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Supplementary Materials for

VP4- and VP7-specific antibodies mediate heterotypic immunity to rotavirus in humans

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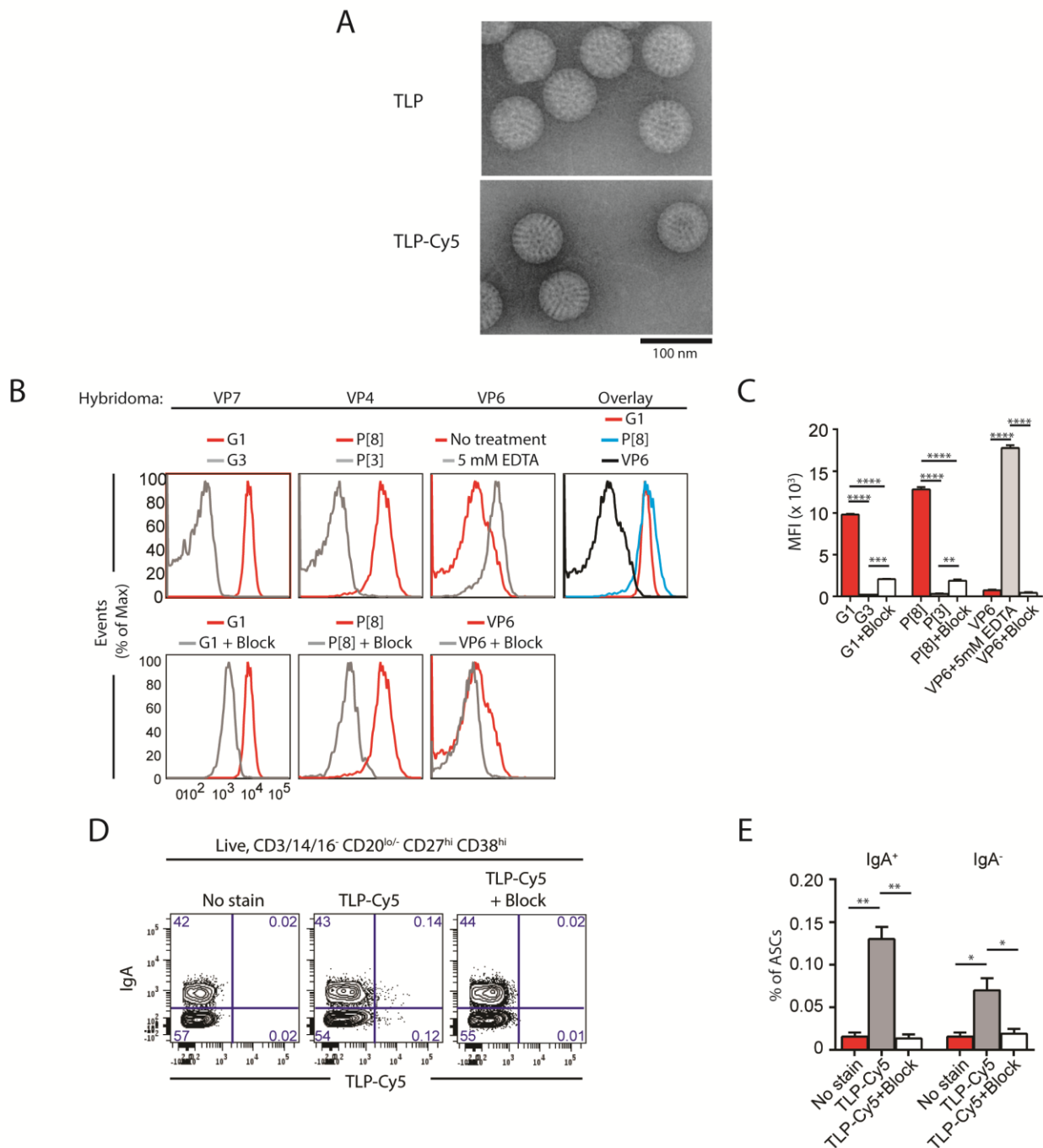William H. Robinson, Harry B. Greenberg*

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Fig. S1. Identification of RV-specific B cells by flow cytometry using TLP-Cy5. (A) The integrity of Cy5-labeled TLPs (CDC-9 strain, G1P[8]) was examined by electron microscopy. **(B)** Shown is TLP-Cy5 staining of G1- (5e8), P[8]- (1a10), G3- (159) and P[3]- (7a12) specific murine hybridomas with and without blocking with unlabeled TLPs, and TLP-Cy5 staining of VP6-specific hybridoma (1e11) with and without blocking and treatment of TLP-Cy5 with 5 mM EDTA. Shown are representative histogram overlays and **(C)** results from two independent experiments. **(D)** Identification of human intestinal TLP-binding B cells by gating on unstained cells. Blocking with unlabeled TLPs reduced TLP-Cy5-specific staining on intestinal ASCs. Shown are FACS plots from a representative donor and **(E)** the mean frequency of intestinal TLP+ ASCs ± SD from repeated experiments on two donors. At least 200,000 events were acquired per sample. Group comparisons performed using one-way ANOVA. P values obtained by Tukey's multiple comparisons test. *, $P<0.05$; **, $P<0.01$; ***, $P<0.001$.

Table S1. Fluorescently tagged Abs used for FACS staining.

Antigen	Fluorochrome	Clone	Vendor
CD3	PE-Cy7	SKY	BD Biosciences
CD14	PE-Cy7	M5E2	BD Biosciences
CD16	PE-Cy7	3G8	BD Biosciences
CD20	APC-H7	2H7	BD Biosciences
CD27	PE-Cy7	MT271	BD Biosciences
CD38	PerCP-Cy5.5	HIT2	BD Biosciences
IgA	FITC	IS11-8E10	Miltenyi Biotec

Table S2. Human and animal RVs used in the study.

RV strain	G serotype	P genotype	Strain origin
Wa	G1	P[8]	Human
CDC-9	G1	P[8]	Human
DS1	G2	P[4]	Human
ST3	G4	P[6]	Human
69M	G8	P[10]	Human
116E	G9	P[11]	Human
#321	G10	P[11]	Human
W161	G9	P[8]	Human
L26	G12	P[4]	Human
RRV	G3	P[3]	Simian
DxRRV	G1	P[3]	Mono VP7 reassortants
DS1xRRV	G2	P[3]	Mono VP7 reassortants
ST3xRRV	G4	P[3]	Mono VP7 reassortants
OSU	G5	P[7]	Porcine
NCDV	G6	P[1]	Bovine
UK	G6	P[5]	Bovine

Table S3. Summary of the binding reactivities of RV-specific human recombinant mAbs.

Mab No.	Subject ID	RV protein specificity		Endpoint immunostaining concentration (ng/ml) of RV-infected MA104 cells						Binding to BV-expressed viral proteins expressed in Sf9 cells					Binding to recombinant RV VP8* proteins by ELISA			Immunoprecipitation of recombinant RV VP5* protein
				Wa G1P[8]	DS1 G2P[4]	ST3 G4P[6]	RRV G3P[3]	NCDV G6P[1]	OSU G5P[7]	VP4 [P8]	VP4 [P6]	VP4 [P4]	VP7 G1	VP6 RRV	VP8* [P8]	VP8* [P6]	VP8* [P4]	VP5* [P8]
2	001	VP4	VP5*	5.0	5.0	-	-	-	-	+	+	+	-	-	-	-	-	+
30	002		VP5*	5.0	5.0	5.0	-	50.0	5.0	+	+	+	-	-	-	-	-	+
33	002		VP5*	50.0	50.0	5.0	50.0	50.0	5.0	+	+	+	-	-	-	-	-	+
41	003		VP5*	0.5	5.0	0.5	5.0	5.0	5.0	+	+	+	-	-	-	-	-	+
4	001		VP8*	0.5	0.5	-	-	-	-	+	-	+	-	-	+	+	+	
6	004		VP8*	0.5	0.5	-	-	-	-	+	-	+	-	-	+	-	+	
8	004		VP8*	5.0	50.0	-	-	-	-	+	-	+	-	-	+	-	+	
9	004		VP8*	0.5	0.5	-	-	-	-	+	-	+	-	-	+	+	+	
11	004		VP8*	0.5	500.0	-	-	-	-	+	-	+	-	-	+	-	-	
12	005		VP8*	5.0	50.0	-	-	-	-	+	-	+	-	-	+	-	+	
13	005		VP8*	5.0	-	-	-	-	-	+	-	-	-	-	+	-	-	
14	005		VP8*	5.0	5.0	-	-	-	-	+	-	+	-	-	+	-	+	
15	005		VP8*	0.5	5.0	-	-	-	-	+	-	+	-	-	+	-	+	
16	005		VP8*	0.5	0.5	-	-	-	-	+	-	+	-	-	+	-	+	
18	005		VP8*	5.0	5.0	50.0	-	-	-	+	-	+	-	-	+	+	+	
19	005		VP8*	5.0	5.0	-	-	-	-	+	-	+	-	-	+	-	+	
20	005		VP8*	5.0	5.0	-	-	-	-	+	-	+	-	-	+	-	+	
21	005		VP8*	0.5	5.0	-	-	-	-	+	-	+	-	-	+	-	+	
23	005		VP8*	5.0	5.0	-	-	-	-	-	-	+	-	-	+	-	+	
29	002		VP8*	5.0	-	-	-	-	-	+	-	-	-	-	+	-	-	
31	002		VP8*	5.0	50.0	-	-	-	-	+	-	+	-	-	+	-	-	
35	002		VP8*	5.0	5.0	-	-	5.0	50.0	+	-	+	-	-	+	-	+	
43	005		VP8*	5.0	-	-	-	-	-	+	-	-	-	-	+	-	-	
44	002		VP8*	0.5	50.0	-	-	-	-	+	-	-	-	-	+	-	+	
55	001		VP8*	5.0	0.5	5.0	-	-	-	+	-	+	-	-	+	+	+	
60	002		VP8*	5.0	-	500.0	500.0	500.0	-	+	-	-	-	-	+	-	-	
47	002		VP8*	0.5	0.5	-	-	-	-	+	-	+	-	-	-	-	-	-
62	003		ND	0.5	0.5	-	-	-	-	+	-	+	-	-	-	-	-	-
22	005	VP7		500.0	-	-	-	-	-	-	-	-	+	-	-	-	-	
27	002			0.5	-	-	-	-	-	-	-	-	+	-	-	-	-	
46	002			0.5	-	-	-	-	-	-	-	-	+	-	-	-	-	
57	002			0.5	0.5	500.0	5.0	-	50.0	-	-	-	+	-	-	-	-	
10	004	VP6		0.5	5.0	5.0	5.0	0.5	0.5	-	-	-	-	+	-	-	-	

ND, VP5* or VP8* specificity not determined

Table S4. Molecular characteristics of RV neutralizing human mAbs.

Mab No.	Subject ID	RV protein specificity		VH	DH	JH	L or K	VL	JL	CDRH3 amino acid sequence	Neutralizing reactivity
		IGH						IGL			
2	001	VP4	VP5*	3-15*01	2-21*02	5*02	L	5-37*01	3*02	TTRLLFSP	Heterotypic, P[4], P[8]
30	002		VP5*	1-46*01	1-1*01	6*02	K	3-15*01	J2*01	ARGAIGNYNAREALDV	Heterotypic, P[4], P[6], P[8]
33	002		VP5*	3-64D*06	6-19*01	4*02	K	1-5*03	1*01	VTDVLRLPYSTGWSPGDFIY	Heterotypic, P[8], P[3], P[6]
41	003		VP5*	3-48*03	6-19*01	5*02	L	6-57*01	3*02	ATISHQQFSSGWNAWFDP	Heterotypic, P[3], P[4], P[6], P[8]
9	004		VP8*	4-61*02	2-15*01	6*02	L	9-49*01	3*02	VADYYYSVPDV	Homotypic, P[8]
19	005		VP8*	4-30-2*01	3-3*01	2*01	L	1-44*01	3*02	ARVNDFWSGSHYTWYFDI	Homotypic, P[8]
47	002		VP8*	4-59*01	6-19*01	J6*02	K	2-28*01	4*01	ARTMGIDQNNRGWPPAGYYFGMDV	Heterotypic, P[4], P[8]
27	002	VP7		4-59*01	5-24*01	5*02	K	3-20*01	4*01	AREGVGYGYNNYGGNWFDP	Homotypic G1
46	002			4-59*01	3-9*01	2*01	K	3-20*01	4*01	ARNFPSYTPDWFFDL	Homotypic G1
57	002			3-30*01	6-19*01	4*02	L	1-40*01	J1*01	ARAAGIMVAGTFLTEFYFDY	Heterotypic G1, G2, G3

ND, VP5* or VP8* specificity not determined

Table S5. Primers used for amplifying RV (Wa) genes.

Gene	Forward primer	Reverse primer
VP4	5'- GGT ACC GCC ACC ATG GCT TC - 3'	5' - AAG CTT TTA TCA CAA TTT ACA TTG TAG TAT TAA CTG TTC AAT TC - 3'
VP5*	5'- GGT ACC GCC ACC ATG GCA CAA GT - 3'	5' - AAG CTT TTA TCA CAA TTT ACA TTG TAG TAT TAA CTG TTC AAT TC - 3'
VP8*	5' - GGT ACC GCC ACC ATG GCT TC - 3'	5'- AAG CTT TTA TCA TCT CTT ATA CTG TAT CGA TCT AGA TGA TAA TG - 3'

Table S6. *IGHV* and *IGLV* nucleotide sequences of all Abs in the study.

Subject ID	Ab ID	Expressed mAb no.	*IGHV* or *IGLV*	Sequence
001	p118w100		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATTAGTAGTTACTACTGGGGCTGGATCCGGCAGCCCCAGGACGGGAGCTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGGAGCACCACCTACAACCCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGGCCATTTATTACTGTGCGAGAGATTCGCGATTCCGTGGGTACAGCTATACCCTTGACTCCTGGGGCCAGGGAATGCTGGTCACCGTCTCCTCAG
001	p118w104		*IGHV*	TCTTTCTATTCCGTTGGGGAGCACCACCTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAATAGACACGTCCAAGAACCAGTTTTCCTTGAACCTGTTCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGTGAGAGATTCGCGATTCCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGTTGGTCACCGTCTCCTCAG
001	p118w108		*IGHV*	ACTTATGATGCTTACACTTCTTACACAAATTACGCACAGAAATTCCAGGGCAGAGTCACCGTGACCACAGACACTTCCACGAGCACGGCCTACATGGAACTGAGGAGCCTAAGGTCTGACGACACGGCCGTCTATTACTGTGCGAGAGTGGTCATAGCAAGTCGTTCGTTCGACTTGTGGGGGGCCAGGGAACGCTGGTCACCGTCTCCTCCG
001	p118w109		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGTTACTACTGGGGCTGGATCCGGCAGCCCCGGACGGGAGCTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGGAGCACCACCTACAACCCCCTCCCTCAAGAGTCGAGTCACCATATCAATAGACACGTCCAAGAACCAGTTTTCCTTGAACCTGTTCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGTGAGAGATTCGCGATTCCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGTTGGTCACCGTCTCCTCAG
001	p118w112		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGCAGTGGTACTTACTACTGGAGCTGGATCCGGCAGCCCGCCGAGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGCACCAATTATAACCCCTCCCTCGAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCCATATATTACTGTGCGAGAGCGGGTAAATGTAGTGGGGGTAGCTGCTACTCCGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
001	p118w114		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCTTCAGTGACTACTACATGGACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAGAAACAAAGATAAGAGTTACACCACAGACTACGCCGCGTCTGTGAAAGGCAGATTCACCTTCTCAAGAGATGATTCAAAGAACTCAGTGTTTCTGCAAATGAGCAGCCTGACAACCGAGGACACGGCCGTGTATTACTGTGTTAGAGATACCGGGAAAGACGGCTACGAAAATTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAG
001	p118w119		*IGHV*	GAGGTGCAGTTGGCGGAATCTGGGGGAGGCTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACATTTAATAGGCATTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCGACATAAAGCAAGATGGAAGCGTCAAATACTATGTGGACTCTGTGAAGGGCCGATTCACCATTTCCAGAGACGACGTCAAGGACTCCGTGTATCTGCAGATGAACAGCCTGGGAGCCGAGGACACGGCTGTCTATTACTGTGCGAGAGGCCCTCAGTACGGTGCCAGGGTCGACTACTTAGACCTCTGGGGCCAGGGATCCCTGGTCACCGTCTCCTCAG
001	p118w122		*IGHV*	GGGAATCAATCATCGGGGAACCACCACCTACAATCCGTCGCTCGAGAGTCGTGTGACCATGTCGGTCGACACGTCCAAGAATCAATTCTCCCTGAATCTGACCTCAGTGTCCGCCGCGGACACGGCTCTTTATTACTGTGCGAGAGCCCCCTATTACTATGACAGGGCGACCTCTTCCATGTTCTACTACGGCCTGGACGCCTGGGGGCAGGGGACTACGGTCACCGTCTCCTCTT
001	p118w126		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTTATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGACCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTATTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p118w135		*IGHV*	GAGGTGCAGTTGGCGGAATCTGGGGGAGGCTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACATTTAAGAGGCATTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCGACATAAAGCAAGAGGGAAGCGTCAAATACTATGTGGACTCTGTGAAGGGCCGATTCACCATTTCCAGAGACGACGTCAAGGACTCCGTGTATCTGCAGATGAACAGCCTGGGAGCCGAGGACACGGCTGTCTATTACTGTGCGAGAGGCCCTCAGTACGGTGACAGGGTCGACTACTTAGACCTCTGGGGCCAGGGATCCCTGGTCACCGTCTCCTCAG
001	p118w136		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTTATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGACCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTATTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG

001	p118w14	1	*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTT ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGA CCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTA TTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p118w143	51	*IGHV*	CAGCTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCAGCTTCAATAAT GATGGCATCACTGGTTCCGCCAGGCTCCAGGCAAGGGACCGGAGTCGGTGGCATTCATATGGTATGATGGAAGTACTAAATATTATGGAGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCGAGAACACACTCTACCTGCAAATGAACAACCTGAGAGCCGAGGACACGGCTGTCTA TTATTGTACGAAAGTTCCCAAGGGATACAGTTCGGGCAGTTATAATATGCATGACGCTTTTGATATCTGGGGCCCAGGGACAATGGTCACCGTCT CTTCAG
001	p118w145		*IGHV*	CAGTGGTACTTACTACTGGATCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGCACCAGCTA TAACCCCTCCCTCGAGAGTCGAGTCACCATATCAGTAGACACGTCCAACAACCACTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACG GGCGTATATTACTGTGCGAGAGCGGGCCAATGCAGTGATGGTAGTTGCTACTCCGATGCTTTTGACATCTGGGGCCAAGGGACAATGGTCACCG TCTCTTTAG
001	p118w146		*IGHV*	GAGATGCAACTGGTACAGTCCGGGGGAGGCTTAGTTCAGCCTGGGGGATCGCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCTTCAGTGAC CACTGCATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGGTCTCACGCCTTTGTCCTGAAGGCAATCTGGCAACCTACGCGGAC TCCGTGAGGGGTCGATTCACCATCTCTAGAGACAACACCAAGAACACAGTGTATCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTATAT ATTACTGCACAAGAAATTTTGATTGTGACGAAGACTGGGGCCCGGGGACCCTGGTCACCGTCTCCTCAT
001	p118w15		*IGHV*	CAGGTAGAACTACAACAGTCAGGTCCACGACTGGTGAAGGCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGC GACAGGGCTGGTTGGAACTGGATCAGGCATTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCGAGTGGTATAATGCA TATGCACCGTTTGTGAAAAGTCGAATAACCATCGACCCAGACACATCCAAGAACGAGTTGTCCCTGCAGCTGACGTCTGTTACTTCCGAGGACGC GGGTGTCTATTACTGTGCAAGAGAATCGGATGTCAGTGGCTGGTGGGGATTTGACTACTGGGGCCAGGGATCCCTAGTCACCGTCTCCGCAG
001	p118w159		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCGGCAGT GGTGATTACTACTGGAACTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTTTGTCAGTGGGAGCACCAGCTACAAC CCCTCCCTCGAGAGTCGGCTCACCATATCAGTAGACACGTCCAAGAACCAGCTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCC GTGTATTATTGTGCGAGAGGGGGATTGTGTAGTGGTGGTAGCTGCTACTCTGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCT CTTCCG
001	p118w162		*IGHV*	CAGGTGCAACTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGACACCCTGTCCCTCACCTGCGCTGTCTATGGTGCGTCCTTCAGTGGTT GCGACTGGAGCTGGGTCCGCCAGTCCCCGGGGAAGGGGGTTGGAGTGGATTGGGGGAATCAATCATCGGGGAACCACCACCTACAATCCGTCG CTCGAGAGTCGTGTGACCATGTCGGTCGACACGTCCAAGAATCAATTCTCCCTGAATCTGACCTCAGTGTCCGCCGCGGACACGGCTCTTTATT ACTGTGCGAGAGCCCCCTATTACTATGACAGGGCGACCTCTTCCATGTTCTACTACGGCCTGGACGCCTGGGGGCAGGGGACTACGGTCACCG TCTCCTCTT
001	p118w163		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCCGTCCCTCACCTGCACTGTCTCTGGTGACTCCATTAGTAGT AACTACTGGGGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGCGTCCTTCTATTCCGTTGGGAGGATCACCTACAACCCCTCC CTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATT ACTGTGCGAGAGATTCGCGATTCCGTGGGTACACCTATACCCTTGACTCCTGGGGCCAGGGAATGCTGGTCACCGTCTCCTCAG
001	p118w164		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTT ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGA CCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTA TTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p118w17		*IGHV*	CATCTGGATACATTTTCACCAGCTACCATATGCACTGGGTGCGACTGGCCCCTGGACAGGGGCTTGAGTGGATGGGAATAATCAATCCTAGTCG TGGTAGCACAATTTACGCACAGAAGTTCCAGGGCAGAGTCACCATGACCAGGGACACATCCACGAGCACAGTCTACATGGAATTGAGCAGCCTG AGGTCTGAGGACACGGCCGTGTATTACTGTGCGAGAGATCCGGCGGTGGTAATGTTTGCTACCCCCTCGTACTACTTTGACTACTGGGGCCAGG GAACCCCTGGTCACCGTCTCCTCA
001	p118w172		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTT ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGA CCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTA TTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG

001	p118w174		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCCCAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGT GGTGATTACTTCTGGAACTGGGTCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGCCGTATCTTTACCAGTGGGAGCACCACGTACAAC CCCTCCCTCCAGAGTCGAGTCAGCATATCAATAGACACGTCCAAGAACCAATTCTCCCTGAACCTGAGCTCCGTGACCGCCGCAGACACGGCCG TGTATTACTGTGCGAGAGCCGGCTCTTGTAGTGGTGGTAGCTGCTACTCCGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTC TTCAG
001	p118w175		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAAGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCAATGTCTCTGGTGACTCCATCAACAGT GGTAGTTACTTCTGGAACTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGCATTCATACCGGTGGGAGCACCAACTACAAC CCCTCCCTCACGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCACCTCTCCCTGAAGTTGAGTTCTGTGACCGCCGCAGACACGGCCG TGTATTACTGTGCGAGAGCCGGGTCTTGTAGTGGTGGTAGCTGCTACTCCGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTC TTCAG
001	p118w176		IGHV	CAGGTGCAGCTCCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCATCTGCTCTGTCTCTGGTGGCTCCGTCACTAGT TACTACTGGAGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATT
001	p118w177		IGHV	GGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGTTACTACTGGGGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGA GTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGATACGTCCAAGAACCAGTT CTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAAAGATTCGCGATTTCGTGGATACAAATATACCCTTGACT CCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG
001	p118w178		IGHV	ACTGCCTCTGGATTCACCTTCATTAGTTATGGCATTCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATTTCACATG ATGGAGGTGAAAAATCGTATGCAGACTCCGTGAGGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTGCAAATGAACAG CCTGAGAGCTGAGGACACGGCTGTGTATTACTGTGCGAAAGGGGAGAATTACTATGATAGGAGTGGTTATTTTATAGCGGCATACTTTGACTATT GGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w184		IGHV	TTCAATAACTATGGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATATATTAGTAGAGGTAGTGATATGATCACCT ACGTAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTACAAATGAACAGCCTGAGAGACGAGGACAC GGCTGTGTATTACTGTGCGCGAGTTAATCCCAACTGGTGGGAGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w185		IGHV	GAGGTCCAGCTGGTACAGTCTGGGGCTGAGGTGAAGAAGCCTGGGACTACAGTGAAAATCTCTTGTAAGGTTTCTGGAAACAGCTTCACCGACT ACGACATGCACTGGGTGCAGCAGGCCCCTGGAAAAGGCCTTGAGTGGATGGGATGGCTTGTCGATCCTGAATATGGTCAAACGGTCTATGCAGAGA GATTCCAGGGCAGAGTCTTCATAACCGCGGACACGTCTACACACAGCCTACATGGACCTGAGCAGCCTGAGCTCTGTGAAGACACGGCCCTATA TTACTGTGCAGCCGTCAGCAAGCATTGTACTACTTCCACCTGCCCTCCCAACTACTTTGACTACTGGGGCCAGGGAACGCTGGTCACCGTCTCC TCAG
001	p118w187		IGHV	AAAGCCTCCGGACTCATTGTCAGTGACGCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGC GAAATTAATGGTGGGACAATAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAAT CAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCC TCAG
001	p118w191		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGTACTCTCTCTGGTGGCTCCATCATTGAC TATTATTGGAGTTGGATCCGGCAGCCCCAGGGAAGGGACTGGAGTGGATTGGCTATATCCATGACAGTGGGATCACCAACTACAGCCCCTCCCT CAAGAGTCGAGTCACCATGTCAGTGGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAACTCTGTGACCGCCGCAGACACGGCCGTGTATTAT TGTGCGAGA
001	p118w20		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACTTGCACTGTCTCTGGTGACTCCATCAGTAGTT ACTACTGGGGCTGGATCCGGCAGCCCCAGGACGGGAGCTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCCTCCCT CAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTTCCTGAAGTTGAGTTCTGTGACCGCTGCGGACACGGCCGTTTATTACT GTGCGAGAGATTCGCGATTCCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG
001	p118w21		IGHV	GAGACTCTCCTGTGCAGCCTCTGGATTTATATTCAGTAACTACGACATGCACTGGGTCCGCCAAAGTACAGGAAAAGGTCTGGAGTGGGTCTCA GCCATTGGTACTGCTGGTGACACATTCTATTCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGAAAATGCCAAGAACTCCCTGGATCTTCA AATAGACAGCCTGGGAGCCGGGGACACGGCTGTGTATTATTGTGCAAGAGGGCGGGGAGTTAATCTGTCTGGGGGTGTTATTGCGAGTTTTGA CTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w25	53	IGHV	GAGGTGCAACTGGTGCAGTCTGGAGCAGAAGTGAAAAAGCCCGGGGAGTCTCTGACGATCTCCTGTAAGGACACGGGATACAACTTTGGCAGC GGTTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTCGAGTGGATGGGACTCATCTATCTTGGAGACTCTGCGACGAGATATAGTCCG TCGTTCCAAGGCCAGGTCACCATCTCAGCCGACAGGTCCATCACTACCGCCTATCTGCAGTGGAACAGTCTGAAGTCCTCGGACAGCGCCATGT ATTACTGTGCAAGACCCTCTAGGGGGATTTACTACGGTGTGGACGTCTGGGGCCAAGGGACGACGGTCACCGTCTCCTCA

001	p118w26		*IGHV*	CGTCTGGATTCGATTTCAAATTCGCCTGGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAGAACTAGTGGTGGGACAACAGACTACGCTGCACCCGTCAAAGGCAGATTCACCATCTCAAGAGATGATTCAACAAACACACTATATCTGCAAATGAACAGCCTGAGAACCGAGGACACAGCCGTTTATTACTGTGCCGCCGTCAGGGATCCTCTATCGTATTCTCTGCACTACTGGGGCCAGGGAACGCTGGCCACCGTCTCCTCAG
001	p118w30		*IGHV*	GGATATATCTATTACAGTGGGGGCGCCAAGTACAACCCCTCCCTCGAGAGTCGAGTCACCATATCACTAGACACGTCCAAGAACCAAGTCTCCCTGAAGCTGAGTTCTGTGACCGCTGCGGACACGGCCATATATTACTGTGCGATGGATACCCATACCAGCTCGAGGTTTGACCACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAG
001	p118w35		*IGHV*	GTGATTATGCTATGAATTGGGGTGCGACAGGCCCCTGGACAAGGGGCTTGAGTGGATGGGAAGGATCAACACCAACACTAGGAGTCCAACATATGCCCCGGACTTCACAGGACGCTTTGTCTTCTCCTTGGACGCCTCTGTCAGCACGGCATATCTGCAGATCAGCGACCTAAAGGCTGACGACACTGCCGTTTATTATTGTGCGAGAGATAGGGAACACCTATGGTCCCCGCCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCTTCAG
001	p118w47		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGCTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTACTTACTTCTGGAGCTGGATCCGGCAGCCCGCCGGGAAGGCACTGGAGTGGATTGGGCGTATCTATTCCAGTGGGAGCACCAGTTATAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTTGACACGTCCAACAACCAACTCTCCCTGAAGCTGACCTCTGTGACCGCCGCAGACACGGCCGTCTATTACTGTGCGAGAGGGGGACTTTGTTCTGGTGGTAGCTGCTACTCTGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
001	p118w48		*IGHV*	CCTCTGGTTACAGCTTTGTTAGTTATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGACCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTATTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p118w5		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTTATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGACCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTATTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p118w59		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCTCCTTCTCTGGGTTCTCACTCAGCACTACTGCAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCTCTCATTCGTTACGATAATGATAAACGCTACAGTCCATCTCTGAGGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGGCACATATTACTGCGCACACAGTTTAGGTTACGATTATTGGAGTGGTTCTAATAAGATGAATTACTTTGATTACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAG
001	p118w8		*IGHV*	TGAGACTCTCCTGTGCAGCCTCTGGATTCCCCTTTAGTAGCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGTCTGGAGTGGGTCTCAACTCTGAGTAATAGTGGTGAATACACATTCTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATGTGCAAATGGACAGCCTGAGAGCCGAGGACACGGCCATATATTACTGTGCGAAAAATAGTCGGGCTAGTAGTGGCTGGCTCGTTTCGTACAACTTCGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
001	p118w81		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCACTAGTTACTACTGGGGCTGGATCCGGCAGCCCCAGGAAGGGAGCTGGAGTGGCTTGGGTCTTTCTATTACGTTGGGAGCACCACCTACAACCCCTCCCTCAAGAGTCGAGTCACCATA
001	p118w82		*IGHV*	CAGGTCCAGCTTGTGCAGTCTGGGTCTGAGGTGAAGAAGCCTGCGGCCTCAGTGAGGGTTTCCTGCAAGGCATCTGGATACACCTTCACTAACTATGCTATACATTGGGTGCGCCAGGCCCCGGACAAAGTCTTGAGTGGCTGGGATGGATCAACGCTGGCAATGGTGACACAAGATATTCAGAGAAGTTCCAGGACAGAGTCACCATTACCAGGGACACATCCGCGAGCACTGCCTACATGGACCTGAGCAGCCTAAGATCTGAAGACACGGCTGTCTATTACTGTGCGAGAGATTGCAATTATGTCAACTGCCACATGTCATCCCCCAATTATGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w83		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTGAAGACCTGGGGGGGTCCCTTAGACTCTCCTGTAAAGCCTCCGGACTCATTGTCAGTGACGCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCGAAATTAATGGTGGGACAATAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAATCAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w93	63	*IGHV*	CAGGTTCAACTAGTGCAGTCTGGAGCTGAGGTGCAGAGGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTATACCTTGACCAACTATGGTGTCACTTGGGTGCGACAGGCCCCTGGACAAGGCCTTGAGTGGCTGGGATGGATCAGCACTTATGAT
001	p120w100		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTAAAGCCTCCGGACTCATTGTCAGTGACGCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCGAAATTAATGGTGGGACAATAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAATCAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

001	p120w104		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGTTACTACTGGGGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGATACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAAAGATTCGCGATTTCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG
001	p120w109		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCATGGTCCAGCCTGGGAGGTCCCTGAGACTCTCATGTGCAACGTCTGGATTCAGTTTCAATAATCATGGCATGCACTGGTTCCGCCAGGCTCCAGGCAAGGGACCGGAGTCGGTGGCATTCATATGGTATGATGGAAGTATTAAATATTATGGAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACCTCGAGAACACGCTGTACCTGCAAATGACCAACCTGAGAGCCGAGGACACGGCTGTCTATTATTGTACGAAAGTTCCCAAGGGATATGGTTCGGGCAGTTATAATATGCATGATGCTTTTAATGTCTGGGGCCCAGGGACCATGGTCACCGTCTCTTCAG
001	p120w111		*IGHV*	GAGGTGCAGTTGTTGCAGTCGGGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCCGCCTCTGGATTCACCTTCAGTAACTATGCCATGGGCTGGGTCCGCCAGGCTCCAGGGGAGGGGCTGGCGTGGGTCTCATCTCTTAGTGGTAGTGGTTCTACCACATACTACGCAGACTCCGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGGACACACTATATTTGCAAATAAACACCCTGAGAGCCGAAGACACGGCGTTATATTACTGTGCAAGGGGGCGATCTTTTGACTACTTCTCATACGGGGACTCCTGGGGCCTGGGAACCCTGGTCACCGTCTCCTCAG
001	p120w112		*IGHV*	GCAGCGTCTGGAATCACCGTCAGTGGCACCTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTTATAGTGCTGATAACACATACTACGCAGACTCCGTGAAGGGCAGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTTCAAATGAACAGCCTGAGAGCCGAGGACACGGCTCTGTATCACTGTGCGCAAAGTAGTGGTTATAAAGGTTCCGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
001	p120w114	4	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGCAGTGGTACTTACTACTGGATCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGCACCAGCTATAACCCCTCCCTCGAGAGTCGAGTCACCATATCAGTAGACACGTCCAACAACCACTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGGCGTATATTACTGTGCGAGAGCGGGCCAATGCAGTGATGGTAGTTGCTACTCCGATGCTTTTGACATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTTAG
001	p120w122		*IGHV*	CAGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACATCTTCAGTGACTATGCTATGAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCAACACCAACACTAGGAATCCAACACTATGCCCAGGGCTTCACAGGACGGTTTGTCTTCTCCTTGGACACCTCTGTCAGCACGGCATATCTGCAGATCACCAGCCTAAAGGCTGACGACACTGCCGTTTATTACTGTGCGAGAGATAGGGAACGCCTGTGGTCCCCGGCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCTTCAG
001	p120w123		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCGGACACCCTGTCCCTCACCTGCGCTGTCTCTGGTTCCTCCATCAGCACTACTAACTGGTGGGGCTGGGTCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGATACATCTCTTATAGTGGGAACATCTACTTCAACCCGTCCCTCAAGAGTCGAGTCACCATGTCACTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGTCCGCCGTGGACACGGCCGTGTATTACTGTGCGAGAAGCATGACCCTACTTTGTGGTTCTGATAGGTGCTACCCTCCGTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
001	p120w126		*IGHV*	CAGGTCCAACTTGTGCAGTCTGGGGCTGAGGTGAAGAGCCCTGGGGCCTCTGTGAGAGTCTCCTGCGAGGCTTCTGGATTCCCGTTCACGACCTATGTTATACACTGGCTGCGCCTGGCCCCCGGACAAGGCTTGAGTGGATGGGATGGATCAACCCTGCCAATCGAAACACAAAATATTCACAGAAGTTCCAGGGCAGAGTCGCCTTTACCAGCGACACATTTGCGCGCACAGTCTACATGGAACTCAATATCCTGACACCGGAAGATACGGCCATTTACTACTGTGCGAAAGATGCGAATCCAAATGACTCTGATAGTTTTGGTTTAATCCCCGGCTACTGGAGCCAGGGGACCCTGGTCACCGTCTCCTCAG
001	p120w136		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTGATGGAGTGGGTGTCGGCTGGATCCGTCAGCCCCAGAACGGCCCTGGAATGGCTTGCAGTCATTTACTGGGATGATGATAAGCGCTACAGCCCATCTCTGGAGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTAGAATGACCAACATGGACCCTGTGGACACAGCCACATATTTTTGTGCACAGAGTCCCCCCCC
001	p120w143		*IGHV*	GAGTTGCGGCTGGTGCAGTCTGGGACAGAGGTGAAAGAGCCCGGGGAGGCTCTGAAGATCTCTTGTCAGGCTTCTGGATACAGTTTTTTCCACCTACTGGATCGGCTGGGTGCGCCAGAGGCCCGATAAAGGCCTGGAGTGGGTGGGGATCATCTATCCCGGTGACTCGGATACTAGGTACGACCCGGCCTTCCAAGGCCAGGTCACCATCTCAGTCGACACATCCATCAACACCGCCTACCTTCAATGGAGCAGTCTGAAGTCCTCGGACACTGGCATATATTTCTGTGCGCGATCCATGTATGAATATGTTTGGGGGGACTGATCGTTATTTTGACTACTGGGGCAACGGAACTCCGGTCACCGTCTCCTCAG
001	p120w144		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGAGGGGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCATCACTACCTATGCAATGCACTGGGTCCGCCAGGCCCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAGACGACAAATTCTACGCAGACTCCGTGACGGGCCGAATCACCATCTCCAGAGACGATTCCAAGAACACGCTGTATTTACAAATGAACAGCCTGAGACCTGAAGACACGGCTGTGTATTACTGTCTGAGAGGGGGTCTTTGGAGTGCTTATCCTCCAGGATTCGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTGCA

001	p120w145	5	*IGHV*	CAGGTCCAACTTGTGCAGTCTGGGGCTGAGGTGAAGAGCCCTGGGGCCTCTGTGAGAGTCTCCTGCGAGGCTTCTGGATTCCCGTTCACGACC TATGTTATACACTGGCTGCGCCTGGCCCCCGGACAAGGCTTGAGTGGATGGGATGGATCAACCCTGCCAATCGAAACACAAAATATTCACAGAA GTTCCAGGGCAGAGTCGCCCTTTACCAGCGACACATTTGCGCGCACAGTCTACATGGAACTCAATATCCTGACACCGGAAGATACGGCCATTTAC TACTGTGCGAAAGATGCGAATCCAAATGACTCTGATAGTTTTGGTTTAATCCCCGGCTACTGGAGCCAGGGGACCCTGGTCACCGTCTCCTCAG
001	p120w146	52	*IGHV*	CAGGTCCAGCTTGTGCAGTCTGGGTCTGAGGTGAAGAAGCCTGCGGCCTCAGTGAGGGTTTCCTGCAAGGCATCTGGATACACCTTCACTAACT ATGCTATACATTGGGTGCGCCAGGCCCCCGGACAAAGTCTTGAGTGGCTGGGATGGATCAACGCTGGCAATGGTGACACAAGATATTCAGAGAA GTTCCAGGACAGAGTCACCATTACCAGGGACACATCCGCGAGCACTGCCTACATGGACCTGAGCAGCCTAAGATCTGAAGACACGGCTGTCTAT TACTGTGCGAGAGATTGCAATTATGTCAACTGCCACATGTCATCCCCAATTCATGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p120w15		*IGHV*	CAGATCTCCTTGAAGGAGTCTGGTCCAACGCTGCTTAAACCCACAGAGACCCTCTCTCTGACCTGCACGTTCTCTGGCTTCTCACTCAGTACACC TGGGGAGGGTGTGGCCTGGATCCGTCAGCCCCGACCGGCAAGCCTGGAGTGGGTTGCACTCATTTATTGGAATGGTAGGAAGGACTTCAGACA ATCTCTGGAAAAGACACTTAATATTGTCCAGGACGCGTCCAAGAATGAGGTGGTCCTTACAGTGAGCAACATGGACCCTGTGGACACGGCCACA TATTACTGTGTACACAGACGTCCCTATCACGGCGCTGGTCTTTATGGCCCGGATGTTTTTGATATCTGGGGCCAAGGGGCAAAGGTCACCGTCT CTTCAG
001	p120w164		*IGHV*	CAGGTGCAACTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGT TACTACTGGAGCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGGTTGGGCGTATCTATACCAGTGGGAGCACCAACTACAACCCCTCC CTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAGCCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCGGACACGGCCGTGTATT ACTGTGCGAGCCTGGAATATTGTAGTGGTGGTAGGTGCTACACTTCCGTGGACGTCTGGGGCCAAGGGATCACGGTCACCGTCTCCTCA
001	p120w167		*IGHV*	CAGATTCAGCTGCTGCAGTCTGGAGCTCAGGTGCAGAGGCCTGGGGCCTCCGTGAAGGTCTCCTGCACGGCCTCTGGTTATACCTTGACCAAA TTTGGTATCTCTTGGGTGCGACAGGCCCCTGGACAAGGCCTTGAGTGGCTGGGATGGATCAGCGCTTACACTTCTTACACAAATTATGCACAGA AATTCCAGGGCAGACTCACCGTGACCACAGACACATCCACGAGCACAGCCTACATGGAGCTGAGGAGCCTAACCTCTGACGACACGGCCGTCT ATTACTGTGCGAGAGTGGTCATATCAAGTCGTTCCTTCGACTACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCCG
001	p120w168		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAGGCCTTCGGACACCCTGTCCCTCACCTGCGCTGTCTCTGGTTACTCCATCAGCAAT AATAACTGGTGGGGCTGGGTCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTACATTTCTTCTACTGGGACCATCTACTACAACCCG TCCCTCAACAGTCGAGTCACCCTGTCAATAGACACGTCCGAGAACCAGTTCTCCCTGATGCTGAGCTCTGTGACCGCCGTGGACACGCCGTGT ATTACTGTGCGAGAAGTATGACCCTACTTTGTGGTTTTGATAAGTGCTTCCCCCCCTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCAC CGTCTCCTCA
001	p120w172		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGCAGT GGTACTTACTACTGGATCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGCACCAGCTATAAC CCCTCCCTCGAGAGTCGAGTCACCATATCAGTAGACACGTCCAACAACCACTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGGC GTATATTACTGTGCGAGAGCGGGCCAATGCAGTGATGGTAGTTGCTACTCCGATGCTTTTGACATCTGGGGCCAAGGGACAATGGTCACCGTCT CTTTAG
001	p120w174		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTT ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGA CCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTA TTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p120w176		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGT TACTACTGGGGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCTCCC TCAAGAGTCGAGTCACCATATCAGTAGATACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTAC TGTGCGAAAGATTCGCGATTTCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG
001	p120w178		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGT TACTACTGGGGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCTCCC TCAAGAGTCGAGTCACCATATCAGTAGATACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTAC TGTGCGAAAGATTCGCGATTTCGTGGATACAAATATACACTTGACTCCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG

001	p120w185		*IGHV*	CAGGCTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGACTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACAGCTTTGTTAGTT ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCCTGAGTGGATGGGATGGATCAGCGTTTACAATGGTAACACAAACTATGCACAGA CCTTCCAGGACAGAATCACCTTGACCGCAGACACATCCACGGGCACAGCCTACATGGAGCTGAAAAGCCTAAAATATGACGACACGGCCGTCTA TTACTGTGCCAGAACACAGATTACTACGGTGACTACTGGGCCCTGGTTCGACCCCTGGGGCCAGGGAACCGTGGTCACCGTCTCCTCAG
001	p120w187		*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGGGGCTGAGGTGAAGGAGCCCGGGGCCTCAGTGAAGGTCTCCTGCACGGCTCCTGGTCAAACTTTTGTGAGT CATGGTGTCAGCTGGGTGCGGCAGGCCCCTGGACAAGGCCTTGAGTGGATGGGATGGATCAGCGCTTACAAACGTGACACAGTTTACGCACAG AAGTTCCAGGACAGAGTCACTCTGACCACGGACACATCCACGACTACTGTCTACATGGAACTGAGGAGCCTGACATCTGACGACACGGCCGTTT ATTACTGTGCCAGAACGAAAATAACCACAGTGACGACGGGGCCCGGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCGTCAG
001	p120w191		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTACC TATGCCATGCATTGGGTCCGCCAGGCGCCAGGCAAGGGGCTGGAGTGGGTGGCAATTATAGCATATGATGGAAGTGGTATTTACTACGCAGCC TCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAGGAACACGCTGTATCTGCAAATGGACAGCCTGAGAATTGAGGACACGGCTGTAT ATTACTGTGCGAGAGAGTGGGGTATTGAAGCAGTACCAGGTCCTAGGGCTGCTGCTTATGATTTCTGGGGCCAAGGGACAATGGTCACCGTCTC CTCAG
001	p120w193		*IGHV*	CAGGTGCACCTGGTGCAGTCTGGGACTGAGGTGAAGCAGCCTGGGGCCTCAGTGAAGGTCTCCTGTAAGGCCTCTGGATACTCCTTCACCGAC TACTATATACACTGGGTGCGACAGGCCCCTGGACAAGGGTTTGAGTGGATAGGATACATCAATCCTAACGCTGGTGGCACAGAGTTTGGACAAA AGTTCCGGGACAGGGTCACCCTGACCACGGACACGTCCATCAACACAGCCTACATGGAACTCGTCAGGCTGAGATCTGACGACGGGGCCCTTT ATTACTGTGCGAGAG
001	p120w20	54	*IGHV*	CAAGTACAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGT GGTGGTTCTTATTGGAGTTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATGGGCTACATCTATTTCGGTGGGAGCACCGACTACAAC CCGTCCCTCAAGAGTCGACTTACCTTATCACTAGACACGTCTAATAACCAATTCTCCCTGAAGCTGAGGTCTGTGACGGCCGCGGACACGGCCG TGTATTATTGTGCGAAGGGATTTCCTCTGTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCCCA
001	p120w203		*IGHV*	CAGCTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCAGCTTCAATAAT GATGGCATGCACTGGTTCCGCCAGGCTCCAGGCAAGGGACCGGAGTCGGTGGCATTCATATGGTATGATGGAAGTACTAAATATTATGGAGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCGAGAACACACTCTACCTGCAAATGAACAACCTGAGAGCCGAGGACACGGCTGTCTA TTATTGTACGAAAGTTCCCAAGGGATACAGTTCGGGCAGTTATAATATGCATGACGCTTTTGATATCTGGGGCCCAGGGACAATGGTCACCGTCT CTTCAG
001	p120w21		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAACACT GATAGTTACTACTGGAGCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGCATCTACACCAGTGGGAGCGCCAACTACAA CCCCTCCCTCGAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAGCTCTGTGACCGCCGCAGACACGGC CGTGTATTATTGTGCGAGTGGGGCCGTGACTACAAGTCACTATTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAG
001	p120w3		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTTTCTGGTGACTCCATCAGTAGTT ACTACTGGGGCTGGATCCGGCAGCCCCAGGACGGGAGCTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCACCTACAACCCCTCCCT CAGGAGTCGAGTCACCATATCAATAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTAC TGTGCGAGAGATTCGCGATTCCGTGGGTACAGCTATACCCTTGACTCCTGGGGCCAGGGAATGCTGGTCACCGTCTCCTCAG
001	p120w30		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTAAAGCCTCCGGACTCATTGTCAGTGAC GCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCGAAATTAATGGTGGGACAATAGACTAC GCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAATCAACAGCCTGAAAACCGAGGACACAGC CGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p120w35		*IGHV*	CCTCTGGATTCACATTTAATAGGCATTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCGACATAAAACAAGATG GAAGCGTCAGATACTATGTGGACTCTGTGAAGGGCCGATTCACCATTTCCAGAGACGACGTCAAGAACTCCGTGTATCTGCAGATGAACAGCCT GGGAGCCGAGGACACGGCTGTCTATTACTGTGCGAGAGGCCCTCAGTACGGTGACAGGGTCGACTACTTAGACCGCTGGGGCCAGGGATCCC TGGTCACCGTCTCCTCAG
001	p120w37		*IGHV*	CAGGTGCAGTTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTATCCTGTGCAGCCTCTGGATTCACCTTCCGTAAC TATGCTCTACACTGGGTCCGCCAGGCTCCAGGCAGGGGGCTGGAGTGGGTGGCCTTTATATCATATGATGGAACCAATAAATACTACGCAGACT CCGTGAGGGGCCAATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTGCAACTGAACAGTCTGAGAGCTGAAGACACGGCTGTGTA TTACTGTGCGAGAGGAGGGGACTATGGTTCGGGGAGTCTTGATGCCTTTGATTTCTGGGGCCAAGGGACATTGGTCACCGTCTCTTCAG

001	p120w46	64	*IGHV*	CAGGTTCAACTAATGCAGTCTGGAGCTGAGGTGCAGAGGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTATACCTTGACCAACTATGGTATCACTTGGGTGCGACAGGCCCCTGGACAAGGCCTTGAGTGGCTGGGATGGATCAGCACTTACACTTCTTACACAAATTATGCACAGAAATTCCAGGGCAGAGTCACCGTGACCACAGACACTTCCACGAGCACGGCCTACATGGAGCTGAGGAGCCTAAGATCTGACGACACGGCCGTCTATTACTGTGCGAGAGTGGTCATAGCAAGTCGTTCCTTCGACTACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCCG
001	p120w48		*IGHV*	AAAGCCTCCGGACTCATTGTCAGTGACGCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCGAAATTAATGGTGGGACAATAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAATCAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p120w51		*IGHV*	GATGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTCCACCCTGGAGGGTCCCTGAGACTCTCCTGTGCAACCTCTGGATTCACCTTCAGTGACCACTTTATGGACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTGGCCACATTAGAATGAGAAGCTACAGTTACTCCACAGAAATCGCCGCGTCTGTGAAAGGCAGGTTTACCATTTCGAGAGATGATTCACAGAATTTACTTTATCTGCAAATGAACAGCCTGAAAACCGAGGACACGGCCATTTATTATTGTAGTACATTGTCATATGGAAGTAATGGCTGGGTCCACTTTGACTACTGGGGCCAGGGAACGCTGGTCACTGTCTCCTCAG
001	p120w55		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCAGTTTCAGTAGTCATGGCATGCACTGGTTCCGCCAGGCTCCAGGCAAGGGACCGGAGTCGGTGGCATTCATATGGTATGATGGAAGCACTAAATATTATGGAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCGAGAATACTTTATACCTGCAAATGAACAACCTGAGAGCCGAGGACACGGCTGTCTATTATTGTACGAAAGTTCCCAAAGGATATGGTTCGGACGGTTATAATATGCGTGATGCTTTCGATGTCTGGGGCCCAGGAACAATGGTCACCGTCTCCTCAG
001	p120w62		*IGHV*	GAGGTGCTGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGGTTCTAAAAGCAGCTTTAGTAAGTCTTGGATCGGCTGGGTCCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGTGTCATCTATCCTGATGACTCTAATACCAGATATAGCCCGTCGTTCCAAGGCCAGGTCACCATCTCAGCCGACAAGTCCATCACCACCGCCTACCTACAGTGGGACAGTCTGAAGGCCTCAGACACCGCCATATATTACTGTGCGAGACCGATGTATGAGAGCTCGTCCGGTCCTTTTCAATACTGGGGCCAGGGAACGCTGGTCACCGTCTCCTCAG
001	p120w7		*IGHV*	CAGGTGCAACTACAACAGTGGGGCGCAGGACTGTTGAAGCCTTCGGACACCCTGTCCCTCACCTGCGCTGTCTATGGTGCGTCCTTCAGTGGTTGCGACTGGAGCTGGGTCCGCCAGTCCCCGGGGAAGGGGTTGGAGTGGATTGGGGGAATCAATCATCGGGGAACCACCACCTACAATCCGTCGCTCGAGAGTCGTGTGACCGTGTCGGTCGACACGTCCAAGAATCAATTCTCCCTGAATCTGACCTCAGTGTCCGCCGCGGACACGGCTCTTTATTACTGTGCGAGAGCCCCCTATTACTATGACAGGGCGACCTCTTCCCATGTTCTACTACGGCCTGGACGCCCTGGGGGGCAGGGGACTACGGTCACCGTCTCCTCTT
001	p120w82		*IGHV*	CAGGTTCAACTAGTGCAGTCTGGAGCTGAGGTGCAGAGGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTATACCTTGACCAAGTATGGTATTTCTTGGGTGCGACAGGCCCCTGGACAAGGCCTTGAGTGGCTGGGATGGATCAGCACTTATACTTCTTACACAAATTATGCACAGAAATTCCAGGGCAGAGTCACCGTGACCACAGACACATCCACGAGCACAGCCTACATGGAACTGAGGAGCCTAAGATCTGACGACACGGCCGTCTATTATTGTGCCAGAGTGGTCATAGCAAGTCGTTCCTTCGACTACTGGGGCCAGGGAACGCTGGTCACCGTGTCCTCCG
001	p120w83		*IGHV*	CAGGTGCAACTGGTGCAGTCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTACTGGATACATTTTCAGTAACTATGCTATGAATTGGGTGCGACAGGCCCCTGGGCAGGGCCTTGAGTGGATGGGAAGGATCAACACCAACACTGGGACCCCAACGTATGCCCAGGACTTCACAGGACGGTTTGTCTTTTCCTTGGACTCCTCTGTCAGAACGGCATATCTGCAGATCAGCAGCCTACAGCCTGAGGACACTGCCGTATATTACTGTGCGAGAGATAGGGAACACCTATGGTCCCCGCCTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w203	2	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTAAAGCCTCCGGACTCATTGTCAGTGACGCCTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCGAAATTAATGGTGGGACAATAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTTAAGAGATGATTCAAAGAACACTCTGTATCTGCAAATCAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACGCGACTGCTGTTCTCTCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
001	p118w111	55	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGTAGTTACTACTGGGGCTGGATCCGGCAGCCCCCAGGGAACGGGAGCTGGAGTGGATTGGGTCTTTCTATTCCGTTGGGAGCACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAACAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCATTTATTACTGTGCGAGAGATTCGCGATTCCGTGGATACAAATATACCCTTGACTCCTGGGGCCAGGGCATGCTGGTCACCGTCTCCTCAG
001	p118w100		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCCACTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGCCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTAGTCCTGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

001	p118w104		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGTAACTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCCTGGGACTTTTGGCCAGGGGACCAACCTGGAGATCAAAC
001	p118w108		IGLV	TCCTATGAGCTGACACAGCCACCCTCGATGTCAGTGTCCCCGGGACAGACGGCCAGGCTCACCTGCTCTGGAGATGCCTTGTCAAAACAATATGCTTATTGGTATCAACAGAAGTCAGGCCAGGCCCCTGTGTTGCTGATATATCAAGACACTAAGAGGCCCTCAGAGATCCCTGAGCGCTTCTCTGGCTCCAGCTCAGGGACAACAGTCACCTTGACCATCACTGGCGTCCAGGCAGAGGACGAGGCTGACTATTACTGCCAATCATCGGACAGCAGTCCTACTTGGGTGTTCGGCGCAGGGACTAAGTTGACCGTCCTAA
001	p118w109		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGTAACTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCCTGGGACTTTTGGCCAGGGGACCAACCTGGAGATCAAAC
001	p118w112		IGLV	AGCATTAGCAACTATTTGAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAACCTCCTGATCTATACTACATTCAATTTGGAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTAGATCTGGGGCAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTATATTTCCCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p118w114		IGLV	GATGTTGTGATGACTCAGTCTCCGCTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATTTCCTGCAGGTCTAGTCAAAGCCCCGTACACAGTGATGGAAACACCTACTTGAGTTGGTTTCATCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAGGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAAGTACACACTGGCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p118w119		IGLV	GATGTTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAACCTCCTGGCTAGTAATGGACACACCTACATGAATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATGTCTTTCGTTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGCGTTTATTACTGCATGCAGACTCTACAAATTCCTCAAACTTTCGGCCCTGGGACCAAAGTGGAAATCAAAC
001	p118w122		IGLV	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTATTGCACAGAGCCAATAATAAAGATTATTTAGCATGGTACCAACAGAAACCAGGACAGCCTCCTAAGCTCCTCATTTACATGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCAGCATCAGCAGGCTGCAGGCTGAAGATGTGGCAGTGTATTACTGTCAGCAATATTATGATATTCCTCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAG
001	p118w126		IGLV	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTACTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACA
001	p118w135		IGLV	GAACCTCCTGGCTAGTAATGGACACACCTACATGAATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATGTCTTTCGTTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGCGTTTATTACTGCATGCAGACTCTACAAATTCCTCAAACTTTCGGCCCTGGGACCAAAGTGGAAATCAAAC
001	p118w136		IGLV	GGACCAGTCAGTACGTTTACAATTACTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGCCTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w14	1	IGLV	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTACTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGCCTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w143	51	IGLV	GAGATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAAAGATGGAGACACCTACTTGTATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAAGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAAGATGTTGCGATTTATTACTGCATGCAAAGTGTAAGCTGGCCTCCAACGTTCGGCCTAGGGACCAAGGTGGAAATCAAAC
001	p118w145		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGGGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCACCTATTTAAATTGGTATCAACACAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATACTACATCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCACTCTGCAACCTGAGGATTTCGCAACTTACTACTGTCAACAGAGTTACACTACCCCGTGGACGTTCGGCCCAGGGACCAAGGTGGAGACCAAAC
001	p118w146		IGLV	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTCGGTAATATCTATCTATGTCTCCTGGTACCAACAGTATTCAGGCAAAGCCCCCAAAGTCATTATTTATGAGGTCAATAAGCGGTCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTC

001	p118w15	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACTATCACTTGCCGGGCAAGTCAGAGTAGTAGTAGTTA TTTAAATTGGTATCAGAAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGCATCCAGTGTACAAAGTGGGGTCCCATCAAGGTTCAGTG GCAGTGGATCTGGGACAGACTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATCTTGCAACTTACTTCTGTCAACAGACTTACATCATCCCG TACACTTTTGGCCAGGGGACCAAGCTGCAGATCAAGC
001	p118w159	*IGLV*	GACATCCAGATGACGCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACAATCAATTGCCGGGCAAGTCAGAGTATTAGTTCCTA TTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAACTCCTGATCTATTCTGCATCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCTCTGG CAGTGGATCTGGGACAGATTTCGCCCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCATCTTACTACTGTCAACAGACTTCCACTTCCCCGT GGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p118w162	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTATTGCACA GAGCCAATAATAAAGATTATTTAGCATGGTACCAACAGAAACCAGGACAGCCTCCTAAGCTCCTCATTTACATGGCATCTACCCGGGAATCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCAGCATCAGCAGGCTGCAGGCTGAAGATGTGGCAGTGTATTACTGTC AGCAATATTATGATATTCCTCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAG
001	p118w163	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCCACT ATTTAAATTGGTATCAGCAGAAACCAGGTAAAGCCCCTAGCCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
001	p118w164	*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGAGTGTTACAACTTA CTTAGCCTGGTATCAGCAGAAACCTGGCCAGGCTCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w17	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTGCCAATT ATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATCAATGCTGCATCCACTTTGCAATCAGGGGTCCCATCTCGGTTCAGT GGCAGTGTATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTTCTGTCAAATGTATTACAGTGCCCC TCCTCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
001	p118w172	*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTA CTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w174	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGACAAGTCAGAGTATTAGCAGCTA TTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAACCTCCTGATCTATACTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGTG GCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTACATTACCCCGT GGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p118w175	*IGLV*	CCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATTCTGCATCCAGTTTACAAACTGGGGTCCCATCAAGGTTCA GTGGCAGTGGATCTGGGACAGATTTCACTCTCTCCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTACATTACCC CGTGGACGTTCGGCCAAGGGACCCAGGTGGAAGTCAAAC
001	p118w176	*IGLV*	GCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAACTATGTCTCCTGGTACC AACAACACCCAGGCAAAGTCCCCAAACTCATAATTTATGCTGACAATAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGC AACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGACGAGGCTGATTATTACTGCAGCTCATATAGAAGCAGCAGCCTCTGGGTGTTCG GCGGAGGGACCAAGCTGACCGTCCTAG
001	p118w177	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
001	p118w178	*IGLV*	GAAACTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCA GCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGCCTCCCAGGCTCCTCATCTATGGTGCATCCTGGAGGGCCTCTGGCCTCCCAGACAGGT TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGGAG CTCCCCTCTCACTTTCGGCGGAGGGACCAAGGTCGAGATCAAAC
001	p118w184	*IGLV*	GAGACTATTAGCACCTACTTAGGCTGGTACCAACAGAAACCTGGCCAGGTTCCCAGGCTCGTCATCTATGATGCATCTAACAGGGCCACTGACAT CCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAG CAGCGTCGCAGGTGGCCTCGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

001	p118w185		*IGLV*	GTGACGTTGGTAATTATAACTATGTCTCCTGGTACCAACAGCACCCAGGCCAAGCCCCCAAACTCATAATTGATGAAGTCAGTAAGCGGCCCTCA GGGGTCCCTGATCGTTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCCGATTATTACT GCAGCTCATATGCAGGCAGCATTTATGTTTTCGGAACTGGGACCAGGGTCACCGTCCTAG
001	p118w187		*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCTTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGCCCAGTGACATCAATGTTGCTTA CTACAACATATACTGGTACCAGCAGAAGCCAGGGAGCCCTCCCAGGTATCTCCTCTACTACTACTCAGACTCAGATCAGGGCCAGGGCTCTGGA GTCCCCAGCCGATTCTCTGGATCCAAGGATGCTTCAGCCAATACGGGGATTTTATTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTA TTGTATGATTTGGACAAGCAATGCTTCAATGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
001	p118w191		*IGLV*	CCCAGGAACGGCCCCCAAACTCCTCATCTATATTACTGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCA GCCTCCCTGGCCATCAGTGGCCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGCGTGGTGTTCGGC GGAGGGACCAAGCTGACCGTCCTAG
001	p118w20		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGACGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
001	p118w21		*IGLV*	GCCTCGTATACGGTGATGGAAACACCTACTTGAATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATGAGGTTTCTAACCGG GAGTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCATTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTT TACTTCTGCATGCAGGGTACACACTTTTGCACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
001	p118w25	53	*IGLV*	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACACAGTCACCATCACTTGCCGGGCCAGTCAGCTCATTAGCAATTA TTTAGCCTGGTATCAACAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCTTCCACTCTGGAAAGTGGAGTCCCATCAAGGTTCAGCG GCAGTGGATCTGGGACAGAATTCACTCTCACAATCACCAGCCTGCAGCCTGAGGATCTTGCAACTTATTACTGTCAACAACTTACTAGTTATTCAT TCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
001	p118w26		*IGLV*	TTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCGTTGACACCTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAACCTC CTGATCTATTCTGTATCAACTTTGGAGAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTTT TCAACCTGAAGATTTTGCAACTTACTACTGTCATCAGAGTTTCAGTACCCCTCAGTCTTTCGGCGGAGGGACCAGGGTGGACATCAAAC
001	p118w30		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGACTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAATCAGCAGTGACGCTGGTGCTT ATAACTCAATCTCCTGGTACCAACAACACCCAGGCAGAGCCCCCAAACTCATCATTTATGATGTCAATACTCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAGCACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATCTAA GGAACATTCTGCTGTTCGGCGGCGGGACCAAGGTGACCGTCTTAC
001	p118w35		*IGLV*	GAGTCAGGGCATTAGCAATTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATTTATGATGCATCTAGTTTGCAATCAG GGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCGGCCTGCAGCCTGAAGATGTTGCAACTTATTACTG TCAAAAGTATATCAGTGCCCCATTCACTTTCGGCCCTGGGACCAAAGTGGATATCAGAC
001	p118w47		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGACAAGTCAGAGCATTAGCAGGT ATTTAAATTGGTATCAGCAGAAACCAGGGCAAGCCCCTAAGCTCCTGATCTATAATGCAGCCAGATTGCAAAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCTACCTGAAGATTTTGCAACTTATCACTGTCAACAGACTTACATTACCCC GTGGACGTTTGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p118w48		*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTA CTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w5		*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTA CTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p118w59		*IGLV*	GCATTAGCAACTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGATTGCAAAGTGGGGTCCCA TCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCTACCTGAAGATTTTGCAACTTACTACTGTCAACAGAC TTACATTACCCCGTGGACGTTTGGCCAGGGACCAAGGTGGAAATCAAAC
001	p118w8		*IGLV*	CAGTCTGTGGTGACTCAGCCACCCTCAGCGTCTGCGACCCCGGCAGAGTGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGTAAT TTTGTATACTGGTACCAGCAGTTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAACGGCCCTCAGGGGTCCCTGACCGATTCTC TGGCTCCAAGTCTGACACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAACATGGGATGACAGC CTGAATGGTCAGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

001	p118w81		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCAGCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTTCTGTCAGCAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGGTGGAGATCAAAC
001	p118w82		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCGCCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCA ACTTCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGTTAATT ACCCTCGAACTTTTGGCCAGGGGACCCAGCTCGAGATCAAAC
001	p118w83		*IGLV*	TCCTATGAGCTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAGACGGCCAGGATCACCTGCTCTGGAGATGCATTGCCAAAGCAATATG CTTATTGGTACCAGCAGAAGCCAGGCCAGGCCCCTGTGCTGGTGATATATAAAGACAGTGAGAGGCCCTCAGGGATCCCTGAGCGATTCTCTGG CTCCAGCTCAGGGACAACAGTCACGTTGACCATCAGTGGAGTCCAGGCAGAAGACGAGGCTGACTATTACTGTCAATCAGCAGACAGCAGTGGT ACTTATCTTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
001	p118w93	63	*IGLV*	TCCTATGAACTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAGACGGCCAGGATCACCTGCTCTGGGGATGCATTGTCAAAACAATATG CTTATTGGTATCAACAGAAGTCAGGCCAGGCCCCTGTGTTGGTGATATATCAAGACACTAAGAGGCCCTCAGAGATCCCTGAGCGCTTCTCTGG CTCCAGCTCAGGGACAACAGTCACGTTGACCATCAGTGGCGTCCAGGCCGAGGACGAGGCTGACTATTACTGTCAATCATCGGACAGCAGTCCT ACTTGGGTGTTCGGCGCAGGGACTAAGTTGACCGTCCTAG
001	p120w100		*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCTTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGCCCAGTGACATCAATGTTGCTTA CTACAACATATACTGGTACCAGCAGAAGCCAGGGAGCCCTCCCAGGTATCTCCTCTACTACTACTCAGACTCAGATCAGGGCCAGGGCTCTGGA GTCCCCAGCCGATTCTCTGGATCCAAGGATGCTTCAGCCAATACGGGGATTTTATTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTA TTGTATGATTTGGACAAGCAATGCTTCAATGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
001	p120w104		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGAGCAAAC
001	p120w109		*IGLV*	GCCTCGTATACAGTGATGGAGACACCTACTTGTATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAATCGG GACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGACAATCAGCAGGGTGGAGGCTGAGGATGTTGCGATT TATTATTGTATGCAAAGTGTAAACTGGCCTCCAACGTTCGGCCTAGGGACCAAGGTGGAAATCAAAC
001	p120w111		*IGLV*	GCAGTCGTATTGACGCAGTCTCCAGGCACCCTGTCCTTGTCTCCAGGAGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTCTTGCCAATT CCTTAGCCTGGTACCAGCAGAAACCTGGCCACACTCCCAGGCTCGTCATCTTTGGTGCGTCCAGCAGGGCCGCTGGCGTCCCAGACAGGTTCA GCGGTAGTGGGTTTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTATATTACTGTCAGCAGTATGATAGGGCA CCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAGC
001	p120w112		*IGLV*	AGCAGCTCCAACATCGGGGCAGGTTATGATGTACACTGGTACCAGCTACTTCCAGGAACAGCCCCCAAGCTCCTCATCTATGGTTACAACAATC GGCCCTCAGGGGTCCCTGACCGATTCTCTGTCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGCCTGAGGATGAGGCTG ATTATTACTGCCAGTCGTATGACAGCAGCCTGAGTAACACTGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
001	p120w114	4	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGGGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCACCT ATTTAAATTGGTATCAACACAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATACTACATCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCAGTG GCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCACTCTGCAACCTGAGGATTTCGCAACTTACTACTGTCAACAGAGTTACACTACCCCG TGGACGTTCGGCCCAGGGACCAAGGTGGAGACCAAAC
001	p120w122		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAGCAATT ATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATTTATGATGCATCTACTTTGCAATCAGGAGTCCCATCTCGGTTCAGTG GCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTCAAAACTATATCAGTGCCCCA TTCACTTTCGGCCCTGGGACCAAAGTGGATCTCAAAC
001	p120w123		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACAGTACCCAGGCAAAGCCCCCAACTCATAATTTATGAAGTCGCTAAGCGGCCCTCAGGAGTCCCTGATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGACTCCAGGCTGAGGATGAGGCTGATTATTACTGCAACTCATATGCAGG CAATTATAATTATGTCTTCGGAAGTGGGACCAAGGTCACCGTCCTAA
001	p120w126		*IGLV*	AACATGGTGGTGACCCAGTCTCCAGACTCCCTGTCTCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAGGTCCGGCCAGAGTGTTTTATACA GGGCCAACAATAGGAACTACTTAGCTTGGTTCCAGCAGAAACCAGGTCAGCCTCCTAAGTTGCTCTTTTCCTGGGCATCTTCCCGGCAATCCGG CGTCCCTGACCGCTTCAGGGGCAGCGGGTCTGGGACAGACTTCACTCTCACCATCACCAGCCTGCAGGCTGAAGATGTGGCAATTTATTACTGT CAACAATATTATTATACTCCTCCTACGTTCGGCCAAGGGACCAAGGTGGAACTCAGAC

001	p120w136		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCAGCATCACTTGCCGGGCCAGTCAGAGTATTGGTAACT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGTTCCTGATCTATAAGGCGTCTAAGTTAGAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAATAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAGTAATTTTGT TCCGGTGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p120w143		*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTA CTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p120w144		*IGLV*	CAATCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCGTCTCCTGCACTGGAACCAGCAGTGACGTTGGTACTT ATGACTATGTCTCCTGGTACCAACAGTACCCAGGCAAAGCCCCCAAACTCATAATTAATGCTGTCAGTAATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAACTCAT
001	p120w145	5	*IGLV*	AACATGGTGGTGACCCAGTCTCCAGACTCCCTGTCTCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAGGTCCGGCCAGAGTGTTTTATACA GGGCCAACAATAGGAACTACTTAGCTTGGTTCCAGCAGAAACCAGGTCAGCCTCCTAAGTTGCTCTTTTCCTGGGCATCTTCCCGGCAATCCGG CGTCCCTGACCGCTTCAGGGGCAGCGGGTCTGGGACAGACTTCACTCTCACCATCACCAGCCTGCAGGCTGAAGATGTGGCAATTTATTACTGT CAACAATATTATTATACTCCTCCTACGTTCGGCCAAGGGACCAAGGTGGAACTCAGAC
001	p120w146	52	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCGCCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCA ACTTCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCACTGTATTACTGTCAGCAGTATGTTAATT ACCCTCGAACTTTTGGCCAGGGGACCCAGCTCGAGATCAAAC
001	p120w15		*IGLV*	TCGGGCGAGCCGGCATATTTCCAATTGGTTAGCCTGGCTTCAGCAGAGGCCAGGAAAAGCCCCTGAACTCCTGATCTATGATGCATCCACCTTG CAAAGTGGGGTCCCGTCGCGATTCAGCGGCGCTGGATCTGGGACGGAATTTACTCTTACCATTAACAGCCTGCAGCCTGAGGATTTTGCCACTT ACTATTGTCAACAGACTAACACTTTCCCCCTCACTTTCGGCGGAGGGACCACGGTGGAGATCATAC
001	p120w164		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAAT AATTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATTATAAGCGACCCTCAGGAATTCCTGACCGATT CTCTGGCTCCAAGTCTGGCACGTCAGCCACCTGGGCCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAG CAGCCTGAGTGCCTATGTCTTCGGAACTGGGACCAAGGTCACCGTCTAGG
001	p120w167		*IGLV*	TCCTATGAGCTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAGACGGCCAGGATCACCTGCTCTGGAGATGCATTGCCAAAACAATTTG CTTATTGGTATCAACAGAAGTCAGGCCAGGCCCCTGTATTGGTGATATATCAAGACACTAAGAGGCCCTCAGAAATCCCTGAGCGCTTCTCTGGC TCCAGCTCAGGGACAACGGTCACGTTGACCATCAGTGGCGTCCAGGCGGAGGACGAGGCTGACTATTACTGTCAATCATCGGACAGCAGTCCT ACTTGGGTGTTCGGCACAGGGACTAAGCTGACCGTCTTGG
001	p120w168		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGGACCAGTAGTGACGTTGGTGGTT ATAATTATGTCTCCTGGTACCAGCAGCACCCAGGCAAAGCCCCCAAACTCATCATTTATGAGGTCAATAAGCGGCCCTCAGGGGTCCCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGCAACTCATATGCAG GCAGTTATAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCTTAG
001	p120w172		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGGGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCACCT ATTTAAATTGGTATCAACACAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATACTACATCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCAGTG GCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCACTCTGCAACCTGAGGATTTCGCAACTTACTACTGTCAACAGAGTTACACTACCCCG TGGACGTTCGGCCCAGGGACCAAGGTGGAGACCAAAC
001	p120w174		*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTA CTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGC CTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p120w176		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGAGCAAAC
001	p120w178		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCC TGGGACTTTTGGCCAGGGGACCAAGCTGGAGAGCAAAC

001	p120w185		*IGLV*	CAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGTACGTTTACAATTACTTAGCCTGGTATCAACAGAAACCTGGCCAGGCCCCCAGACTCCTCATCTCTGATGCATCCGACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGCGTAGCAACTGGCCTGTCACCTTCGGCCAAGGGACACGACTGGACATTAAAC
001	p120w187		*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCATCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCACCTACTTAGCCTGGTATCAACATAAATATGGCCAGCCTCCCAGGCTCCTCATCTATGATACATCCGACAGGGCCACTGGCATCCCACCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCACCAGCGTAGCGACTGGCCTGTCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
001	p120w191		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTGTTTTATATAGCTCCAACAATAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAACTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAATTTATTACTGTCAGCAATATTATAGTACTCCATTGTACACTTTTGGCCAGGGTACCAGGCTGGAGATCAAAC
001	p120w193		*IGLV*	GATATTGTGCTGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGTCGGCCTCCATGTCCTGCAAATCTAGTCAGAGCCTCCTACATAGCAATGGATACAATTACGTGGGGTGGTTTCTGCAGAAGCCAGGGCAGCCTCCACAGCTCCTGATCTATTTGGGCTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACATTGAAAATCAGCAGAGTGGAGGCTGACGATGTTGGGATTTATTACTGCATGCACGGTTTCCAAACTCCTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p120w20	54	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCAGCATCACTTGCCGGGCAAGTCGGAGCATTAACACTTTTTTAAATTGGTATCAGCAGAAACCAGGGAAAGCTCCCAACCTCCTCATCTATGCTGCCTCCACTTTGCAAAGTGGGGTCCCATCACGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATTAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTTCTGTCAACAGAGTTACAGTACCCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p120w203		*IGLV*	GAGATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAAAGATGGAGACACCTACTTGTATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAAGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAAGATGTTGCGATTTATTACTGCATGCAAAGTGTAAGCTGGCCTCCAACGTTCGGCCTAGGGACCAAGGTGGAAATCAAAC
001	p120w21		*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGCTTATAACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCATTATTTATGAGGTCTATAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGACGATGAGGCTGATTATCACTGCTGCTCATATACAGGCGACTATGTTTTCCTGGTATTCGGCGGAGGGACCAAGCTGACCGTCTTAG
001	p120w3		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCCACTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGCCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTAGTCCTGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
001	p120w30		*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCTTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGCCCAGTGACATCAATGTTGCTTACTACAACATATACTGGTACCAGCAGAAGCCAGGGAGCCCTCCCAGGTATCTCCTCTACTACTACTCAGACTCAGATCAGGGCCAGGGCTCTGGAGTCCCCAGCCGATTCTCTGGATCCAAGGATGCTTCAGCCAATACGGGGATTTTATTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTATTGTATGATTTGGACAAGCAATGCTTCAATGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
001	p120w35		*IGLV*	ATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGTAGGTCTAGCCAGAACCTCCTGGCTAGTAATGGACACACCTACATGAATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATGTCTTTCGTTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGCGTTTATTACTGCATGCAGACTCTACAATTTCCTCAAACTTTCGGCCCTGGGACCAAAGTGGAAATCAAAC
001	p120w37		*IGLV*	GACGTCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGCAATTATTTAGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATCTTGCATCCACTTTACAAGGTGGGGTCCCATCAAGGTTCAGCGGCAGCGGATCTGGGACAGACTTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTAGAGCTTAATAATTACCCGTTCACCTTCGGCCAAGGGACACGACTGGAGACTAAGC
001	p120w46	64	*IGLV*	TCCTATGAGCTGACACAGCCACCCTCGATGTCAGTGTCCCCGGGACAGACGGCCAGGATCACCTGCTCTGGAGATGCCTTGTCAAAACAATATGCTTATTGGTATCAACAGAAGTCAGGCCAGGCCCCTGTGTTGGTGATATATCAAGACACTAAGAGGCCCTCAGAGATCCCTGAGCGCTTCTCTGGCTCCAGCTCAGGGACAACAGTCACCTTGACCATCACTGGCGTCCAGGCAGAGGACGAGGCTGACTATTACTGCCAATCATCGGACAGCAGTCCTACTTGGGTGTTCGGCGCAGGGACTAAGTTGACCGTCCTAG
001	p120w48		*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCTTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGCCCAGTGACATCAATGTTGCTTACTACAACATATACTGGTACCAGCAGAAGCCAGGGAGCCCTCCCAGGTATCTCCTCTACTACTACTCAGACTCAGATCAGGGCCAGGGCTCTGGAGTCCCCAGCCGATTCTCTGGATCCAAGGATGCTTCAGCCAATACGGGGATTTTATTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTATTGTATGATTTGGACAAGCAATGCTTCAATGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG

001	p120w51		*IGLV*	GATATTGTGATGACCCAGACTCCACTCTCTTCACCTGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTGAAAGCCTCGAACACAGTGATGGAAGTACCTACTTGAGTTGGCTTCAACAGAGGCCAGGCCAGCCTCCAAGACTCCTAATTTATAAGATTTCTAACCGGTTCTCTGGGGTCCCAGACAGATTCAGTGGCAGTGGGGCAGGGACAGATTTCACACTGAAAATCAGCAGGGTGGAAGCTGAGGATGTCGGGGTTTATTACTGTATGCAAACTACACAATTTCCCCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
001	p120w55		*IGLV*	GCCTACTTGTATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGAAAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAAGATGTTGCGATTTATTACTGCATGCAAAGTGTAAGGTGGCCTCCAACGTTCGGCCTAGGGACCAAGGTGGAAATCAAAC
001	p120w62		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGGGACGTTGGTGGTCAGAATTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAACTTATCCTCTTTAATGTCAGTAATCGGCCCTCAGGAGTTTCTGATCGCTTCTCTGGCTCCAAGTCTGCCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAAGACGAGGCTGATTATTACTGCAACTCTTTTACAAGCAGTAATACTTGGGTGTTCGGCGGAGGGACCAAATTGACCGTCCTAG
001	p120w7		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTATTGCACAGAGCCAATAATAAAGATTATTTAGCATGGTACCAACAGAAACCAGGACAGCCTCCTAAGCTCCTCATTTACATGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCAGCATCAGCAGGCTGCAGGCTGAAGATGTGGCAGTGTATTACTGTCAGCAATATTATGATATTCCTCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAG
001	p120w82		*IGLV*	TCCTATGAACTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAGACGGCCAGGATTACCTGCTCTGGGGATGCATTGTCAAAACAATATGCTTATTGGTATCAACAGAAGTCAGGCCAGGCCCCTGTGTTAATCATATATCAAGACACTAAGAGGCCCTCAGAGATCCCTGAGCGCTTCTCTGGCTCCACCTCAGGGACAACAGTCACGTTGACCATCCGTGGCGTCCAGGCCGAGGACGAGGCTGACTATTACTGTCAATCATCGGACAGCAGTCCTTCCTGGGTGTTCGGCGCAGGGACTAAGTTGACCGTCCTAG
001	p120w83		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAGCAATTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATCTATGATGCATCCGCTTTGCAATCAGGGGTCCCATCGCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCATCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTCAAAGGTATCTCAGTGCCCCATTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
001	p118w203	2	*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCTTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGCCCAGTGACATCAATGTTGCTTACTACAACATATACTGGTACCAGCAGAAGCCAGGGAGCCCTCCCAGGTATCTCCTCTACTACTACTCAGACTCAGATCAGGGCCAGGGCTCTGGAGTCCCCAGCCGATTCTCTGGATCCAAGGATGCTTCAGCCAATACGGGGATTTTATTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTATTGTATGATTTGGACAAGCAATGCTTCAATGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
001	p118w111	55	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAACTATTTAAATTGGTATCAGCATAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTCACAGTAGTCCTGGGACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
002	p125w100	58	*IGHV*	CAGGTGCAGTTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCGGTAAATACTACTGGAGTTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATTACACTGGAACCACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAATTCTCCCTGAACCTGAGCTCTGTGACTGCTGCGGACACGGCCGTGTATTACTGTGCGAGAGAGTCCCTCCCCTGTGGTGGCGGTGCCTGGAGAATACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w104		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCACCGTCAGTAACTATGGCATGTCTTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCACTTATATGGTATGATGGGACTAATACATACTATGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAGTTCCCAGAACACCCTATTTCTGCAAATAAACAGCCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGGGAGAGATCCACCCCCAGCAAGGAGTGACGGGTCGTGGGGGGACTACTACTCCTACGGCATGGACGTCTGGGGCCAAGGGACCGCGGTCACCGTCTCCTCA
002	p125w109		*IGHV*	CAGGTTCAGCTGATGCAGTCTGGAAGTGAAGTGAAACAGCCTGGGGCCTCAGTGAAGGTCTCCTGCGTGGCTTCTGGTTATAGTTTTTACCGCCTATAGTATCAACTGGGTGCGACAGGCCCCAGGACAAGGGCTTGAGTGGATGGGGTGGATCAGTGTTTACAAAGGTGAAACAAAGTATGCACAGAAGTTCCAGGGCAGAGTCACTATGACCGCAGACCCATCCACGAGCACAGCCCACATGGAACTGAGGGGTCTGACATCTGAGGACACGGCCTTATATTTCTGTGCGAGGGACCGACGCGCGGAATATGATGACAGTCGTGGTTTTGAAAAATGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w112	46	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACGTGCACTGTCTCTGGTGGCTCCATCAATAGTTACTACTGGAGTTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGTATGTCTTTTACAGTGGCATCACCAAGTACAACCCCTCCCTCCAGAGTCGAGTCACCATATCACTGGACATGGGCAAGAACCAGTTCTCCCTGAAGTTGACCTCTGTGAATGCTGCGGACGCGGCCGTGTATTATTGTGCGAGAAACTTTCCGAGCTACACCCCGGACTGGTTTTTTGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG

002	p125w113		IGHV	CACGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCACTCACCTGCAGTGTCTCTGGTTACTCCATCAACAGT GGCTACTACTGGGGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGAGTTTGTATCATAGTGGGAGCACCTACTACAACCCG TCCCTCAAGAGTCGAGCCACCATATCAGTCGACCCGTCGAAGAACCAGTTGTCCCTGAACCTGAGGTCTGTGACCGCCGCAGACACGGCCGTTT ATTTCTGTGCGAGACGGGCTATGGGGGATATGTTCCCAGCTAGAGAATTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w114		IGHV	TGTCAAGGTCTCCTGCAAGGCTTCTGGATACACTTTCACCGGCTTCTATATACAGTGGATTCGACAGGTCCCTGGACAAGGACTTGAGTGGATGG GATGGGTCGACCCTAACAGTGGTGACACAGCATATGCACAGAAGTTTCAGGGCAGGGTCACCATGACCAGGGACACGTCCATCAGATCAACCTA CATGGAGTTGAGCAGGCTGACACATGACGACACGGCCGTTTATTATTGTGCGAGAGATTATTATGATAGAAGTGGATATGATCTCGACTACTTTG ATTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAC
002	p125w119		IGHV	GAGGTGAAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGAGTCTCCTGTGCAGTCTCTGGATTTACGTTTGAAGAA TATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTACAATAGTGGTAGCATAGGCTACGCGGAC TCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAGAAGTACTTGCATCTGCAAATGAACAGTCTGAGACCTGAGGACACGGCCTTGT ATCACTGTGTAAAAGATAGTGGCCGCTGGTTCCAAGCGAGGGAGCAGCTCCAGACCTGGAGGCACTACGACTACGGTATGGACGTCTGGGGCC AAGGGACGAAGGTCATCGTCTCCTCA
002	p125w126		IGHV	CGAGCCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGCCTTCAGTGACTATAACATCAACTGGGTCCGCCAGGCTCCAGGGAA GGGGCTGGAGTGGGTCTCAGCCATTACGACTAGTAGTAGTTACATATACTACGCAGACTCAGTGAAGGGCCGATTTACCATCTCCAGAGACAAC GCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGCCGAGGACACGGCTGTTTATTACTGTGCGCGAGATACGCGGGGGGCATAGCACGT CGTATCACCTCTATTACGGTTTGGACGTCTGGGGGGCCCAAGGGACCACGGTCACCGTCTCCTCAG
002	p125w136	44	IGHV	GAGGTGAAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGAGTCTCCTGTGCAGTCTCTGGATTTACGTTTGAAGAA TATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTACAATAGTGGTAGCATAGGCTACGCGGAC TCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAGAACTACTTGCATCTGCAAATGAACAGTCTGAGACCTGAGGACACGGCCTTGT ATCACTGTGTAAAAGATAGTGGCCGCTGGTTCCAAGCGAGGGAGCAGCTGCAGACCTGGAGGCACTACGACTACGGTATGGACGTCTGGGGCC AAGGGACGAAGGTCATCGTCTCCTCA
002	p125w14	27	IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTCAAGCCTTTGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGTCTCCATCAATAGTT ACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGCAATGTCTTTTATAGTGGGAGCACCAAGTACAATCCCTCCCT CGAGACTCGAGTCGCCATGACAGTTGACTCGTCCAGGAATCAGGTCTCCCTGAGGCTGAACTCTGTGACCGCTGCGGACACGGCCGTGTATTA CTGTGCGAGAGAAGGGGTGGGATACGGCTACAATAATTACGGAGGTAACTGGTTCGACCCCTGGGGCCAGGGAACTCTGGTCACCGTCTCGTC AG
002	p125w143		IGHV	CAGGTGCAGCTGCGGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTAATGGCTCCATGACTAAT TATTATTGGACATGGGTCCGACAGCCCCAGACGGGAAGGCTGGAATGGATTGGATATGTCTATTCCAGTGGGAGCACCAACTACAACCCCTCCC TCCAGAGTCGGGTCACCATAACTGTAGACACCTCCAAGAATCAGTTCTCCCTGAACCTGAATTCTGTGACCGCTGCGGACACGGCCGTGTATTA CTGTGCGAGAGGGACCCTGCTTCGGGAGGCTAAGTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w159		IGHV	GAAGAGCAGCTGGTGCAGTCCGGAGCAGAGGTGAAAGAGCCCGGGGAGTCTCTGAGGATCTCCTGCAAGGGTTCTGGATACAGCTTTACCAGC CACTGGATCACCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGAGGATTGATCCTAGTGACTCTAATACCCACTACAGCCCG TCCTTCCAAGGCCACGTCACCATCTCAACTGACAAGTCCATCAGCACTGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACAGCGGCATCT ATTACTGTGCGACGAGCTACCGCCTCTACTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCTCGGTCACCGTCTCCTCA
002	p125w162		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTCAAGCCTTTGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGTCTCCATCAATAGTT ACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGCAATGTCTTTTATAGTGGGAGCACCAAGTACAATCCCTCCCT CGAGAGTCGAGTCGCCATGACAGTTGACTCGTCCAGGAATCAGGTCTCCCTGAGGCTGAACTCTGTGACCGCTGCGGACACGGCCGTGTATTA CTGTGCGAGAGAAGGGGTGGGATACGGCTACAATAATTACGGAGGTAACTGGTTCGACCCCTGGGGCCAGGGAACTCTGGTCACCGTCTCGTC AG
002	p125w163	31	IGHV	GAAGAGCAGCTGGTGCAGTCCGGAGCAGAGGTGAAAGAGCCCGGGGAGTCTCTGAGGATCTCCTGCAAGGGTTCTGGATACAGCTTTACCAGC CACTGGATCACCTGGGTGCGCCAGGTGCCCGGGAAAGGCCTGGAGTGGATGGGGAGGATTGATCCTAGTGACTCTAATACCCACTACAGCCCG TCCTTCGAAGGCCACGTCACCATCTCAACTGACAAGTCCATCAGCACTGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACAGCGGCATCT ATTACTGTGCGACGAGCTACCGCCTCTACTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCTCGGTCACCGTCTCCTCA
002	p125w167		IGHV	ATGAAAAAGCCCGGGGCCTCAGTGAAGGTCTCCTGCTCGGCTTCTGGTTACACCTTTAGCACCTATAGTATTCACTGGGTGCGACAGGCCCCAG GACAAGGTCTTGAGTGGATGGGATGGATCAGCGCTTACAATGGTGACACAAAATATGTACAGAAGTTCCAGGGCAGAGTCGCCATGACCGCAGA CACATCCACGAGCACAGCCTACATGGAACTGAGGAGTCTGACATATGACGACACGGCCGTTTATTTCTGTGCCAGGGATCGACGCGCGGAATAT CATGACAGTCGTGGTTTTGAAAAATGGGGCCAGGGAACCCTGGTCACCGTCTCGTCAG

002	p125w17	35	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGGCTGAGGTGAGGAAGCCTGGGTCCTCGGTGAAAGTCTCCTGCAAGGCCTCTGGAGGCACCTTCGGCAGCTATAGTTTCAACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCATCCCTATGTATCGTAGACCAAATTACGCACAGATGTTCCAGGGCAGAGTCACCATTACCGCGGACGAATCCACGAGCACAGCCTACATGGAGCTGAGCAGCCTGAGATTTGAGGACACGGCCGTGTATTACTGTGCGAAGGCCGCTTACGATATTTTGACTGGTCAGTTTTACTACTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p125w172		*IGHV*	CAGGTGCAGCTGGTGGAATCTGGGGGGAGGCGTGGTCCAGCCTGAGAGGTCCCTAAGACTCTCCTGTGTAGCGTCTGGATTTACCTTCAGGACCTATGGCATGCCACTGGGTCCGTCAGGCCCCAGGCAAGGGCCTGGAGTGGGTGGCAGCTATGTGGTACGATGGAAGTAATAAATATTATGCAGACTCGGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACAGTATATCTGCAAATGAACAGCCTGAGAGTCGAGGACACGGCTGTGTATTACTGTGCGAAGAACCATGTCATCTACGGTAGTAATTCTAACAACTATATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p125w175		*IGHV*	AAGTGAAGCTGGTGGAGTCTGGGGGGAGGCCTGGTACAGCCTGGCAGGTCCCTGAGAGTCTCCTGCGAAGTCTCTGGATTTACGTTTGAAGAATATGCCATGCAGTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTACAATAGTGGTAGCATAGGCTATGCGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAGAACTCCCTGTATCTGGTAATGAACAGTCTGAGACCTGAGGACACGGCCGTGTATTACTGTGTAAAAGATAGTGGCCGCTGGTACCAAGCGAGGGAGCAGCTCCAGACCTGGAGGCACTACGACTACGGTATGGACGTCTGGGGCCAAGGGGCGAAGGTCATCGTCTCCTCA
002	p125w176		*IGHV*	ATTACTGGAGTTGGATCCGGCAGACCCCAGGGAAGGGACTGGAGTGGCTTGCATTTATCTTTTATAGTGGGAGCACCCACTCCAACCCCTCCCTCCAGAGTCGAGTCACCATATCATTAGACATGTCCAAGAACCAGTTCTCCCTGGAGCTGAGCTCTGTGACCGCTGCGGACTCGGGCGTTTATTATTGTGTGAGAGAGGGGGTGAGATATTGTGGCGCTAACTGCCCGTACTACTTTGACGACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w177	57	*IGHV*	CAGGTGCAGTTGGTGGAGTCTGGGGGGAGGCGTGGTCCAGTCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGAAGCTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCAGATTTATCATTAGATGGAAGTCATAAATACGCAGACTCCGTGAGGGGCCGATTCACCATCTCCAGCGACAGTTCCAAGAACACGGTGTATCTGCAAATGAACAGCCTGAGAACTGAGGACACGGCTATATATTACTGTGCGAGAGCCGCGGGTATAATGGTGGCTGGTACTTTCTTAACCGAGTTCTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w178		*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGACAGTTTCCTGCAAGGCATCTGGATACGCCTTCACCAGTTTCTATCTACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAATAATCAACCCTAGTGATGGTCGCACAAGATACGCACAGAAGTTCCAGGGCAGAGTCACCATGACCAGCGACACGTCCACGAACACAGTCTACGTGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCATATATTACTGTGCGAGAGGTGCCATCGGGAACTACAATGCCCGGGAGGCTTTGGACGTCTGGGGCCGAGGGACCACCGTCACCGTCTCCTCA
002	p125w184		*IGHV*	CACTCACGTGCAGTGTCTCTGGGGGTCCGTCAATAGTGGTGGTTACTACTGGAGCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGCTACATTTATTACAGTGGGAGTACCGACTACAACCCCTCCCTTAAGAGTCGAGCCACCTTATCTATAGACACGTCTATGAACCAATTCTCCCTGAAACTGACATCTCTTACCGCTGAGGACACGGCCATATACTATTGTGC
002	p125w185		*IGHV*	TTCATCTGGTACAGTCTGGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGACCTCTGGATACAACTTCAACGACTACTTTGTTCACTGGTTTCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGGGGTGGATCAACCCTAATAGTGGTGGCACAAATTATGCAATAAACTTTCAGGGCAGGGTCACCATGACCTGGGACACGTCCCTCACCACAGCCTACATGGAGCTGACCGGGCTGAGATCTGACGACACGGCCGTCTATTACTGTGCGAGAGTCAGATTTCCTGGCTATGATTTGCTTGAATACTGGGGCCAGGGCACCCTAATAAGTGTCTCTTCAG
002	p125w187		*IGHV*	GAGGTGCGAGTGTTGGAGTCTGGGGGGAGCCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGATTCCCCTTTACAAATTCTATCATGACGTGGGTCCGCCAGGCACCAGGGAAGGGGCTGCAGTGGGTCTCAAGTCTTAGTAATATTGACGGCAGTACATACTACGCAGACTCCGTGGAGGGCCGCTTCAGCATCTCCAGCGACCATTCCAAGAACACCCTTTATCTGCAACTGAATTCCCTGAGAGCCGAGGACACGGCCAGATATTACTGCGCGAAGGAGTTTCAGACTAGTGGCAGGTGTGGCAATTATAATTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w20		*IGHV*	GAGGTGAAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGAGTCTCCTGTGCAGTCTCTGGATTTACGTTTGAAGAATATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTACAATAGTGGTAGCATAGGCTACGCGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAG
002	p125w203	47	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCCTCGGAGACCCTGTCCCTCACCTGCTCTGTCTCTGGTGGCTCCATCAGTGTTTACTACTGGAACTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGCGTCTATGTATTACACTGGAATTACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATGTCAGTAGACATGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAACGATGGGGATTGACCAGAATAACCGTGGCTGGCCCCCTGCGGGCTACTACTTCGGCATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

002	p125w25		*IGHV*	GATGGTGGGTCCTTCAGTGGTTACTACTGGAGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAAATCAATCATAGTGGAAGCACCACCTACAACCCGTCCCTCGAGAGTCGAGCCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTCAATTTGAACTCTGTGACCGCCGCGGATACGGCTGTGTATTTCTGTGCGAGGGCCCTGCTTGTGTGGACTCCTCGTCCTGAGTGGGTCAGTGGGGTCTTTGACTACTGGGGCCAGGGATCCCTGGTCACCGTCTCCTCAG
002	p125w3		*IGHV*	AAGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGGTGTCTCTGATTACTCTATCAGCAGTGGTTACTACTGGGGCTGGATCCGACAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTTTCATAGTGGGGCCACGTACTTCAACCCGTCCCTCAAGAGTCGACTCACCATCTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTACTGTGCGCGAGACCGTAATTACTATCATGATAGTGATTATTACGGGCGCCTGACTTACTTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w37	28	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGAGGGTTAGTTCAGCCGGGGGGTGCCCTGAGACTCTCCTGTGCAGCCTCTGGATCCACCTTCAGTAGCTACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGGTCTCACGTATTAATAGTGATGGGAGTAGCACAAGTTACGCGGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACACGCTGTATCTGCAAATGAGCAGTCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCAAGGGGCCATCAACCCATTTCGACCGGAGCTGTCGGCTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCGG
002	p125w46		*IGHV*	GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGTGTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGACTCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTATTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG
002	p125w47	29	*IGHV*	GACGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCAGTTTCAGTAGGGCCTGGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGACTGGAGTGGGTTGGCCGAATTAAAAACAAAAATGAGGGCGAGACAAGAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGACTCAAAAGCCACGCTCTATCTGCAAATGAATGACCTGAAAACCGAGGACACAGCCGTGTATTATTGTGCCACAGATAGTCGCTACGGTGACGGCTCGGGAGTTTTTGATATCTGGGGCCATGGGACAAAGGTCACCGTCTCTTCAG
002	p125w5	45	*IGHV*	CAGGTCCAACTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTGACACTGTCCTGTGCAGCCTCTGGATTCACCTTCAGCAACTATGTTATGCACTGGGTCCGACAGGCTCCAGGCAAGGGACTGGAATGGGTGGCTCTTGTCTCACTTGAAATAAGTTATAATCAATATGTGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCAAGAACACAGTGTCTCTGGAATTGAACAGCCTGAGAGATGAGGACACGGCTGTCTATTACTGTGCGAGAGAGGGGGAGACCAGTGGCCATGCTGGAAGTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w55		*IGHV*	CAGGTGCTGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACGTGCAGTGTCTCTGGTGGCTCCATGACTAGTTACTATTGGAGCTGGATCCGGCAGCCCGCCGGGAAGGGACTCGAATGGATTGGGCGTATTTATGTCAGTGGGACCACCAACTACAATCCCTCCCTCCAGAGTCGAGTCACCATGTCAGTGGACACGTCCACGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCGGACTCGGCCGTCTATTATTGTGCGCGAGAATACACCTACCGAAATTACTACTATGGTTTGGACTTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p125w59	30	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGACAGTTTCCTGCAAGGCATCTGGATACGCCTTCACCAGTTTCTATCTACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAATAATCAACCCTAGTGATGGTCGCACAAGATACGCACAGAAGTTCCAGGGCAGAGTCACCATGACCAGCGACACGTCCACGAACACAGTCTACGTGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCATATATTACTGTGCGAGAGGTGCCATCGGGAACTACAATGCCCGGGAGGCTTTGGACGTCTGGGGCCGAGGGACCACCGTCACCGTCTCCTCA
002	p125w62		*IGHV*	GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGTGTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGACTCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTATTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG
002	p125w7		*IGHV*	GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGTGTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGACTCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTATTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG
002	p125w8		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGACTCCATTAGTAGTGACCGTTACTACTGGAATTGGATCCGCCAGCACCCAGGGAAGGGCCTCGAGTGGATCGGGTACATAAATTACAGTGGGAGAACCCACTACAATCCGACCCTCCAGAGTCCTGTTAGCATGTCAGTAGACACCTCTAAGAACCAGTTCTCCCTGAAATTGAGTTCTGTGACGGCCGCGGACACGGCCGTATATTACTGTGCGAGAATTTCTGGATTTAGAAATTACGACCCCGTGGACTGCCTCGACCCGTGGGGCCAGGGAATCCTGGTCACCGTCTCCTCAG
002	p125w81		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACTGCCTGGAGGGTCCGTGAGACTCTCCTGCGCAACGTCTGGATTCACCTTTAGTGGTTATGGAATGAACTGGCTCCGCCAGACTCCAGGGAAGGGGCTGGAATGGATTTCATATATCAGTAATTTTAATACTAACATATACTATGCAGCCTCTGTGAGGGGCCGATTCACCATCGCAAGCGACACCTCCGAGAACTCAATATATCTGCAAATGAACAGCCTGAGAGTCGAGGACTCGGCTGTTTATTACTGTGCGAGAGAGGCCCCGAGTGGGAGCTTAGATTACTGGGGCCTGGGAACCCTGGTCACCGTCTCCTCAG

002	p125w83	60	*IGHV*	GACGTGCAACTGGTGGAGTCTGGGGGGAGGCTTGGTAAAGCCTGGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCAGTTTCAGTAGGGCCTGGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGGTTGGCCGAATTAAAAACAAAAATGAGGGCGAGACAAGAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGACTCAAAAGCCACGCTCTATCTGCAAATGAATGACCTGAAAACCGAGGACACAGCCGTGTATTATTGTGCCACAGATAGTCGCTACGGTGACGGCTCGGGAGTTTTTGATATCTGGGGCCATGGGACAAAGGTCACCGTCTCTTCAG
002	p125w93		*IGHV*	CAGTTTAACCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGCCTTCTGGTTACACCTTTACCAGCTATGGTATCACCTGGGTGCGACAGGCCCCTGGACAAGGTCTTGAGTGGATGGGATGGATCAGCACTTATGATGGTCACACAAACTATGCACAGAAGTTCCAGGACAGAGTCACCATGACCACAGACACATCCACGAGCACAGCGTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCATGTATTACTGTGCGAGAGATGGTGATGGCTACAGTGTTAGCTTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p126w104	36	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGATTCAGTTTCAGTGACTACTCCATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGATTGCATACATTAATCAAAATAGTGCTTACATAAGTTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGGGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTCTTTATTACTGTGCGTCCCGTGGGGGCAAAGGTTTTGAAGACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p126w112		*IGHV*	GAGGTGCAGGTGGCGGAGTCTGGGGGGAGGCTTGGTCCACCCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCGGTAGCAACTACATGAACTGGGTCCGCCTGGCTCCAGAGAAGGGGCTGGAGTGGGTCTCAGTTATGTATAGCAGTGGTGGCACATACTACGCAGACTCCGTGAAGGGCAGATTCACCATTTCCAGAGACAATTCCAAGAACACGGTGGATCTTGAAATGAACAACTTAAGAGCCGAAGACACCGGAGTATACTACTGTGCGAGAGACGGGATACAGATAAGAACTTACTACTACTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p126w113		*IGHV*	GAGGTGAAGCTGGTGGAGTCTGGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGAGTCTCCTGTGCAGTCTCTGGATTTACGTTTGAAGAATATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTACAATAGTGGTAGCATAGGCTATGCGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAGAAATACTTGTATCTGCAAATGAACAGTCTGAGACCTGAGGACACGGCCTTGTATTACTGTGTAAAAGATAGTGGCCGCTGGTACGAAGCGAGGGAGCAGCTCCAGACCTGGAGGCACTACGACTATGGTATGGACGTCTGGGGCCAAGGGACGAAGGTCATCGTCTCCTCA
002	p126w114		*IGHV*	CAGATACAGCTCCACGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCCTCAATTATTACTACTGGAGTTGGATTCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGTACCAACTACAACCCCTCCCTCAATAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAATCAGTTCTCCCTGACCCTGAGTTCTGTGACCGCCGCGGACACGGCCGTATATTATTGTGCGAGAG
002	p126w126		*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGGAGGGTTAGTTCAGCCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATCCACCTTCAGTAGCTACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGGTCTCACGTATTAATAGTGATGGGAGTAGCACAAGTTACGCGGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACACGCTGTATCTGCAAATGAGCAGTCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCAAGGGGGCCATCAACCCATTTCGACCGGAGCTGTCGGCTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCGG
002	p126w129		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTGTTTACTACTGGAACTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGCGTCTATGTATTACACTGGAATTACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACATGTCCAAGAACCAATTGTCCCTGAAGCTCAGCTCTGTGACCGCTGCGGACACGGCCGTGTATTACTGTGCGAGAACGATGGCGATTGACCCGCATAACCGTGGCTGGCCCCCTGCGGGCTACTATTTCGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p126w135		*IGHV*	GAAGTGCAGCTGGTGGAGTCTGGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTCAGACTCTCCTGTGTAACCTCTGGATTCATCTTTGAGAATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAACAGTGGTAGCCTAGACTATGCGGCCTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGCAAATAAACAGTCTAAGAGCTGAGGACACGGCCCTATATTACTGCGCAAAGGGGAAGGAACGGTATTACTATGCATCGGGGAGAGTTGGTCGTTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
002	p126w14		*IGHV*	GAGGTGCGGCTGGTGGAGTCTGGGGGGAGGCTTAGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGACTCAAATTTAGGATTCACAAATTCCATTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATTCATTAGTGATAGTGGTGAAACCATATACTACGCAGATTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGGACTCAGTGTACCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTGTTTATTACTGCGCGAGAGATCCCCTTTCCTATGATTATTGTCTTGACCAGTGGGGCCCGGGAACTCTGGTCACCGTCTCCTCAG
002	p126w162	48	*IGHV*	CAGGTCCAGCTGGAGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCCTCAGCCCCTATGTTGTCAGCTGGCTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGA

002	p126w163		*IGHV*

GAGGTGGAGCTGCTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGGAGTCTCTGAAGATCTCCTGTCAGGGTTCTGGATACAGCTTTACCAAC
TACTGGATCGCCTGGGTGCGCCAGATGCCCGGCAAAGGCCTGGAGTGGATGGGGACCATCCGTCCTGGTGAATCTGATATCAGATACAGCCCG
TCCTTTGAAGGCCAGGTCACCATCTCAGCCGACAAGTCCAGCAGCACCGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATG
TATTACTGTGCGAGAGGGAGGACTTATTACTATGGTTCGGGGAAATTACCACTTTGACTATTGGGGCCAGGGAACCCTGGTCACCTTCTCCTCAG

002	p126w164	34		*IGHV*

CAGATACAGCTCCACGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCCTCAATTATT
ACTACTGGAGTTGGATTCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGTACCAACTACAACCCCTCCC
TCAATAGTCGAGTCACCATGTCAATAGACACGTCCAAGAATCAGTTCTCCCTGACCCTGAATTCTGTGACCGCCGCGGACACGGCCGTGTATTAT
TGTGCGAGAGGATCGTTGGCTCCGGATTACTGGGCCCGGGAACCCTGGTCACCGTCCCCCAAC

002	p126w172		*IGHV*

GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGT
GTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGAC
TCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTA
TTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG

002	p126w174		*IGHV*

CAGTTTCCTGCAAGGCATCTGGATACGCCTTCACCAGTTTCTATCTACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAT
AATCAACCCTAGTGATGGTCGCACAAGATACGCACAGAAGTTCCAGGGCAGAGTCACCATGACCAGCGACACGTCCACGAACACAGTCTACGTG
GAGCTGAGCAGCCTGAGATCTGAGGACACGGCCATATATTACTGTGCGAGAGGTGCCATCGGGAACTACAATGCCCGGGAGGCTTTGGACGTC
TGGGGCCGAGGGACCACGGTCACCGTCTCCTCA

002	p126w175		*IGHV*

CAGGTCCAACTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTGACACTGTCCTGTGCAGCCTCTGGATTCACCTTCAGCAAC
TATGTTATGCACTGGGTCCGACAGGCTCCAGGCAAGGGACTGGAATGGGTGGCTCTTGTCTCACTTGAAATAAGTTATAATCAATATGTGGACTC
CGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCAAGAACACAGTGTCTCTGGAATTGAACAGCCTGAGAGATGAGGACACGGCTGTCTAT
TACTGTGCGAGAGAGGGGGAGACCAGTGGCCATGCTGGAAGTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

002	p126w176		*IGHV*

GACGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTTCAGCCTCTAGATTCACCTTCAGTAATTA
TGCTATGTACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAATATGTTTCATCTATTAGTAGTGATGGGGGTAGCACATATTACGCAGAGTCC
GTGAAGGGCAGATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTTCAAATGAGGAGTCTGAGAGCTGAGGACGCCGCTGTGTATTA
CTGTGTGACAGATGTCTTGAGGTTACCCTATAGCACTGGCTGGAGCCCAGGGGGACTTTAGTCTACTGGGGCCAGGGGAACCCGTGGTCACCGT
CTCCTCAG

002	p126w177		*IGHV*

GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAACCTTTGGATTCACCTTTGAGAATT
ATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAATAGTGGTAGCCTAGACTATGCGGGCT
CTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGCAAATGGACAGTCTGAGAGCTGAGGACACGGCCCTATA
TTACTGCGCAAAGGGGAAGGAACGCTATTACTATGCATCGGGGAGAGTTGGTCGCTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCAC
GGTCACCGTCTCCCCA

002	p126w187		*IGHV*

CAGGTGCAGTTGGTGGAGTCTGGGGGAGGCGTGGTCCAGTCTGGGAGGTCCCTGAGACTCTCCTGTGCAACCTCTGGATTCACCTTCAGAAAC
TATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCAGATTTATCATTAGATGGAAGTCATAGATACGCAGACTCCG
TGAGGGGCCGATTCACCATCTCCAGCGACAGTTCCAAGAACACGGTGTCTCTTCAAATGAACAGCCTGAGAACTGACGACACGGCTATTTACTA
CTGCGCGAGAGCCGCGGGTGTAATGGTGGCTGGTACTTTCTTAACCGAGTTCTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCC
TCAG

002	p126w191		*IGHV*

AAAGCCTGGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCAGTTTCAGTAGGGCCTGGATGACCTGGGTCCGCCAGGCTCCAGGGAA
GGGACTGGAGTGGGTTGGCCGAATTAAAAACAAAAATGAGGGCGAGACAAGAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAG
AGATGACTCAAAAGCCACGCTCTATCTGCAAATGAATGACCTGAAAACCGAGGACACAGCCGTGTATTATTGTGCCACAGATAGTCGCTACGGTG
ACGGCTCGGGAGTTTTTGATATCTGGGGCCATGGGACAAAGGTCACCGTCTCTTCAG

002	p126w193		*IGHV*

GAGGTGCAGGTAGTGGAGTCTGGGGGAGGCTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCGGTAG
CAACTACATGAACTGGGTCCGCCTGGCTCCAGAGAAGGGGCTGGAGTGGGTCTCAGTTATGTATAGCAGTGGTGGCACATACTACGCGAGACTC
CGTGAAAGGCAGATTCACCATTTCCAGAGACAATTCCAAGAACACGGTGTATCTTGAAATGAACAACTTAAGAGCCGAAGACACCGGAGTCTATT
ACTGTGCGAGAGACGGGATACAGATACGAAGTTACTACTATTACGGTATGGATGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA

002	p126w21		*IGHV*

CAGGTGCAGCTGCGGGAATCGGGCCCGAGACTGGTGAGGCCTTCGGAGACCCTGTCCCTCACCTGCAGCGTCTCTGGTGACTCCATCTATACT
TATTACTGGGCCTGGATCCGGCATCCCCCCGGGAAGGGCCTAGAGTGGATTGGTTATGTCTTTTACACTGGGACCAGTGACTACAACCCCTCCC
TCAAGAGTCGACTCACCATGTCTGTTGACGCATCCAAGAACCAGGTCTCCCTGAAACTGACCTCTGCGACCGCTGCGGACACGGCCGTATATTT
CTGTGCGAGA

002	p126w26		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGT TACTACTGGAGCTGGATCCGGAAGCCCCCAGGGAAGGGACTGGAATGGATTGCGAATATCTATTACAGTGGGAGCACCAACTACAACCCCTCCC TCAAGAGTCGAGTCACCATATCAGCAGACACGTCCAAGAACCAATTCTCCCTGAAGTTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTA CTGTGCGAGACATGGATCAGGTTCCCCCTCGTGGCTTCGGGGAGTCATTCAAACGTACGCCATGGACGTCTGGGGCCAAGGGACCACGGTCAT CGTCTCCTCA
002	p126w30		*IGHV*	CAGATGCAGCCGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCCGGGGCCTCAGTAAAGGTTTCCTGCAAGACATCTGGAAACACCTTCACCAGT TACAATATACACTGGGTGCGACTGGCCCCCGGACAAGGGCTTGAGTGGCTGGGAATGATCAACCCTAGTGGTAGTAGCACAGTCTACGCACAG AGGTTCCACGGGAGAGTCACCATGACCAGGGACACCTCCACGAGCACAGTCTACATGGAGTTGAGCAGCCTGAGATCTGAGGACACGGCCGTA TATTACTGTGCGAGAGACGATAGGACTGATTATTACTATGTTGGGCCTCCTGAGTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCCCAG
002	p126w44		*IGHV*	TTGTGAAGGCTCTGGATTCACGTTTAGTAGTGTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACA GCCAGATGGAAAGGAGAGAAACTATGTGGACTCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATG AACAACCTGAGAGTCGAGGACACGGCCCTTTATTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTT CAG
002	p126w46		*IGHV*	CAGATGCAGCCGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCCGGGCCTCAGTAAAGGTTTCCTGCAAGACATCTGGAAACACCTTCACCAGTT ACAATATACACTGGGTGCGACTGGCCCCCGGACAAGGGCTTGAGTGGCTGGGAATGATCAACCCTAGTGGTAGTAGCACAGTCTACGCACAGA GGTTCCACGGGAGAGTCACCATGACCAGGGACACCTCCACGAGCACAGTCTACATGGAGTTGAGCAGCCTGAGATCTGAGGACACGGCCGTAT ATTACTGTGCGAGAGACGATAGGACTGATTATTACTATGTTGGGCCTCCTGAGTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCCCAG
002	p126w47		*IGHV*	GAGGTACAACTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTCTAGTGAC TATTCGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCAACATAAAACAAGATGAGAGTGAGAAATACTATGTGGAC TCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTCGCTGTATTTGCAAATGAACACCCTGAGAGTCGAGGACACGGCTGTGT ATTACTGTGCGAGATATTCGACATTACGATTTTTGGAGTGGTCCAAAAGTTATTATAATGGTTTGGACGTCTGGGGCCAAGGGACCACGGTCACC GTCTCCTCA
002	p126w51		*IGHV*	GAGGTACAATTGGTGGAGTCTGGGGGAGGCCTGGTCAGGCCTGGGGAGTCCCTGAGACTCTCCTGTGCAGCCTCTGGTTTCACTTTCAGCTAC TTTAGAATGCACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGCTCACATCCCTTAGTGGTTACAGTAGTCACAGTTACTATGCAGACT CAATTCAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCTTTGTATCTGGAGATGAATAGCCTGAGAGTCGACGACACGGCTGTGTA TTATTGTGCGAGAGAATCTAGATACAGTAATTACGACTTTTACTACTATCCTATGGACGTCTGGGGCCAAGGGACCACGGTTAGCGTCTCCTCA
002	p126w55		*IGHV*	CAGGCGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGGAGCCTTCGGAGACCCTGTCTCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTGGT TACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGATATATCTACTACAGTGGGAGTACCGACTACAACCCCTCC CTCAAGAGTCGGGTCACCATATCACTAGACATGTCCAAGAACCAGGTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACCGCCGTGTATT TCTGTGCGAGATCCCCGACTTATTGTAGTAGTACCAGTTGCTATGGCTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p126w59		*IGHV*	GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGT GTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGAC TCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTA TTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG
002	p126w6		*IGHV*	AGCAGTTTCTACTGGAGCTGGATCCGGCAGACCCCAGGGAAGGGACTGGAGTGGATTGGGTATATGTTTTACAGTGGGAGCACCAACTACAACC CCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAGCTCTGTGACCGCTGCGGACACGGCCGT GTATTACTGTGCGAGACAATCGCCAAGTTACAAGTACGCTGATAACTACTGGTACTTCGATCTCTGGGGCCGTGGCTCCCTGGTCACTGTCTCGT CAG
002	p126w62	33	*IGHV*	GACGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTTCAGCCTCTAGATTCACCTTCAGTAAT TATGCTATGTACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAATATGTTTCATCTATTAGTAGTGATGGGGGTAGCACATATTACGCAGAGT CCGTGAAGGGCAGATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTTCAAATGAGGAGTCTGAGAGCTGAGGACGCCGCTGTGTA TTACTGTGTGACAGATGTCTTGAGGTTACCCTATAGCACTGGCTGGAGCCCAGGGGACTTTATCTACTGGGGCCAGGGAACCCTGGTCACCGTC TCCTCAG
002	p126w69		*IGHV*	CAGATGCAGCCGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCCGGGGCCTCAGTAAAGGTTTCCTGCAAGACATCTGGAAACACCTTCACCAGT TACAATATACACTGGGTGCGACTGGCCCCCGGACAAGGGCTTGAGTGGCTGGGAATGATCAACCCTAGTGGTAGTAGCACAGTCTACGCACAG AGGTTCCACGGGAGAGTCACCATGACCAGGGACACCTCCACGAGCACAGTCTACATGGAGTTGAGCAGCCTGAGATCTGAGGACACGGCCGTA TATTACTGTGCGAGAGACGATAGGACTGATTATTACTATGTTGGGCCTCCTGAGTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCCCAG

002	p126w7		*IGHV*	CAGCCTCTAGATTCACCTTCAGTAATTATGCTATGTACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAATATGTTTCATCTATTAGTAGTGAT GGGGGTAGCACATATTACGCAGAGTCCGTGAAGGGCAGATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTTCAAATGAGGAGTCT GAGAGCTGAGGACGCCGCTGTGTATTACTGTGTGACAGATGTCTTGAGGTTACCCTATAGCACTGGCTGGAGCCCAGGGGACTTTATCTACTGG GGCCAGGGAACCCGTGGTCACCGTCTCCTCAG
002	p126w81	59	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACTTGCACTGTCTCTAATGGCTCCATGACTAATT ATTATTGGACATGGGTCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGATATGTCTATTCCAGTGGGGAGCACCAACTACAACCCCTCCCT CAAGAGTCGGGTCACCATTACAGTAGACACGTCCAAGAATCACTTCTCCCTCAACCTGAACTCTGTGACCGCTGCGGACACGGCCGTGTATTAC TGTGCGAGAGGGACGCTGCTTCGGGAGGCTAAGTACTGGGGCCAGGGAACCCTGGTCACAGTCTCGTCAG
002	p126w82		*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAGGGTTTCCTGCAAGGCATCTGGAAACATCTTCAGCAGC TACTATGTGAACTGGGTACGACACGCCCCTGGACAAGGGCTTGAGTGGATGGGAGTAATCAATCCTAGCGGTGGTAGCGCAAGCTACGCACAG AAGTTCCAGGGCAGAGTCACCATGACCAGGGACACGTCCACGAGCACAGTCTACATGGACCTGAGCAGCCTGAGATCTGAGGACACGGCCGTA TATTACTGTGCGAGA
002	p126w83		*IGHV*	GAGGTGCAGGTGGTAGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGTCCCTGACACTCTCCTGTGCAGTCTCTGGATTCACCTCCAGTGGTT ATTGGATGAGTTGGGTCCGCCAGGCTGCAGGGAAGGGGCTGGAGTGGGTGGCCGATATAAATCAAGATGGAAATGAGAAGTGGCATGTGGACT CTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTCAGTGTATTTGGAAATGAACAGCCTGAGAGTCGAGGACACGGCCGTATA TTATTGCACAAGACTCGACTATGATACTAGTGGTTATTACTGGGAGCGCCGCTACCACGGTATGGACGTCTGGGGCCATGGGACCACGGTCACC GTCTCCTCA
002	p126w93		*IGHV*	GTACTTATTACTGGAACTGGATCCGGCAGTCCCCAGGGAAGGGACTAGAATTTATTGCGAATATCTATTACAGGGGGGACCACCAACTACAACCCC TCCCTAAAGAGTCGAGTCACCATATTAGTTGACATGTCCAAGAACGAGTTCTCCCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCCGTCT ATTACTGTGCGAGAGCGATGGGGATTGACCAATATGGCAGTGGCTGGCCCCCTGCGGGCTACTACTACGGTATGGACGTCTGGGGCCAAGGGA CCACGGTCACCGTCTCCTCA
002	p126w97		*IGHV*	CAGGTGCAACTGGTGCAGTCTGGGGCTGAGATGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCAGCGAC TATTTTTTGCACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGA
002	p127w159		*IGHV*	GAGGAGCAGTTGGTGCAGTCTGGAGGAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGCTTCTAGATATAAATACATCGCTT GGGTGCGCCAGAAGCCCGGGAAAGGCCTGGAGTGGATGGGGATTCATCTATAATGACGGCACTCATATCACATACAGTCCGTCCTTCCAAGGCC AGGTCACCTTCTCAGCCGACAAATCCATCACCACCGCCTATTTGCAGTGGAGTAGCCTGAGGACCTCGGACACCGCCATGTATTACTGTGCGAC ACCTCGTAGTGGCTACGGAGTCCCTGACTTTGCCATTTGGGGCCAGGGATCCCTGGTCACCGTCTCCTCAG
002	p128w20		*IGHV*	CGTGGTCCAGCCTGGGACGTCCCTGAGACTGTCCTGTGCAGCCTCTGGATTCACCTTCAGTCGCCATGGCTTCCACTGGGTCCGCCAGGCTCC AGGCAAGGGGCTAGAGTGGGTGACAACAATTTGGCAAAATGGAATTAATAAATTTTACGCAGACTCCGTGAAGGGCCGATTCACCTTTTCCAGAG ACAACTCCAACAATATGTTGTATCTGCAGATGAATAGCCTGAGAGTTGACGACACGGCTATTTATTACTGTGTGAGAGACGATGATCGTAGTGGTT ATTACCCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p126w203	37	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACACTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGGTCTCACTCAGCAGTC CTGGAGAGGGTGTGGCCTGGATTCGTCAGCCCCAGGAAGACCCTGGAGTGGCTCGCACTCATTTATGGGAATGGTGAAACGTCGTACAGCCCA TTTTTGGAGAGCAGGCTCACCATCACCAAGGACAGTACGAAGAAGCAGGTGGTCCTTACAATGACCACCATGGACCCTCTGGACACAGCCACAT ATTTCTGTGCCCGATATAGTTACGGACTCTCGCTGGGCTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
002	p125w191	32	*IGHV*	GAGGTGAAACTGGTAGAATCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCTTGTGAAGGCTCTGGATTCACGTTTAGTAGT GTTTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGCCTACATACAGCCAGATGGAAAGGAGAGAAACTATGTGGAC TCTGTCAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAACCTGAGAGTCGAGGACACGGCCCTTTA TTACTGTACGATAGGGCACTACGACCACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCTTCAG
002	p125w100	58	*IGLV*	TCCTATGAACTGACTCAGCCACTCTCAGTGTCAGTGGCCCTGGGACAGACGGCCAGGATTACCTGTGAAAGAAACAACATTGGAAGTAAAAATGT GCACTGGTACCAGCAGAAGCCAGGCCAGGCCCCTGTGCTGGTCATCTATAGGAATACCAACCGGCCCTCTGGGATCCCTGAACGATTCTCTGG CTCCAACTCGGGGAACACGGCCACCCTGACCATCAGCAGAGCCCAAGCCGGGGATGAGGCTGACTATTACTGTCAGGTGTGGGACAGCACCAC TGCAAGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p125w104		*IGLV*	GAAATTGTGTTGACACAGTCTCCAGTCACCCTGTCTTTGTCTCCAGGGGAAACAGCCTCCCTCTCCTGCAGGGCCAGTCAGAGTGTTCGCAGCT CCTTGGCCTGGTACCAACACAGACCTGGCCAGCCTCCCAGACTCCTCATCTATGATGCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAG TGGCACTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTTGACCCTGAAGATTTTGCAGTCTATTACTGTCAGCAGCGTTACAACTGGC CTCCCTACACTTTTGGCCAGGGGACCAAGGTGGAGATCAAAC
002	p125w109		*IGLV*	CAGGTTGTGCTGACTCAGTCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGCAGTGGGCACAGGACCTAC GCCATCGCATGGCATCAGCAGCGGTCAGACAAAGGCCCCCGATTCTTGATGACAGTTAATAGTGATGGCAGCCACATCAAGGGGGACGGCATC CCTGATCGGTTCTCAGGCTCCAGTTCTGGGACTGAGCGCTACCTCACCATCTCCAGTCTCCAGTCTGAAGATGAGGCTGACTATTACTGTCAGAC TTGGGCGTCTGGCATTCGAGCTTTCGGCGGAGGGACCAAGTTGACCGTCCTAG

002	p125w112	46	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGTAGTGATAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGCCTCCCAGGCTCCTCATCTATGGTGCATCCCACAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGAACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTCGCAGTTTATCACTGTCAGCAGTATGGTAGCTCACCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
002	p125w113		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTTATTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCAACATCATCATTTATGATGTCAATAATCGGCCCTCAGGGGTTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCACCTCATATACAACCAGCGACAATATCGTACTGTTCGGCGGAGGGACCGAGCTGACCGTCCTAC
002	p125w114		*IGLV*	ATACTTAATGATAATTAAAAATGATGGCAGTCACAAAACGGGGGACGGCATCCCTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCATCATCGCCAGCCTCCAGTCTGAAGATGAGGCTGACTATTACTGTCAGACCTGGGGCACTGGCGTCGGGGTATTCGGCGGAGGGACCAAGGTGACCGTCCTGA
002	p125w119		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCGCCACCTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCAACAGGGCCCCTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCACCAGACTGGAGCCTGAAGATTTTGCAGTTTATTCTGTCAACAGTATGTTAGTTCTCTCACTTTCGGCGGAGGGACCAAGGTGGACATCAAAC
002	p125w126		*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCGCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTGAGAGTGTTAGCACCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTACATCCATCAGGACCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATAAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTATAATAACTGGCCTCCGATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
002	p125w136	44	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCGCCACCTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCAACAGGGCCCCTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCACCAGACTGGAGCCTGAAGATTTTGCAGTTTATTTCTGTCAACAGTATGTTAGTTCTCTCACATTCGGCGGAGGGACCAAGGTGGACATCAAAC
002	p125w14	27	*IGLV*	GAAGTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGTCACCCTCTCTTGTAGGGCCAGTCAGAGTGTTACCAGTAGTAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGACTCCCAGGCTCCTCATTTCTGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAATATGCTAACTCACCCGTCACTTTCGGCGGAGGGACCAAGCTGGAGATCAAAC
002	p125w143		*IGLV*	CAGTCTGCCCTGACTCAGCCAGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCAGTGGAACCAACAGTGACGTTGGTCGTTATAATTATGTCTCCTGGTACCAACAACACCCAGGCAAAGGCCCCAAAGTCATTATTTATGAGGTCAGTAATCGGCCCTCTGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATATCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCACCTCCGTCGTTTTCGGCGGAGGGACGAAGGTGACCGTCGAAG
002	p125w159		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCATCAGTGACGTTGGAAGTTATAACTATGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCAGTACTCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGC
002	p125w162		*IGLV*	GAAGTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGTCACCCTCTCTTGTAGGGCCAGTCAGAGTGTTACCAGTAGTAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGACTCCCAGGCTCCTCATTTCTGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAATATGCTAACTCACCCGTCACTTTCGGCGGAGGGACCAAGCTGGAGATCAAAC
002	p125w163	31	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCATCAGTGACGTTGGAAGTTATAACTATGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCAACATCATCATTTATGATGTCAGTACTCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCATCACGGCCTCCCTGACCATCTCCGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATTCAGGCACCAGCAGTCCCTCCCTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p125w167		*IGLV*	CAGGTTGTGCTGACTCAATCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGCAGTGGGCACAGAAACTACGCCGTCGCATGGCATCAGCAGCAGTCAGAGAAGGGCCCCCGATTCTTGATGACAGTTAATAGTGATGGC
002	p125w17	35	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTACCACCTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGCATCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAGCCTGAAGATTTTGCAACTTACCACTGTCAACAGAGTTACAGTATTTCATTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
002	p125w172		*IGLV*	CAGTCTGTGTTGAGTCAGCCACGCTCAGTGTCTGCGACCCCGGGCGAGGGGGTCACCATCTCCTGTTCTGGAGGTCCCTTCAACATTGGAATTTATTATGTATACTGGTTCCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTCTAGGAATAATGAGCGGCCGTCAGGGGTCCCTGACCGATTCTCTGCTTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGCCCGAAGATGAGGCTGAATATTTCTGTGCAGCATGGGATGACAGTCTGAGGGCCGTACTATTCGGCGGAGGGACCACACTGACCGTCCTAC

002	p125w175		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCGGCACCTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCAACAGGGCCCCTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTTTATTTCTGTCAGCACTATGTTAGTTCTCTCACTTTCGGCGGAGGGACCAAGGTGGACATCAAAC
002	p125w176		*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGGTTCAACTTAGCCTGGTACCAGCAGAAACGTGGCCAGGCTCCCAGGCTCCTCATCTCTGGTACATCTACCAGGGCCACTGGTATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCGGTTTATTACTGTCAACAGTATAATGACTGGCCTCAGACATTCGGCCGAGGGACCAAGGTGGAAGTCACAC
002	p125w177	57	*IGLV*	AGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGCAGGTTATGATGTACACTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTAACATCAAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGACTGAGGATGAGGCTGACTATTACTGCCAGTCCTATGACAGCAGCCTGAGTGCCTATTATGTCTTCGGAACTGGGACCAGGGTCACCGTCCTAG
002	p125w178		*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGTGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAACAGTAACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATTTTTAGTGCATCCTCCAGGGCCACTGGTATCCCAGCCAGATTCAGTGGCAGTGGGTCTGGGACAGAGTTCACACTCACCATCAGCAGCCTGCAGTCTGACGATTTTGCAGTTTATTACTGTCAGCAGTATAATATTTGGCCTCCGGAGCACACTTTTGGCCAGGGGACCAGGCTGCAGATCAAAC
002	p125w184		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCCTTTCCTGCACTGCAAGCAACAATGATGTTGCGAGTCGTAACCTTGTCTCCTGGTACCAACAATATCCAGGCAAAGCCCCAACTCATAATTTATGATGCCTATAAGCGGCCCTCAGGGGTTTCCGATCGCTTCTCTGCCTCCAAGTCTGGCAAAACGGCCTCCCTGACAGTCGCTGACTTGAAGGCTGAGGACGAGGCATTTTATTTTTGTTGTTCGTATACACGGACTGGCACGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
002	p125w185		*IGLV*	GAAGGTGTGGTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGTCAGTCGGGGTATTAATAACAACTACCTAGCCTGGTTCCAGCAGAAGCGTGGCCAGCCTCCCAGACTCCTCATCTTTGGTGCATCCAGGAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTCTGCAGTGTATTTCTGTCAGCACTTTGGTGGCACACCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
002	p125w187		*IGLV*	GACATCCAGATGGCCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAAAGTATTAGTATTTGGTTGACCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTCATTCAAAAGGCGTCTATTTTAGAGATGGGGTCCCATCAAGGTTTAGCGGCAGTGGATCGGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTCTGCAAGTTATTATTGCCAACAATATGACAATTATCCCCGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
002	p125w20		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCGCCACCTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCAACAGGGCCCCTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCACCAGACTGGAGCCTGAAGATTTTGCAGTTTATTTCTGTCAACAGTATGTTAGTTCTCTCACTTTCGGCGGAGGGACCAAGGTGGACATCAAAC
002	p125w203	47	*IGLV*	GATATTGTGATGACTCAGTCCCCACTCTCCCTGCCCGTCACACCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATAGTAATGGAAACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGATTTATTACTGCATGCAAGCTCTAGAAGCCTCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAGC
002	p125w25		*IGLV*	GAAAATGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGTAACAACCTCTTAGCCTGGTACCAGCAGAAACCTGGCCTGGCTCCCAGGCTCCTCATCTTTGGTGCATCCACCAGGGCCGCTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACAATCACCAGACTGGAGCCTGAAGATTTTGCACTCTATTACTGTCAGCAGTATGGTAGTTTACCTAAGACTTTTGGCCAGGGGACCAAGCTGGAGATCGAAC
002	p125w3		*IGLV*	TCTTCTGAGCTGACTCAGGACCCTACTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAAGCTATTCTTCAAGTTGGTACCAGCAGAAGCCAGGGCAGGCCCCTGTACTTGTCTTTTATGACGGAAAC
002	p125w37	28	*IGLV*	GACATCCAGATGACCCAGTCTCCATCGTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCCGCTGGTTAAATTGGTATCAGCAACAACCAGGGAAAGCCCCTAAACTCCTGATCTATACTACATCCAATTTGGAAAGTGGAGTCCCATCAAGATTCAGTGGCAGTGGATCTGGGACAGGTTTCACTCTCACCATCAGCAGTCTGCAGCCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTGGCCCTCCAACTTTTGGCCAGGGGACCAGGCTGGAGATCAAAC
002	p125w46		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTGGCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCCGTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC

002	p125w47	29	*IGLV*	CGATACTTGATGAAAGTTAATAGTGATGGCAGCCACACTAAGGGGACGGATCCCTGATCGGTTCTCAGGCTCCAGTTCTGGGGCTGAGCGCTACCTCACCATCTCCAGCCTCCAGTCTGAGGATGAGGCTGACTATTACTGTCAAACTGGGCCTCTGGCATTCGAGTTTCGGCGGAGGGACCAAGTTGACCGTCGTAG
002	p125w5	45	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATTTGTAGGAGACAGAGTAACCATCACTTGCCGGGCCAGTCAGACTATCAGTACCTGGTTGGCCTGGTATCAGCAGAAACCGGGGAAAGCCCCTAAATTCCTGATCTATAAGGCGTCAAGTTTAGTAAGTGGGGTCCCATCGAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATAAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAATATAGTCGTTATTCCGTGACATTCGGTCAAGGGACCAAGGTGGAACTCAAAC
002	p125w55		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGTAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCCATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGAACCTCCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
002	p125w59	30	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGTGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAACAGTAACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATTTTTAGTGCATCCTCCAGGGCCACTGGTATCCCAGCCAGATTCAGTGGCAGTGGGTCTGGGACAGAGTTCACACTCACCATCAGCAGCCTGCAGTCTGACGATTTTGCAGTTTATTACTGTCAGCAGTATAATATTTGGCCTCCGGAGCACACTTTTGGCCAGGGGACCAGGCTGCAGATCAAAC
002	p125w62		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTGGCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCCGTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
002	p125w7		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTGGCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCCGTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
002	p125w8		*IGLV*	TTCGGGGCAGGTTTTGCTGTACACTGGTACCAGCAGCTTCCAGGGACAGCCCCCAAAGTCCTCATCTATGGTAACACCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTATTGCCAGTCCTATGACAGCAGCCTGAGTGGTTCGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p125w81		*IGLV*	TTATTATAATTTGGTCTCCTGGTACCAACAATATTCAGGCAAAGCCCCCAACATCATTATTTATGATGTCATTAATCGCCCCTCAGGGATTTCTAATAAACGGCATAAATCGTTGGGTGTTCGGCGGGGGACCAAGCTGACCGTCCTAG
002	p125w83	60	*IGLV*	CAGCTTGCACTGACTCAGCCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGCAGTGGGCACAGCAACTACGCCATCGCATGGCATCAGCAGCGGCCAGACAAGGGCCCTCGGTACGTGATGAAGGTTAACAGTGATGGCAGTCACTACAGGGGAGACGGGATCCCTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCACCATCTCCAGCCTCCAGTCTGAAGATGAGGCTGATTATTACTGTCAGACCTGGGGCACTGGCATTCGTGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAC
002	p125w93		*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGTAGTGATGTTGGTGGTTATAACTATGTCTCCTGGTACCAACAACACCCAGTCAAAGCCCCCAAACTCATCATTTATGATGTCAGTAGGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCGGGCTGAGGATGAGGCTTATTATTACTGCTGCTCATATGCAACCAGCAACACTGTGATTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p126w104	36	*IGLV*	GACCTCGTGCTGACCCAGTCTCCAGGCTTCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAGCTGCAAGTCCAGCCAGAGTGCTTTATACAGCTCCAATAATAAGAACTACTTAACTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGGTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAGGCTGAAGATGCGGCATTTTATTACTGTCACCACTATATTGGTGAACCCTCTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
002	p126w112		*IGLV*	GAGATTGTATTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAGAGAGCCACCCTCTCCTGCAGGGCCAGTCGGTATGTTAGCAGCAGCTACCTATCCTGGTACCAGCAGAAACCTGCCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAACAGGGCCACTGGCGTCCCAGACAGGTTTAGGGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAATATGGTGACTCACCTCCTTTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAG
002	p126w113		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCGCCACCTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCAACAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCACCAGACTGGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACAGTATGTTAGTTCTCTCACTTTCGGCGGAGGGACCAAGGTGGACATCAAAC

002	p126w114		IGLV	GATGTTGTGGTGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGTCTCGTATACAGTGATGGAAGCACCTACTTGAATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTGACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGTAGGGTGGAGGCTGAAGATGTTGGGATTTATTACTGCATGCAAGGTACACACTTACCTATGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
002	p126w126		IGLV	AAGTCAGAGCATTAGCCGCTGGTTAAATTGGTATCAGCAACAACCAGGGAAAGCCCCTAAACTCCTGATCTATACTACATCCAATTTGGAAAGTGGAGTCCCATCAAGATTCAGTGGCAGTGGATCTGGGACAGGTTTCACTCTCACCATCAGCAGTCTGCAGCCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTGGCCCTCCAACTTTTGGCCAGGGGACCAGGCTGGAGATCAAAC
002	p126w129		IGLV	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTACATAGTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGCTCTACAAACCTCGGTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
002	p126w135		IGLV	AAAGAGCCACCCTCTCTTGCAGGGTCAGTCAGAGTATTAGCAGCGACTTCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCTCAGATAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACAGCCTGGAGCCTGAAGATTTTGCAGTATATTACTGTCAGCAGTATGATGACTCACCCATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
002	p126w14		IGLV	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCATCGGAACTAACACTGTGATTGGTACCAACAATTCCCACAAACGGCCCCCAAACTCCTCATCTATGCCAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCGTCAGTGGGCTCCAGTCTGACGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAAACGTGTGATGTTCGGCGGGGGGACCAAGCTGACCGTCCTGC
002	p126w162	48	IGLV	GAAATCGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGTAGGGCCAGTCAGAGTGTCAACAGCTACTTAGCCTGGATCCAACACAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATTTTTTCAAGAGGGCCACTGGCATTCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAACCTGAAGATTCTGCAGTTTATTACTGTCACCAGCGTAGCAACTTGCATCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC
002	p126w163		IGLV	CAGTCTGTCCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAACCAGCTCCAACATCGGAAGTAATACTATAAATTGGTACCAGCAACTCCCAGGCACGGCCCCCCAAACTCCTCATCTATAATAATCATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCACTCTGAGGATGAGGCTGATTATTACTGTGCAACATGGGATGACAGTCTGAATGGTCCGGTGTTCGGCGGAGGGACCAAGCTGGCCGTCCTAG
002	p126w164	34	IGLV	GATGTTGTGGTGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGTCTCGTATACAGTGATGGAAACACCTACTTGAATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTGACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGTAGGGTGGAGGCTGAAGATGTTGGGATTTATTACTGCATGCAAGGTACACACTTACCTATGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
002	p126w172		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTGGCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCCGTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
002	p126w174		IGLV	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGTGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAACAGTAACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATTTTTAGTGCATCCTCCAGGGCCACTGGTATCCCAGCCAGATTCAGTGGCAGTGGGTCTGGGACAGAGTTCACACTCACCATCAGCAGCCTGCAGTCTGACGATTTTGCAGTTTATTACTGTCAGCAGTATAATATTTGGCCTCCGGAGCACACTTTTGGCCAGGGGACCAGGCTGCAGATCAAAC
002	p126w175		IGLV	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATTTGTAGGAGACAGAGTAACCATCACTTGCCGGGCCAGTCAGACTATCAGTACCTGGTTGGCCTGGTATCAGCAGAAACCGGGGAAAGCCCCTAAATTCCTGATCTATAAGGCGTCAAGTTTAGTAAGTGGGGTCCCATCGAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATAAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAATATAGTCGTTATTCCGTGACATTCGGTCAAGGGACCAAGGTGGAACTCAAAC
002	p126w176		IGLV	GACATCCAGATGACCCAGTCTCCTTCCATCCTGTATGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTTAGCAGCTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGTCCCTAAACTCCTCATCTATCAGGCGTCTACTTTAGAAAATGGGGTCCCATCAAGATTCAGCGGCAGTGGATCTGGGACAGAATTCATTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACATTATAATGTTTTGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC
002	p126w177		IGLV	GAAATTGTGTTGACACAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCTTGCAGGGTCAGTCAGAGTGTTAGCAGCGACTTCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACAGCCTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGATGACTCACCCATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC

002	p126w187		*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGC AGGTTATGATGTACACTGGTACCAGCAGCTTCCAGGAACAGCCCCC
002	p126w191		*IGLV*	CAGCTTGCACTGACTCAGCCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGCAGTGGGCACAGCAACTAC GCCATCGCATGGCATCAGCAGCGGCCAGACAAGGGCCCTCGGTACGTGATGAAGGTTAACAGTGATGGCAGTCACTACAGGGGAGACGGGAT CCCTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCACCATCTCCAGCCTCCAGTCTGAAGATGAGGCTGATTATTACTGTCAG ACCTGGGGCACTGGCATTCGTGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAC
002	p126w193		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTTTCCAGGCGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGTAACA ACTACTTAGCCTGGTTCCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCGTCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGT TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTAATCATCAGGAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTGG CTCACGGTGGACGTTCGGCCAAGGGACCAAGGTAGAAATCAAAC
002	p126w21		*IGLV*	TTCCTGCAGGTCCACTCAGAGCCTCCTGCATAGTAATGGATACAACTATTTGGATTGGTATGTGCAGAGGCCGGGGCAGTCTCCACAGCTCCTG ATCTTTTTGGCTTCTTTTCGGGCCTCCGGGGTCCCAGACAGGTTCAGTGGCAGTGGGTCAGGCACAGATTTTACATTGACAATCAGCAGAGTGG AGCCTGAGGATGTTGGGGTTTACTACTGCATGCAAGCTCTACAAACTTGGACGTTCGGCCAGGGGACCAAGGTGGAAATCAAAC
002	p126w26		*IGLV*	CAGACTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGCTTCCACCACTGGAGCAGTCACCAGT GGTGACTATCCAAACTGGTTCCAGCAGAAACCTGGACAAGCACCCAGGGCACTGATTTATAGTACAAGCAACAAATATTCCTGGACCCCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACACTGTCAGGTGTGCAGCCTGAGGACGAGGCTGAGTATTACTGCCTGCTCTACTA TGGTGGTGCTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p126w30		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGGAGTT ACAATCTTGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCAACATCATGATTTATGAGGTCACTAAGCGGCCCTCAGACATTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGGAGG AAGTAGCACCCTGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTGG
002	p126w44		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTTAGCAGCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGTCCCTAAACTCCTCATCTATCAGGCGTCTACTTTAGAAAATGGGGTCCCATCAAGATTCAGC GGCAGTGGATCTGGGACAGAATTCATTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACATTATAATGTTTTGTGG ACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC
002	p126w46		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGGAGTT ACAATCTTGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCAAACATCATGATTTATGAGGTCACTAAGCGGCCCTCAGACATTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGGAG GAAGTAGCACCCTGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTGG
002	p126w47		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGACACAGAATCACCATCACTTGTCGGGCGAGTCAGGGTGTTAACAACTG GTTAGCCTGGTATCACCAGCGACCAGAGAAAGCCCCTAAGTCCCTCATCTATGGTGCATCCAATTTGCAA
002	p126w51		*IGLV*	GAACTTGTGTTGACGCAGTCTCCCGGCACCCTGTCCTTGTCTCCAGGGGAGAGAGCCACACTCTCCTGCAGGGCCAGTCAGAGTGTTGGCAAC AACTACCTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGACAGAT TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTGTGCAGTGTATTACTGTCAGCAATATGGTGG CTCTCCTAAGACGTTTGGCCAAGGGACCAAGGTGGACATCAAAC
002	p126w55		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGACAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGTA ATTATATATATTGGTACCAGCAACTCCCAGGAATGGCCCCCAAACTCCTCATCTATAAGATTGATCAGCGGCCCTCAGGGGTCCCTGACCGATTC TCTGGCTCCAAGTCTGGCACCTCAGGCTCCCTGGCCATCAGTGGGCTCCGGTCCGACGATGAGGCTAATTATTTCTGTGCAGCATGGGATGACA GCCTGCGTGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
002	p126w59		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTA TTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTG GCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCC GTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
002	p126w6		*IGLV*	GAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGACAGCAGCTTCTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGACTCTTCAT CTATGGTGCATCCAACAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGA GCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTAGCTCACCTACTTTTGGCCTGGGGACCAGGCTGGACATCAAAC
002	p126w62	33	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCATCCTGTATGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTTAGCAGCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGTCCCTAAACTCCTCATCTATCAGGCGTCTACTTTAGAAAATGGGGTCCCATCAAGATTCAGC GGCAGTGGATCTGGGACAGAATTCATTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACATTATAATGTTTTGTGG ACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC

002	p126w69		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGGAGTT ACAATCTTGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCAACATCATGATTTATGAGGTCACTAAGCGGCCCTCAGACATTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGGAGG AAGTAGCACCCTGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTGG
002	p126w7		*IGLV*	CGACACTTACCTTTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCC CACCTCGGTTCAGTGGCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAA GTATAATGCTGCCCCGTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
002	p126w81	59	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCAGTGGAACCAACAGTGACATTGGTCGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGGCCCCAAAGTCATTATTTATGAAGTCAGTAATCGGCCCTCTGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGTTCATACACAA CGAGCACCTCCGTCGTTTTCGGCGGAGGGACCAAGGTGACCGTCGTGG
002	p126w82		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGACATTAGCAATC ATTTAACCTGGCTTCAGCAGAAAGCAGGGAAAGCCCCTAAGTCCCTGATTTATGCTGCATCCAGTTTG
002	p126w83		*IGLV*	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCCTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAAGTTATTATG CAAACTGGTACCAGCAGAAGGCAGGACAGGCCCCTATACTTGTCATCTATGATTACAACAAGCGGCCCTCAGGGATCCCAGACCGATTCTCTGG CTCCATGTCAGGAAACACAGCTTCCTTGACCATTACTGGGGCTCAGGCGGCAGATGAGGCTGACTATTACTGTGATTCCCGGGACAAAAGTGGT AACCATCTGGTCTTCGGCGGAGGGACGAAGGTGACCGTCCTAG
002	p126w93		*IGLV*	CCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGTCTCGTATACAGTGATGGAAGCACCTACTTGAATTGGTTTCAGCAGAGGCC AGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTGACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTC ACACTGAAAATCAGTAGGGTGGAGGCTGAAGATGTTGGGATTTATTACTGCATGCAAGGTACACACTTACCTATGACGTTCGGCCAAGGGACCAA GGTGGAAATCAAAC
002	p126w97		*IGLV*	TCCAACTTCGGGGCAGGTTTTGGTGTACACTGGTACCAGCAACTTCCAGGAACAGCCCCCAAACTCCTCATCTATGATAACACCAATCGGCCCTC AGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTAC TGCCAATCGTATGACAGCACCCTGAGGAGGTTCGGTATTCGGCGGAGGGACCCAGCTGACCGTCCTAG
002	p127w159		*IGLV*	CCATCAGTGACGTTGGTACTTATAACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTTAGTACTCGG CCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATT ATTACTGCAGCTCATATACAACTAGTAGCGGTCCCTCCCTTTTCGGCGGAGGGACCAAGCTGACCGTCGTAG
002	p128w20		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGCTT ATGACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAGAGTCATCATTTATGAGGTCAGTAATCGGCCCTCAGGAATTTCTAATCGC TTCTCTGGC
002	p126w203	37	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGACACAGAATCACCATCACTTGTCGGGCGAGTCAGGGTGTTAACAACTG GTTAGCCTGGTATCACCAGCGACCAGAGAAAGCCCCTAAGTCCCTCATCTATGGTGCATCCAATTTGCAAGGTGGGGTCCCATCTAGATTCAGC GCCAGTGGATCTGGGACAGATTTCACTCTCACCATCACCAGTCTGCAGCCTGAAGATTTTGGAACTTATTACTGCCAACAATATAGTCGTTTCCCC TTTACTTTCGGCCCTGGGACCAAAGTGGACATCAACC
002	p125w191	32	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCTTCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCGAGTCACGACACTTACCTTTA TTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGCCTCCTGATTTACGATGCGTCCAATTTGCGCTCAGGTGTCCCACCTCGGTTCAGTG GCAGTGGATCTGGGACAGACTTCAGTCTCACCATCAGCAGCCTGCAGCCTGAAGATGCTGCAACATATTACTGTCAGAAGTATAATGCTGCCCC GTGGGCGTTCGGCCCAGGGACCAAGGTGGAAATCAAAC
005	p109w100		*IGHV*	GAGGTGCACCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAGGTTCTGGATTCACCTTCCCTGAT TATTCTATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGGTAGGTTTCATTGGAGCCAAAGCTTATGGTGGGACAACTGGATAC GCCGCGTCTGTGAAAGGCAGATTCACAATTTCGAGAGATGATTCCAATGGTATCGCCCATCTGCAAATGAACAGCCTGAAAACCGACGACACAG GCATTTATTACTGTACTAGAGATAGTGCCTGGAACGAGCCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w107		*IGHV*	CAGGTGCAGCTACACCAGTGGGGCGCGGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCCTTCACTGGT CACTTCTGGACCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCAAAGTGGAAGCACCAATTATAATCCGTCC CTCAAGAGTCGAGTCACCATATCAGCGGACACGTCCATGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTTTACT ACTGTGCCAGA
005	p109w108		*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTAATAAAGCCTGGGGGGTCTCTCAGACTCTCCTGTGCAGCCTCTGGATTCAATTTCAGGAAC GCCTGGATGACGTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAGAAGGCAATCTGACGGTGGGACAGCAGACTA CGCTGCACCCGTGAAAGGCAGACACTCCATCTCAAGAGATGACTCAAGAAACACGGTCTATCTTCAAATGAATAGCCTGAAAACCGAGGACACA GCCGTGTATTATTGTACGACCGCCCTACTTCCCCTTGGAGTGGTTGTTGGAGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p109w109		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAGCTTTAAGAAT TATGCCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGTCTGGAGTGGGTCTCAGGTGTTAGTCCTAATGGCTATAGTACACTCTACGCAGACT CTGTGAAGGGCCGGTTCACCATTTCCAGAGACAATTACGAGAACACGCTGTACCTGCAAATCAACAGCCTGAGAGCCGAGGACACGGCCCTATA TTACTGTGCGAGAGGCCCTTCTGATCTTTGGAGTGCTTATTATCTTGTACCCGACTTTGACTACTGGGGCCAGGGGACCCTGGTCACCGTCTCCT CAC
005	p109w111	62	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACACCTTTAACAGC CATGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGCTTACAATGGGAACACAAACTATGGACAG AAGTTCCGGGGCAGAGTCACCATGACCACAGACACATCCACGAGAACAGTCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTA TATTACTGTGCGAGAATGGAGTATTGTAGTGGTGGGTGCTTCGATTACTATGATAGTAGTGGCGAACTGGACTACTGGGGCCAGGGAACCCTGG TCACCGTCTCCTCAG
005	p109w115		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCCGGTCAAGCCTGGGGAGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCTTCAGTCAC TATGCCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTGTTCCATCAGTAGTGATAGTAGTTACATACAGTACGCAGACT CTGTGAAGGGGCGATTCTCCATCTCCAGAGACAACGCCAAGAACTCACTGGATCTCCAAATGAACAGCCTGACAACCGAGGACACGGCTGTTTA TTATTGTGTGAGAGAGCCCGACTCTGCGAACCGCGGGGAGTTATGGAGTTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCCG
005	p109w118		*IGHV*	CAAGCGCTGTTAGTTCAGTCTGGGACTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCGTCAGGTTACGCCTTCAACAACT ACTTTATCAGTTGGGTTCGACAGGCCCCTGGGCGAGGCCTTGAGTGGATGGGAGTGATCACCACTTTCAGCGGTACAACTAACATCGCTCAGAA GTTCCAGGGCAGGGTCACCCTGACCAGGGACACGTCCACAAAAACAGTCTATATGGAATTGACCAGCCTGAGATCTGAGGACACGGCTGTCTAT CACTGTACAAGAGAGCCCACCCGAAGCTATTACCCCACGTATTACATGGACGTCTGGGGCACAGGGACCACGGTCACCGTCTCATCA
005	p109w126		*IGHV*	GAGGTGCACCTGCAGGAGTCGGGGCCCAGGGCTGGTGAAGCCCTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGCTACTCCATCGGCAGT GGTTACTACTGGGGCTGGGTCCGGCAGTCCCCAGGGAAGGGCCTGGAATGGATTGGGAGTATCCATGATAGTTGGAGCACCTACCACAACCCG TCCCTCAAGAGTCGAGTCACCATCTCAGTAGACGCGTCGAAGAACCAAATCTCCCTGAGGCTGAACTCTGTGACCGCCGCAGACACGGCCGTGT ATTATTGTGCGAGAGATCCCTTTTGTGCTTATGTAACCTGCAACATGCGTGACGACTGGTTCGCCTCCTGGGGCCAGGGAATCCTGGTCACCGT CTCCTCGG
005	p109w127		*IGHV*	TTCCTGCAAGGCCTCTGGATACGTCTTCACGGCCTTTCCTATTCACTGGGTGCGCCAGGCCCCCGGACAAAGGCCTGAGTGGCTGGGATCGAT CGACACTGGCAATGGTAAATCAAAATATTCAGAGAAGTTCCAGGGCAGACTCACCTTTACCAGGGACACATCCGCGACTACGGCCTATATGGAG CTGACCAGCCTAAAATCTGAAGACACGGCTGTCTATTACTGTGCGTCAGAGGGGGATTGTAGCGGCACCACCTGTTATAGCGGCCGACAGGTAC TACTACTACATGGACTTCTGGGGCAGAGGGACCACGGTCACCGTCGCCTCA
005	p109w130		*IGHV*	CAGGTTCACCTGGTGCAGTCTGGACCTGAGGTGAAGGAGCCTGGGGCCTCACTGAAGGTCTCCTGCAAGGCCTTTGGTTACACCTTTAACAGCC ATGGCATCACCTGGGTGCGACAGGCCCCTGGACAGGGGTTTGAGTGGATGGGATGGATCAGCGCGCTTACAATGGGAACACAAACTACGGACAGA AATTCCAGGGCAGAGTCACCATGACCATAGAAACATCCGCGAGCACAGCTTACATGGAGTTGAAGAGCCTGAGATCTGACGACACGGCCATATA TTACTGTGCGAGAATGAAGTTCTGTAGTGGTGGTTGCTTCGATTACTATGGTAATAGTGGCGACCTGGACTACTGGGGCCAGGGAACGCTGGAT CGACCGTCTCCTC
005	p109w135		*IGHV*	CAGGTGCAACTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGAAGCCTCTGGCTTCACTTTCAGTAGC TATAATATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGACTAGAGTGGGTGGCATTTATACCATATGATGAAACTGATGAAAAGTACGCAGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTTCAAGAGCACTGTATACCTGCAAATGAACAGCCTGAAAAGAGAGGACACGGCTGTCTA TTACTGTTCGAGTGAATTTTGGATTAACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w136		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGATCCAGCCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTCTGGGTTCACCGTCAGAAC CAACTACATGAGCTGGGTCCGCCAGGCTCCAGGTAAGGGGCTGGAGTGGGTCTCAGTTATTTACAGCGCTGGTAACACATACTACGCAGACTCC GTTGAGGGCCGATTCACCATCTCCAGAGACGCTTCCAAGAATACGGTGTATCTTCAAATGAACAGTCTGAGAGCCGAGGACACGGCCTTGTATT ACTGTGCGACTTTGTATCATGATTACGTTTGGGGGGAGTCCCCCCTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w143		*IGHV*	GTGGGTCCGCCAGGGTCCAGGCGAGGGGCTGGAGTGGGTGGCAGTTATTTGGTTTGATGGAAGTAAAAGATATTATGGAGACTCCGTGAAGGG GCGATTCACCATCTCCAGAGACAATTCCAAGAACATGCTATATCTGGAAATGAACAGTCTGAGAGTCGACGACACGGCTGTCTATTACTGTGCGA GAGTCTCATTACCTTATTACAATTTGTGGAGTGGCACATTTGCCTTTGATGACTGGGGTCCAAGGGACAGTGGTCACCGTGTCTTCAG
005	p109w146		*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTCGTACAGCCGGGGGGGGTCCCTGAGACTCTCCTGTGTTGCCTCTGGATTCATTAGAGACTAT GCCATGAGTTGGGTCCGCCAGGCTCCAGGAAAGGGGCTGGAGTGGCTCTCAAGTATAAGTGGTAGCGGTAATACAAAGTACGCAGACTCCGTG AAGGGCCAGTTCACCATCTCCAGAGACAATTCCAAGAAAATGTTGTATCTGCAGATGAACAGCCTGAGAAGTGAAGACACGGCCACATATTACTG TGCGACAGGATCTAAACCCTCTTACTCCTTCTACTACGTCTTGGATGTCTGGGGCCTAGGGACCACGGTCACCGTCTCCTCA

| 005 | p109w15 | *IGHV* | GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCTTCAGTAGT TATGAAATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTTCATACATTAGTAGTCGTGCTAGTAACACATACTACGCTGATT CTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGATCAGCCTGAGAGCCGAGGACACGGCTCTTTA TTACTGTGCGAGAAGGCACTTTGGAGGAGACCATGATGCTTTTGATGTCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG |

005	p109w15	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCTTCAGTAGT TATGAAATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTTCATACATTAGTAGTCGTGCTAGTAACACATACTACGCTGATT CTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGATCAGCCTGAGAGCCGAGGACACGGCTCTTTA TTACTGTGCGAGAAGGCACTTTGGAGGAGACCATGATGCTTTTGATGTCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
005	p109w158	*IGHV*	TTAGTCTCTGGATTCCCCTTCAGTAACAATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGACTAGAGTGGGTGGCACTTATATCACATG ATGGAAGCTGGATAATGTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACATGCTGTATCTGCAGATGAACAG CCTGAGACCTGAGGACACGGCTCTGTATTATTGTGTGACCGAAGGCATGCGACTCGTCCATGACTACTGGGGCCAGGGAACCCTGGTCGCCGT CTCCTCAG
005	p109w159	*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGACTTGGTCAAGCCTGGGGGGTCCCTTAGACTCTCATGTGCAGCCTCTGGATTCGCTTTCAATTACG CCTCGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAACCGAAGCTGACGGTGGGACAACAGAGTAT GCTGCTCCCGTGAAAGGCAGATTCACCATCTCAAGGGATGATTCAAAAGACACCCTTTATCTGCACCTGACCAGCCTGAAAACCGAGGACACAG CCGTCTATTACTGTATCGCATCAAAGACATTTGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w162	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGTCTTCGGTGAAGGTGTCCTGTAAGGCTTCTGGAGGCACCTTCAGCACC TATGCGATCCACTGGGTACGACAGGCCCCTGGACAAGGGCGTGAGTGGATGGGCGGAATTATCCCTTTTTCCGGAACAAGAAAGTACGCACAG AATCTCCAGGACCGACTAACGATTGTCGCGGACGAATCCACGAACACAGCCTATATGGAGTTGAGAAGCCTGAGATCTGACGACACGGCCGTAT ATTATTGTGCGAGACTGGTCGAGGTGGGATATTGTACTGGTGGTACCTGCTACCCATATTTTGACTACTGGGGCCAGGGAACCCTGATTACCGTC TCCTCTA
005	p109w163	*IGHV*	GAGGCGCAGCTGGTGCAGTCTGGGGGAGATTTAGTGCAGCCGGGGGGGTCCCTGAGACTCTCCTGTACAGCCTCTTCATTCACCTTTAGCGCC TATGCCATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTCTCAAGTATTAGTATGAACGGCCTTAATACATATTACGCAGACT CCGTGAAGGGCCGGTTCACCGTCTCCAGAGACAATTCCAAGAACACGCTGTCTCTACAAATGAGCCGCCTGAGAGTCGAGGACACGGGCTTATA TTACTGTGTGAGAGATAATATAGGAACACATGTTATCCATTACTACGGTATGGCCGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
005	p109w167	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGCTGTACCCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTTATTCCATCGCCAGTG GTTACTACTGGGGCTGGATCCGGCCAGTCCCCAGGGAAGGGTCTGGAGTGGATTGGGAACATCGATCATTCTGGGACCACCTACTTCAACCCGT CCCTCAGGAGTCGAATCACCATGTCAGTGGACACGTCCCAGAACCAGATCTCCCTGAAGTTGAGTTCTGTGACCGCCGCAGACACGGCTGTTTA CTATTGTGCGAAAGCATTGTACTACTGATCACTTGTCGGTCCTACTACTACGGTATGGACGTCTGGGGCCCAGGGACCACGGTCACCGTCTCCT CA
005	p109w172	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCCGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGATTCACCTTCAGTAGT TATGAAATGTACTGGGTCCGACAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATACATTAGTACTAGTCCGGCTATCACATATTATGCAGACT CTGTGAGGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAGCTCACTCTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTTTA CTACTGTGCGACCATATCCCACCAACAATATAGCGGTGGCTGGAACGCCTGGTTCGACCCCTGGGGCCATGGAACCCTTGTCACCGTCTCCTCA C
005	p109w174	*IGHV*	CAGGTGCGGCTACATCAGTGGGGCGCAGGCCTTTTGAAGGCTTCGGAGACCCTGTCTGTCACCTGCGAGGTGTATAATGGGTCCTTCACCGGT TACTTCTGGAGCTGGGTCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGCGAAATCAATCGTGATGGAACCGCCTACTACAGCCCGTCA CTGAAGAGCCGAGTCACCATATCTGTGGACCCGCCCAAGAATCAATTCTCCCTGAAGCTGACCTCTGTGACCGCCGCGGACACGGCTGTATATT ACTGTATGAGA
005	p109w175	*IGHV*	GAGGTACAACTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGCACAGCCTCTGGATTCAACTTCATGAAA TATGGGATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTACTACTAGTGTCAATTATGTATATTATGCTGACTC CGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCGAGAACTCTCTATCTGCAAATGGATAGCCTGAGAGTCGAGGACACGGCTGTATAT TACTGTGCGAGAAGGGAGAATTTGGTATGGTTCGGAGAGTTATATGACTTTCGACGCCTGGGGCCAGGGAATTCTGGTCACCGTCTCGTCAG
005	p109w176	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCCGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAT TATGAAATGTACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGGTTTCATACATTAGCACTAGTCCGGCCATCACATATTATGCAGACT CTGTGAGGGGCCGATTCACCGTCTCCAGAGACAACGCCGAGAGCTCACTCTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTTT ACTACTGTGCGACCATATCCCACCAACAATATAGCAGTGGCTGGAACGCCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCT CAC
005	p109w177	*IGHV*	CAGGTGCAGTTGCAGGAGTCGGGCCCCGGACTGGTGAAGCCCTCGGAGACCCTGTCCCTCACCTGCGAAGTCGCTGGTGGCTCCTTCACTAAT TATTACTGGACTTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATAACAATGGGAACACCAACTACAACCCCTCCC TCAAGAGTCGAGTCACCATATCATTAGACAAGTCCAATAAACAGTTCTCCCTGAAGCTGACCTCTGTGACCGCTGCGGACACGGCCGTGTATTAC TGTGCGAGAGGGGGTAGTAGTAATTATTTCCCCACCTACAACTATGACTCCTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG

005	p109w18		*IGHV*	GAGGTGCAGCTGGTGGACTCTGGGGGGAGGCTTGGTCCAGCCTGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTACTTATTGGATGACCTGGGTCCGCCTGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCAACATAAACGAAGATGGAAGTCGGTCATCCTATGTGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGGAGTCAATATATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGGTGTGTATTACTGTGCACCGTGGTTTCACGCCCACCGACTTGACTCCTGGAGCCAGGGAACCCCGGTCACCGTCTCCTCAG
005	p109w2		*IGHV*	CAGGTGCACCTGGTGGAGTCTGCGGGAGGCGTGGTCCAGCCTGGGGAGTCCCTGAGACTCTCCTGTACAGCCTCTGGATTCACCTTCAGTACCTATACTATGCACTGGGTCCGCCAGCCTCCAGGCAAGGGACTAGAGTGGGTGGCAGCTGTCACATATAATGGACTGAGTCAATACTACGGAGATTCTGTGAAGGGCCGATTTACCATCTCCAGAGACAATTCCGGGAACACCTTATATTTGCAAATGAACAGCCTGAGAGCTGAGGACACGGCAACTTATTACTGTGCGCGAGAGCGCGTGACGGTGAGTGCTGCATTCAGCGGACTGACCCTTTCTCACTGGGGCCAGGGAACCCAGGTCACCGTCTCCCCAG
005	p109w20		*IGHV*	GAAGTGCAACTGGTGGAGTCTGGGGGAGCCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGATTCACGTTTGATGATTATGAAATGTATTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAATAGCGCTAGAATAGGTTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCCAGAACTCCGTGTATCTACAAATGAACAGTCTGAGACCTGACGACTCGGCCTTATATTACTGTGCAAAAGCCTTCACACCTCGCTTCGGGATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
005	p109w21		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCATCACTGGCTATACCTTGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCTCCATTAGTACTAGTAGTACTTACATATACTACACAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCAGTGTATCTGCAGATGAACAGCCTGAGAGCCGAGGATACGGCTCTGTATTACTGTGCGAAAATAATTTGTGGTGGTACCGGGTGCCCTCTTTTCCCGGCGAACTACGGTCTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
005	p109w25		*IGHV*	CAGGTGCACCTGGTGCAATCTGGGTCTGAATTAAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACCTTCGTTAATTTTCCTATGATTTGGGTGCGACAGGCCCCTGGACAAGGGCCTCAGTGGATGGGATGGATCAACACCAACACTGGGAACCCAACGTATGCCCAGGGCTTCACAGGACGGTTTGTCCTCTCCTCGGACACCTCTGTCAACACGACATATCTGCAGATCAGCAGCCTTAAGTCTGAGGACACTGCCATATATTATTGCGCGAGAGAAACTCGATACTGTTCTGGTGGTACGTGCGACTCCGCTGCGCGCTATTATGACCACTGGGGCCAGGGAACCCTGGTCACCGTGTCGTCAG
005	p109w26		*IGHV*	CAGGTTCAAGTGGTCCAGTCTGGAGTTGAGATGAAGACGCCCGGGTCGTCAGTGAAGGTCTCCTGTCAGACTTCTGGACACACATTGAACGCCTACATTATCAACTGGGTGCGCCAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGGTCAGCGCTTACAACGACAACACAGAGTATTCAGAGAGGGTTCAGGGCAGAATCACCATGACCATAGACAAAGACACGGACACAGGCTACATGGAACTGAGGAGCCTGAGATCTGACGACACGGGCGTGTATTTTTGTGCGAGTTCGCGGCTTGAAAGAAGTGGATATCAGCCGTTTGATTTTTGGGGCCAGGGAGTCCTGGTCACCGTCTCCTCAG
005	p109w3	61	*IGHV*	GAGGTGCAGCTGGTGGAATCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTTCAGCCTCTGGATTCACTTTCACTAACGCCTGGATGAGCTGGGTCCGCCAGCCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAACCAATGCTGAAGCTGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAATACGCTGTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCCGTGTATTACTGTACCACAGATATCGGGCGTATTACTATCGTTCGGGGAGTTAATTACTGGGGCCAGGGAACCCTGCTCACCGTCTCCTCAG
005	p109w30		*IGHV*	CAGGTGCAGCTGGTACAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGTAAGGCTTCTGGATACACCTTCACTAAATATGCTATTAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGGTGGATCAACACCAACACTGGGAACCCAACGTATGCCCAGGACTTGACAGGACGGTTTGTCTTCTCCTTCGACACCTCTGTCAGCACGGCATATCTGCAGATCAGCAGCCTAAAGGCTGAGGACACTGCCGTATATTACTGTGCGAGAGAAACGTACAGTAAGTACGACCCTCACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w37		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGCGGGAGGCGTGGTCCAGCCTGGGGACTCCCTGAGACTCTCCTGTACAGCCTCTGGATTCACCTTCAGCACCTATACTATGCACTGGGTCCGCCAGCCTCCAGGCAAGGGACTAGAGTGGGTGGCCGCAATAACCTATAATGGACTGAGTCAATACTATGGAGATTCTGTGAAGGGCCGATTTACCATCTCCAGAGACAATTCCAGGAGCACGGTCCATCTGCAAATGAACAGCCTGAGAGCTGAAGACACGGCTGTTTATTACTGTGCGCGGGAGCGCGGGATGGTGAGTGGAACATTCACCGGGATGACCCTTTCTAACTGGGGCCAGGGAACCCTGGTCACCGTCTCCCCAG
005	p109w39		*IGHV*	CAGGTTCAGCTGCAGCAGTCAGGTTCAGGACTGCTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTACCAACATTGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGGGGCCTTGAGTGGCTGGGAAGGACATATTACAGGTCCACGTGGTTTTTTGATTATGGAATGTCTGTGAAAGGTCGAATAACCATCAAAGCGGACACATCGAGGAACCAATTCTCCCTGCAACTGACCTCTGTGACTCCCGACGACACGGCTGTATATTACTGTGCAAGAGATCCGAATAGCAGTGGCTGGTTTGGACTAGACTTCTGGGGCCAGGGAATCCTGGTCACCGTCTCCTCAG

005	p109w43	*IGHV*	GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGGAGTCTCTGAGGATCTCCTGTCAGGGTTCTGAATACACGTTTAGCAAC CACTGGATCGGCTGGGTGCGCCAGAAGCCCGGGAAAGGCCTGGAGTGGATGGGGATCGTCTATCCTGGTGATTCTGATACCAGATATAGCCCG TCTTTCCAGGGCCAGGTCACCATCTCAGTCGACAGGTCCATCAGCACCGCCTACGTGCAGTGGAGCAGCCTGAAGCCCTCGGACAGCGCCATG TATTACTGTGCGAGAAGCCCCTGGGGGTGGGATATTTGGACTTCTTATTATAAAAATTACTTCGAATTATGGGGCCAGGGAACCCTGGTCACCGT CTCCTCAG
005	p109w44	*IGHV*	GAGGTGCAGCTGGAGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTCAGGCTTCTGGATACATCTTTCGCGAA TACTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGGTGGGGACCATCTTTCCTCGTGACTCTGATACCAAATACAGTCCG TCCTTCCAAGGCCAGGTCACCATCTCAGCCGACAAGTCCATCACCACCGCCTATCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATTT ATTATTGTGTGAGACAAGGGACTTACGATTTTTGGGGTGGCCGGTGGAACTTGCAGGGAACTCACTACATGGACGTCTGGGGCAAAGGGACCAC GGTGCATTGTCTCCTC
005	p109w46	*IGHV*	CAAGTGCAACTGGTGCAGTCTGGGGGCTGAAGTAAAGAAGCCTGGAACCTCAGTTAGGGTCTCCTGTCAGACTTCTGGATACACTTTCTCCGACT ATTGGATACACTGGATGCGCCAGGTCCCCGGACAAGGATTTCAGTGGCTGGGCCGACTCCAGCCTAACAATGGCGCCCCACACTATGCAAACA ACTTTCAGGGCAGAGTCACCATGTCCAGGGACAGGTCTACCCGGACAGCCTTCTTGGAAGTGCGCGGTCTGACATCTGACGACACGGCCATCT ATTATTGTGTGCGGGCCCAACGAATCGAACTTTGGACAACTTCTCATCCACCCGACTTTTGGGGCCAGGGAACCCCGGTCACCGTCTCCTCCG
005	p109w47	*IGHV*	CAGGTTCAGCTGGAGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTAACACCTTAAGTAACT TTGAAATAACCTGGGTGCGGCAGGTCCCTGGACAGGGGCTTGAGTGGATGGGATGGATCAGTCCTTCTCATGGTAACACAAATTATGCACAGAA ATTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAACACAGCCTACATGGAATTGAGAAGCCTGACATCTGACGACACGGCCGTCTAT TTCTGTGCGAGAGAGCGGTATGTTGCAGTGGATGCTACCCGCTACTTTGACTTTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w48	*IGHV*	TTGTCTCTGGTGGGTCGACCAGTGGTCACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGCCACATCAGTCATA TTGGAGGCCCCAACTACAGCCCGTCCCTCATGAGTCGAGTCACCATGTCGATAGACACATCCAACAACCACTTCTCCCTGAGGTTGAACTCTGT GACCGCCGCGGACACGGCTGTCTACTACTGTGTGAGAGGCCGGGAGTACAGTAATGGACCACGCCGATCTCCACTGTACTACTACTTCGGTAT GGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTTCGCA
005	p109w5	*IGHV*	CAGGTGCAGCTGGTGCAGTCGGGGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCCTCGGGAGGCACCCTCAGCAG CATTGCTGTCACCTGGGTGCGACAGGCCCCTGGACAGGGGCTTGAGTGGATGGGGGGGATCATCCCTATCTTTGGAACAACACATTACGCACA GAAGTTCCAGGGCAGAGTCACTTTTACAGCGGACGACTCCACGAACACAGCCTTCATGGAGGTGAGCAGCCTGAGATCTGAGGACACGGCCCT ATATTTTTGTACAAAAATTGATTTCTCTACACTACCCTACTACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p109w51	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCTCCTTCTCTGGGTTCTCACTCACTACTAG TGGAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAATGGCTTGCAGTCATTTATTGGAATGATGATGAGCGCTACAGCCCC ATCTCTGAAGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGCCACA TATTACTGTGCACAGTCGTCCTACGGTGACTTCGTAGGCTGGCTCGACCCCTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
005	p109w55	*IGHV*	GCAAGGCTTCTGGATACACCTTCACCGGCTACTACATTCACTGGGTGCGACAGTCCCCTGGACAAGGGCTAGAGTGGATGGGACGGGTCAACC CTAACAGTGGTGACACAAATTATGCACAGAAGTTTCAGGACAGGGCCACCATGACCAGGGACACGTCCATCAGCACAGCCTACATGGAACTGAG GAGGCTGAGATCTGACGACACGGCCGTATATTACTGTGCGAGAGATCCGGGTTTAATTACTCGGGCGATCGACCCCTGGGGCCAGGGAACCCT GGTCACCGTCTCCTCAG
005	p109w58	*IGHV*	CAGGTTCAGCTATATCAGTCAGGTCCAGGACTGGTGAAGCCCTTGCAGACCCTCTCACTCACCTGTGTCATCTCCGGGGACAGTGTCTCCAGCA ACAGTGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCACGTGGTATACTGATTA TGCAGTTTCTGTGAGAGGTCGAATGACCATCAATGCAGACACCTCCAAGAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTCCCGACGACACG GCTCTTTATTTCTGTGCAAGAGACAGAGGATACAGCTATAATTACCGGTACTACTTTGACTTCTGGGGCCAGGGGA
005	p109w6	*IGHV*	GATATACAACTGGTTGAGTCTGGGGGAGCCTTGGTGCGCTCGGGGGGGTCCCTCAAAATCTCCTGCGCAGCCTCTGGATTCTCATTTGATTTTT ACGGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTCGAGTGGGTCGCAAGTATCAGTGAGAAATCTGGAGCCACAGACTACGGAGAT TCCGTGAAGGGCCGATTCACCATCTCCAGAGACATCTCCAAAAATATCCTTTTTCTGTACATGGAGAACCTGAGGAGCGACGACACGGCCGTCTA TTATTGTGCGAAAGCGGCAGCCTCTTATTTTGGTTCGGGACTCTATTACTTTGACTCTTGGGGCCAGGGAGCCCTGGTCAGCGTCTCCTCAG
005	p109w69	*IGHV*	CAGATGCAACTGGTGCAGTCTGGGACTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTGCTGGAGGCACCTTCAGGACT TTTGTGATCAGCTGGGTGCGACAGGCCCCTGGACAAGGCCCTGAGTGGATGGGAGGGATCATCCCTATGTTTGGTAGAGCCCACTACGCTCCG AGATTCGAGGGCAGAGTCACGATAACCGCGGACGAATCCACTGATACTGCCTACATGGAGGTGACCAGCCTGAGATCTGAAGACACGGCCGTC TATTTCTGTGCGAGATCTCGGGGTAGCAGTTACGTTTCTGACTACTTCTATTACGCTATGGACGTCTGGGGACAAGGGACCACGGTCGCCGTCT CCTCAG

005	p109w7		*IGHV*

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATGAGTGAT
TACTACTGGAGCTGGATCCGGCAGCCCCCGGGAAGGGACTGGAGTGGATTGGG

005	p109w8		*IGHV*

CAGGTGCAGTTGGTGCAGTCTGGGCCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCGTGGCTTCTGGCTACACCTTCACCGCC
AATTATATACACTTGGTGCGACAGGCCCCTGGACAAGGACTTCAGTGGATGGGGCGGATCAACCCTAACAGTGGTTTCACGAACTTTGCACAGC
AGTTTCAGGGCAGACTCACCATGGCCAGGGACACGTCCATGAATACAGTCTACATGGAGCTGAATACTCTGAGATCTGACGACACGGCCACATA
TTACTGTGCGAGGGCCCTTTACAGCAGTTCGGCCGTCTGGCTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p109w82		*IGHV*

CCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCTTCAGCAGGTTTGCTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGG
CTTGAGTGGATGGGAGGGATCATCCCTATGTATGGTACACCAAATTACGCACAGAAGTTCCAGGGCAGAGTCACGATTACCGCGGACGAATCCA
CGAGCACAACCTTCATGGAGCTGAGTAGGCTGAGATCTGAAGACACGGCCGTCTATTACTGTGCGAGAGGAGAGGTCAGCTTTGGCGATGCTTT
TGATATCTGGGGCCGAGGGACAATGGTCACCGTCTCTTCAG

005	p109w83		*IGHV*

GAGGGGCAGCTGGCGGAGTCTGGGGGAGGCCTGGTCAAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAG
TTATAGCATGCACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTGTTTACATATACTACGCAGAC
TCAGTGAAGGGCCGATTCACCATCTCCAGAGACAACCCCTACAACTCACTGTATCTACAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGT
ATTACTGTGCGAGAGATTCCGCCCTCGGGTGGAAGTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p109w89		*IGHV*

CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAGGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGAC
TACTTTCTCTACTGGCTGCGACAGGCCCCTGGACAAGGGCTCGAGTACATGGGACGGATCTATCCTATCAGTGGTTACACAGACTTTGAGCAGA
AATTCCAGGGCAGGGTCACCATGACCAGGGACACGTCCATCAACACAGCCTACCTGGAGCTGAGCAGGCTGGGACTTGACGACACGGCCACGT
ATTACTGTGCGAGAGATCTGTGTTCTGGTGGCAGCTGCTACTACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p109w92		*IGHV*

GCTCACCGTCAGTAGCATTTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCACTTATTGATACCGGTGGGGCCAC
TCACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACCCTGTATCTTCAAATGAGCAGCCTGAGAGCCGAG
GACACGGCCGTATATTACTGTGCGACTACCAGTAGTTATGCTTTTCAGATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG

005	p109w93		*IGHV*

CAGGGGCAGCTGGTGCAGTCTGGGCCTCAGGTGAAGAAGCCTGGGGCCTCAGTGAAAGTTTCCTGCAAGGCATCTGGATACACCTTCACCAGC
CACTTTCTGGACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGAATCAACCCTACTGGTGGCATCACAGTCAACGAAGAG
AAGTTTCAGGGCAGAGTCACCTTGACCAGGGACACGTCCACGAGCACAGGCTACATGGAACTGACTAGCCTGAGATCTGAGGACACGGCCGTT
TATTATTGTACGACAGATCGGCATAACGAGGGTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG

005	p109w94		*IGHV*

GAGGTGCAGCTGATGGAGTCTGGGGGTGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGACTTTAGCAAC
TATGCCATGACCTGGGTCCGCCAGGTCTCAGGGAAGGGACTGGAGTGGGTCTCTTCTATTAGATCTGGAGATACTGGCACATTCTATGCAAACT
CCGTACAGGGGCGGTTCACCGTCTCCAGAGACAATTACGGGGACACACTGTCTCTGGAAATGAGCAGCCTGAGAGCCGAGGACTCGGGCATTT
ATTACTGTGCGGCCTCCCGGATTTACTCTGCTTACTACTTC

005	p110w100		*IGHV*

CAGGCTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGATGCCTGGGGCCTCAGTGACGGTCTCCTGCAAGGCTTCCGGTTATACCTTTAATAGTT
ACGGCATCAGTTGGGTGCGACAGGCCCCTGGACAGGGGTTTGAGTGGATGGGATGGATCAGCGGTTACAATGGTAACACAAACTATGCACAGA
AGATGCAAGACAGAGTCACCATGACCACAGATACATCCACGAACACAGCCTACATGGAGCTGAGGAGCCTGAGATCCGACGACACGGCCGTCT
ATTACTGTGCGAGAGATAGGTTTGGGCAGTATTATGGTTCTTGGGGTGCTCATTTCGGTTACTACTTTGCCTCCTGGGGGCCAGGGAACCCAGG
TCATCGTCTCCTCAC

005	p110w101	38	*IGHV*

GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGGTTCTGGATACACCTTTACCAGC
TATTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCTATCCTGGTGACTCTGATATCAGATATAGCCCG
TCCTTCCAAGGCCAGGTCACCATCTCAGCCGACAACTCCATCAACACCGCCTACCTGCAGTGGAGCAGCCTGAGGGCCTCGGACACCGCCATG
TATTACTGTGCGAGAGGGATAACTGGAACTACACACCCCTACCACTTTGACTATTGGGGCCAGGGAACCCTGATCACCGTCTCCTCAG

005	p110w104		*IGHV*

CAGGTGCAGCTAGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGAAGCGTCTGGATTCACCTTCAGTAGC
TATGCAATGCACTGGGTCCGCCAGGCTCCTGGCAAGGGGCTGGAGTGGGTGGCATCTATTTGGAATGATGGAAGTAAGCAACACTATGTAGACT
CCGTGGAGGGGCCGATTCACCATCTCCAGAGACAACTCCAAGAATACACTGTATCTGCAAATGGACAGCCTGAGAGCCGAGGACACGGCTGTGTA
TTACTGTGCGGCGCACGACCGTGGACACAGCTATGGTGCCCTTACTGACTACTGGGGCCAGGGAGCCCTGGTAACCGTGCTCCTCA

005	p110w106		*IGHV*

AAATCAATCATAGTGGAAGCACCAATTATAATCCGTCCCTCAAGAGTCGAGTCACCATATCAGCGGACACGTCCATAAACCAGTTCTCCCTGAGG
CTGACCTTTGTGACCGCCGCGGACACGGCTGTTTACTACTGTGCCAGATACTATCGATTGCCACCTCGGTTCACTTATGATTCCGGGGTTCAACGC
CTTGGACGTCTGGGGCCGAGGGACCACGGTCACCGTCTCCTCA

005	p110w107	*IGHV*	GAGGTACAGTTGGTGGAGTCTGGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGGCTCTGGATTCATCTTCAGTAGT TATGAAATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTTTCATATATAAGTGGTAGTGGAACTATGATTCACTACGCAGACT CTGTGAGGGGCCGAGTCACCATCTCCAGAGACGACGCCAAGAACTCACTGTATCTGCAAATGAGGAGCCTGAGAGCCGACGACACGGCTGTTT ATTACTGTGCGAGACAGACCCGAAATTACAGTGGTGGCTGGTACTATCTTGACTTCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
005	p110w108	*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAACTGCTGGATTCACCTTTGGTGAT TATGGTATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGTTTCGTGAGAAGCAAAGCTTATAGTGGGACAACAGATTAC GCCGCGTCTGTGAAGGGCAGATTCACTATCTCAAGAGATGATTCCAAGAGCATCGCCTATCTGCAAATGAACAGCCTGAAATCCGAGGACACAG CCATATATCACTGTACTAGATACTATTTAGGGAAATTCGGTGACTACGGACCTTCTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
005	p110w112	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGAAGCGTCTGGATTCTTCTTCACAACC TATGCCATGCATTGGGTCCGCCAGGCCCCAGGCAAGGGGCTGGAGTGGGTGGCAGGTATATGGTATGATGGAAATACAAAATATTATGCAGACT CCGTGAAGGGCCGATTCACCGTCTCCAGAGACAATTCCAAGGACACGGTGTTTCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGT ATTACTGTGCGAGAGGCTTCGAATTACGATACTTTGACTGGTTAGAGCACTATTACGGCATGGACGTCTGGGGCCAGGGGACCACGGTCACCGT CTCCTCA
005	p110w113	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGTAAGGCTTCTGGATTCACCCTCACCGCC TCCTATATGCACTGGGTGCGACAGGCCCCTGGACAAGGGCTGGAGTGGATGGGACGGATCAACCCTAACACTGCTGGCACAATGTATGCACAG AAGTTTCAGGGCAGGGTCACCATGACCACGGACACGTCCATCAGCACAGCCTACATGGAGGTGACCAGGCTGACGTCTGACGACACGGCCGTT TATTACTGTGCGAGAGGTCCAACTCGTGGATATGGTGGCAACGATTGGTCCTACTACTACTACATGGACGCCTGGGGCAAAGGGACCACGG TCACCGTCTCCTCA
005	p110w118	*IGHV*	CAGGTGCAGTTGGTGCAATCTGGGTCTGAGTCGAAGAAGCCAGGGGCCTCAGTGAAGGTCTCCTGCAAGGTTTCTGGATACACCCTCAGTAGAT ATGCTATCAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACACCGTCAATGGGATCCCAACGTATGCCCGGA ACTTCGGAGGCCGATTTGTCTTCTCCTTAGACACGTCCGCCGCCACGGCATATTTGCAGATCAGTAGCCTAGAGGCTGAGGATACTGCCGTATA CTACTGTACGAGAGATGAGGGTAGCAGTGGCTGGTCGTCTGCCTTGGATATCTGGGGCCAAGGGACACTGGTCACCGTATCTTCAG
005	p110w119	*IGHV*	GACCTGCAGTTGGTGGAGTCTGGGGGGAAACTTGGTGCAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCGCCTGGATTCACCTTCAGTAGT TATGACGTGAACTGGGTCCGCCAGGTTCCAGGGAGGGGGCTGGAGTGGATTTCATACATTAGCCATAGTGGGAGTTCGACATACTACGCGGAC TCTGTGAAGGGCCGCTTCACCGTCTCCAGAGACAACGCCAAGGACTCACTGTATCTGCAGATGAGCAGCCTGAGAGCAGAGGACACGGGTGTC TATTACTGTGCGAGAGA
005	p110w122	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGGAGGCTTAGTTCAGCCTGGGGGGTCCCTGAGACTTTCCTGCGCAGCCTCTGGATTCGCCTTCAGTAAC TACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTAGTGTGGGTCTCACGTATTAATGTTGATGGGAGAACCACAAACTACGCGGCTT CCGTGAAGGGCCGATTCACCATGTCCAGAGACAACGCCAAGAACACCCTGTATCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTGTGT ATTACTGTACAAGAGGTCCCTTGTACGCTGCCGTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w123	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGGAGGCTTGGCCCAGCCTGGGCGGTCCCTGAAAGTCTCCTGTGTAACCTCTGGGTTCTCCTTCAGTGAC TCTGCTATACACTGGGTCCGCCAGGCTTCCGGGAAAGGGCTGGAGTGGGTTGGCCGTATTAGAAACAAAGCTAACGATCACGCGACAGCATAT GCTGCGTCGGTGAATGGCAGGTTCACCATCTCCAGAGATGATTCAAAGAACACGGCTTATCTGCAAATGAACAGCCTGAAAACCGAGGAC
005	p110w130	*IGHV*	CAGGTGCACCTGGTGGACTCTGGCGGAGGCGTGGTCCACCCTGGGGGGTCCCTGCGACTCTCCTGTGTAGCCTCTGGTATCGTCTTCGATCTC AATAGTCTCCACTGGGTCCGCCAGGCCCCAGGCAAGGGCCTAGAGTGGGTGGGAATTATCTCATATGATGGAAGTCAGCAAAAACACGCAGACT CCGTGAAGGGCCGATTCACCATCTCCCGAGACAACTCCAAGAAAACAGTCTCTCTCCAAATGACCAACCTGCGACCTGACGACACGGCTGTTTA CTATTGTGTTCGGGATCGTTACAGTGGGACTCAAGCCTCATATCTTGACCATTGGAGTCGGGGAAGTACGGTCACCGTCTCTTCAG
005	p110w133	*IGHV*	GGTGGCAGCTGGTGCAGTCTGGGCCTGAGGTGAAGAATGTTGGGTCCTCGGTGAAGGTCTCCTGTAAGGCTTCTGGAGACAGTTTCAGAGACT ATGGAATCAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGGTCAAGTCCACCTTTCTGACAGCAGTCTACGCACAGA AGTTCCAGGGCAGAGTCACAATTACCGCGGACGAATCCACGAGCACAGTCTACCTGGAGGTGAACAGCCTGAGATCTGACGACACGGCCGTAT ATTATTGTGCGAGCGCGGAGCACTTCGTGGGGAGGTGGTTCGACCCCTGGGGCCAGGGAACCCCGGTCACCGTCTCCTCAG
005	p110w135	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTACACGTTTACCGAC TATGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGGATGGATCAGCGGTTACACTGGTAACACATACCATGCACAG AAGTTCCAGGGCAAAGTCACCATGACCACAGACACATCCGCGAGCACAGCCCACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTG TATTACTGTACGAGAGACGCTGACGATGTAATGACTGGTTATTCCCTAAAAATTGACTCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p110w143		*IGHV*

GAGGTGCAGCTGATGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAACTTTAGGAACTATGCCATGAACTGGGTCCGCCAGGCTTCAGGGAAGGGACTGGAGTGGGTCTCATCTATTAGATCTGGGGGTACTGGCACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTACGGGAACACGCTGTCTCTGGAAATGAGCAGCCTGAGAGCCGAGGACTCGGGCATTTATTACTGTGCGGCCTCCCGGATTTACTCTGATTACTACTACTACTACGGTCTGGACCTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

005	p110w145		*IGHV*

CAGGTGCTCCTGGAGCAGTCTGGGGCTGAGGTGAGGACGCCTGGGGCCTCACTGAGGGTCTCCTGCAAGGCTTCCGGATACAGTTTCACCGACCACTATCTACACTGGGTGCGACAGGCCCCTGGACAGGGGCTTGAGTGGATGGGATGGGTGAACACTGACAGTGGCGCCAGTGTTTATGCAGAAGCTTTTAGCGGCAGGGTCACCATGACCAGGGACACGTCTATCACAACAATATATTTGGAGTTTCCCAGGCTGAGATCAGACGACACGGCCGTGTATTTCTGTGCGAGGGAACGTTTGGATAGTGATACTTTTTGATTTATGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG

005	p110w146		*IGHV*

GCAGATGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGAATAAGCTTCAGTGGCTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCAATTATCTCACATGATGGAAGTAATAAATACTACGCAGACTCCGTGAAGGGCCGATTCACCGTCTCCAGAGACAATTCCAAGAACACGTTGTATCTGCAAATGAACAGCCTGAGAACTGAGGACACGTCTCTATATTTCTGTGCGAAAGA

005	p110w15		*IGHV*

GAGGTGCAGCTGGTACAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAGGATCTCCTGTCAGACCTCTGGATACAGCTTTTCCACCTACTGGATCGCCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGGTGGGCATCATCTTTCCTGATGACTCTGACACCACATACAGCCCGTCCTTCCAAGGCCAGGTCACCATCTCAGTCGACAAGTCCATCTCCACCGCCTACCTGCAGTGGAGCAGCCTGAGGGCCTCGGACACCGCCATCTACTACTGTGCGAGACCACCTTACCATTATACCAGTTCCCCCCCTTGGCTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p110w153		*IGHV*

CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTTACAGACCCTGTCCCTCACGTGCAGTGTCTCTGGCGTCTCAATGAGCGGTAGTGGTTACTACTGGAGCTGGATCCGCCAGCACCCAGTGAAGGGCCTGGAGTGGATTGGGTACATCTATGATAATGGGATCACCCACTACAACCCGTCCCTCAGGAGTCTTAGTTCATTATCCGTGGACACGTCTAATAATCAATTTTCCCTGAACCTGAGGTCAGTGACTGCCGCGGACACGGCCGTTTATTACTGTGCGAGAATGCGGCAGGTCGTCCGGAGGAGGATGACTGAAACTCCCGTATTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTC

005	p110w162		*IGHV*

CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACGTGCGCTGTCTCTGGTTACTCCATCAGCAATGGTTATTACTGGGCCTGGATCCGGCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGTAATATCTATGAGAGTGGGAGCACATACTACAATCCGTCCCTCGAGAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGACGCTGAAGTCCGTGAGCGCCGCAGACACGGGCGTGTATTTCTGTGCGAGAGGATTTTGGGTATTCTCCAGTAGTAGTAATTATTACTTTGACTACTGGGGCCAGGGAAACCTGGTCACCGTCTCCTCAG

005	p110w164	39	*IGHV*

CAGGTGCAACTGGTGCAGTCTGGGTCTGAGGTGAGGAGGCCTGGGTCCTCGGTGAAGGTCTCCTGCGAGGCCTCTGGAGGCACCTTCAGTAATTATGGTATCAACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCAACCCCATCTTTAACACAGCAAAGTATTCACAGAAGTTTCAGGGCAGACTCATCATTACTGCGGACGAATCGACGAACACAGCCTACATGGACCTGAGCAGCCTGATATACGAGGACACGGCCGTCTATTACTGTGCGCGAGATCTGACTCAATGTTCTAGTGGCAGTTGCCAGAGTTTTAATACCTTTGATGTCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG

005	p110w167		*IGHV*

CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAACCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTTTTTTCCATCAACAATGGTTACTACTGGGGCTGGGTCCGGCAGCCCCCAGGGAAGCGTCTGGAGTGGATTGGGAACATCCATCATAGTGGGACCACCTACTCCAACCCGTCCCTCAGGAGTCGAATCAGCATGTCAGTAGACGTGTCCAAGAACCAGTTCTCCCTGACGTTGACCTCTGCGACCGCCGCAGACACGGCTGTATATTATTGTGCGAGAGATTGTACCAGTATCACTTGTCGGTCCCACTACTATGGTATGGACGCCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

005	p110w169		*IGHV*

GCCGTATGGGACCCCACCTACAACCCGTCCCTCAGGAGTCGAGCCACCATATCAGCAGACACATCCAACAACCACTTCTCCCTGAAACTGGACTCTGTGACCGCCGCGGACACGGCCGTCTATTACTGTGCGAAAGTGGGGTATCAGAAGTTGCTGGACTCATGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p110w17		*IGHV*

GAGGTGCCACTGGTGGAGTCTGGGGGAGGCCTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTTCAGCCTCTGGATTCACCTTCAGTAAGTCTGCTATGCACTGGGTCCGCCAGGCTCCAGGAACGGGACTGGAACATGTGTCATCTATTGATAGTTATGGGATTACCACAAACTACGCAGACTCCACGAAGGGCAGATTCACCATCTCCAGAGACAACTCCAAGAATACCCTCTTTCTTCAAATGAGCAGTCTGAGACCTGAGGACACGGCTGTCTATTACTGTGTGAAATCTCGTGGCTCCTGGTTTGAGTACTGGGGCCATGGGAAGTCTGGTCACCGTCTCCTCAG

005	p110w172		*IGHV*

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005	p110w175	*IGHV*	TCAGCGCTCCTGGCGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGGAAGGCCCTGGAGTGGCTCGCACTCATGTATTGGGATGATGATAAGC GCTACAACCCAGCTCTGAAGAGCAGGCTCACCATTAGCAAGGACACCTCCAAAAACCAGGTAGTCCTTACAATGACCAATATGGACCCTGCGGA CACAGGCACATATTTTTGTGCACGGAGACTTTACTATGATCGTTACCCCCAACTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCGCA G
005	p110w177	*IGHV*	TTCCTGTAAGGCTTCTGGATACACCTTCACTACCGATGCTATTAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATC AACACCAACACTGGGAACCCAACGTATGCCCAGGGCTTCACAGGACGGTTTGTCTTCTCCTTGGACACCTCTGCCAGCACGGCATATCTGCAGA TCAGCAGCCTAAAGGCTGACGACACTGCCGTGTATTACTGTGCGAGAGGCGGACCAAACAGATGGCGAGATTTTTGGAGTGGTGATTACCATAA CTGCCTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w178	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTGTCACTCAGCACTA ATGAAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCAGTCATTTATTGGGAT
005	p110w180	*IGHV*	GAGGTGTACCTGGTGGAGTCTGGGGGAGGCTTGGTGCAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAGGTTCTGGATTCACCTTCCCTGAT TATGCTATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGGTAGGTTTCATTGGAACCAAAGCTTATGGTGGGACAACTGAATAC GCCGCGTCTGTGAAAGGCAGATTCACCATTTCAAGAGATGACTTCAACAGTATCGCCCATCTGCAAATGAACAGCCTGAAAACCGAGGACACAG CCGTGTATTACTGTGCTAGAGATAGTGCCTGGAACGAGCCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w183	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGAGGCTTAGTTCAGCCAGGGGGGTCCCTGAGACTCTCCTGTTCAGCCTCTGGATTCACCTTCAGTACC GACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGGTCTCACGTATTAGTTATGATGGGACTACTAAAACGTACGCGGAC TCCGTGGAGGGCCGATTCGCCATCTCCAGAGACAACGCCAAGAACACGCTGTATCTCCAAATGAACAGTCTGAGAGCCGACGACACGGCTGTG TACTACTGTGCAAATTGGGCGGGCTACTTGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w20	*IGHV*	CAGGTTCAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGC AACAGTGCTGCTTGGAACTGGATCAGGCAGTCCCCAACGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCAGGTGGTATTATGATT ATGCAATTCCTGTGAAAAGTCGAATAACCATCAGCCCCGACACATCCAGGAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTCCCGAGGACAC GGCTATCTATTACTGTGTAAGAGATGCAGGTTTTGGTCTCGATGCTTTTGATATCTGGGGCCGATGGGACAATGGTCACCGTCTCTTCAG
005	p110w21	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGACACTCTCCTGTGCAGGCTCTGGGTTTGCCTTCAGTGC CTCTGAAATGCACTGGGTCCGCCAGGCTTCCGGGAAAGGGCTGGAGTGGGTTGGCCGTATTAGAAGCAAAGTTAATGATTACGCGACGGCACA GGCTGCGTCACTGAAAGGCAGGTTCACCATCTCCAGAGATGATTCACAGAACACGGCCTATCTGCACATGAACAGCCTGAAAACCGAAGACACG GCCGTCTATTACTGTGCGAGAGATCGCGTGAGGGGCTGTTCTAGTACCAGCTGCCTCTGGGGCTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCG
005	p110w24	*IGHV*	CAGGTGCAGCTGATGCAATCTGGGTCTGAGTTGAAGGAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCCTCTGGATACACGTTCAGTGATT ATGGTTTGAATTGGGTGCGACAGGCCCCCGGACAAGGGCTTGAGTGGCTGGGATGGCTCAACACCAATACTGGGAACCCATTTTATGCCCAGG AGTTCAGAGGACGATTTGTCTTCTCTTTCGACTCCTCTGTCAGTACGGCATATCTTCAGATCCCCAGCCTGCAGCCTGACGACACTGCCATTTATT ACTGCGCGAGAGATCGCGTGAGGGGCTGTTCTAGTACCAGCTGCCTCTGGGGCTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCT CAG
005	p110w26	*IGHV*	TCCTCCATCAGCAGTGGTTACTTCTGGGGCTGGATCCGGCAGCCCCCAGGGAAGGGGCTGGAATGGATTGGGAATGTCTATCATGATGGGAAC ACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAACTCTGTGACCGCCG CAGACACGGCCGTATATTACTGTGCGAGAGAGTGTAGTACTTTCACCTGTCACCACTACTTCGGTTTGGACGTCTGGGGCCAAGGAATCACGGT CACCGTCTGCCTC
005	p110w3	*IGHV*	CAGGTCCAACTTGTGCAGTCTGGGGCTGAGGTGAAGAGGCCTGGGGCCTCAGTGAAACTTTCCTGCGAGGCTTCTGGATACATCTTCAGTAACT ATGGTGTGCATTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGGTGGATCAACGCTGCCGATGGTAAGACTAGATACTCACAAA GGTTGCAGGGCAGAGTCACCATTACTACCGACACAACCGCGACCACAGCCTACATGGAACTGCGCAACCTGAGATCTGCAGACACCTCTATTTA TTACTGTGCGACCCAACTCCGGTTTACTGGGGACTACTACTGGGAAGCCTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w30	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCAATCAGCACTA GTGGAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCACTCATTTATTGGGATGATAATACGCGCTACAGCC CATCTCTGAAGAGCAGGCTCACCATCACTAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGCCAC ATATTACTGTGCACACAGATCCGATAGCAGCATCTGGTACGTTGGTGAACACTTCCACTACTGGGGCCAGGGCACCCTGGTCACCGTCTCCTCA G
005	p110w35	*IGHV*	CAGGTACAACTGCAGGAGTCGGGCCCAGGACAGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCCGGTGCCTCCATGAAGAAT TACTATTGGAGTTGGATCCGGCAGGCCCCAGGGGAGGGGCTTGCGTGGATTGGCTATGTCCACGACAGCGGGAGCACCAGTTACAATCCCGCC CTCAGGAGCCGAGTCACCGTCTCACTGGACACGTCCGCGAATCAGTTCTCCCTGAAACTGACCTCTGTGACCGCTGAGGACACCGCCGTGTATT ATTGTGCGGTGACCGCTTCCGTTTGGGGGAGTCCTTTTGAATCTTGGGGCCAGGGGAACCCTGGTCACCGTCTCTTCAG

005	p110w37	*IGHV*	GAGGTGCACCTGGTGGACTCCGGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGGTTCACCTTCAGTGG CTCTTTTATACACTGGGTCCGCAAGGCTCCCGGGAAAGGGCTGGAGTGGGTTGGCCGCATTAGAACCAAAACTGACAATTACGCGACAGCATTT GCTGCGTCGGTGGAAGGCAGGTTCACCATGTCCAGAGATGACTCACAGAACACGGCGTATCTACACATGAACAGCCTGAAAACTGAGGACACG GCCATTTATTACTGTACTAGATATGTGCAAGACACCTCCATCTTCTGGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w39	*IGHV*	GAGGTGCAGCTGGAGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGCTTCTGGATACATCTTTCGCGAAT ACTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGACCATCTTTCCTCGTGACTCTGATACCAAATACAGTCCGT CCTTCCAAGGCCAGGTCACCATCTCAGCCGACAGGTCCATCACCACCGCCTATCTGCAGTGGAGCAGCCTAAAGGCCTCGGACACCGCCATTTA TTATTGTGTGAGACAAGGGACTTACGATTTTTGGGGTGGCCGGTGGAACTTGCAGGGAACTCACTACATGGACGTCTGGGGCAAAGGGACCAC GGTCACCGTCTCCTCA
005	p110w46	*IGHV*	CGCTCAATTGCAGTGTCTCTGGTGGGTCCCTCGGTTTCGAGTACTGGACCTGGATCCGCCAGTCCCCAGGGATGGGACTGGAGTGGATTGGAT TTCTCTATTACGGTGGGAGGACGGCGTACAATCCCTCCCTCAAGGGTCGAGCCACCATATCAGCTGGCACCTCCAAGAATCAGTTCTCCCTGAA GTTGACCTCTGTGACCCCTGCGGACACGGCCGTGTATTTTTGTGCGAGAGAGGTTCATTATGGGGATGGACATGGTTCGGGGGACTTTTTGGGC CTTTGGGGCCGGGGGAACCCTGGTCAAAGTCACCTCAG
005	p110w47	*IGHV*	CAGGTACAACTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCAGCTTCGGCAG CTCTGCTCTCAGCTGGGTGCGACAGGCCCCTGGACAGGGGCTTGAGTGGATGGGAGGGATCGTCCCTCTGTTTGGTACAGTAAACTATGCCCA GAAGTTCCAGGGCAGAGTCTCCATTAGTGCGGACACACCCACGACCACGGTGTACATGGAGCTGGGCAGCCTGAGATCTGAGGACTCGGCCGT GTATTACTGCGCGAGACACGCTGATGCTGGTGGTCAGTACTACTCAAACTGGTATTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCC TCAG
005	p110w5	*IGHV*	CAGGTGCATCTACATGAGTCGGGCCCAGGACTGATGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCGTCAGCAGC CGTGCTTACTACTGGAGCTGGATTCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGACATATTTATTACAGTGGGAGCACCAATTACAGCC CCTCCCTCCAGAGTCGAGTCACCCTATCAATTGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAACTCTGTGACCGCTGCGGACACGGCCCT ATATTACTGTGCGAGATCTGACG
005	p110w51	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCGAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGAC TACTACATGACCTGGATCCGCCAGGCTCCAGGGACAGGGGCTGGAGTGGGTTTCATACATTGGTGATAGTCATACTATGGTATACTACGCAGACT CTGTGAAGGGCCGATTCACCATCTCCAGGGACAACGCCAAGAACTCATTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTA TTACTGTGCCAGAGATATGGGACCCCGCCAAAATTGTCGTGGTGGTAACTGCTACACTGTCTACGCTGACTACTGGGGCCAGGGAACCCTGGTC ACCGTCTCCTGCA
005	p110w55	*IGHV*	CACCAGTACTTACTACTGGGCCTGGATCCGGCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGACTATCTATCATAGTGGGATCCTCTACTAC AACCCGTCCCTCACGAGTCGAATCACCATATCAGCAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGACCTCTGTGACCGCCGCAGACACGG CCGTGTATTACTGTGTGAGGGCCCCCCAATATGCTGGGCTTTCGACCCCTGGGGCCGGGGAACCCTGGTCACCGTCTCCTCAT
005	p110w59	*IGHV*	CAAGTGCAGTTGGTGCAATCTGGGCCTGAGATGACGCGGCCTGGGGCCTCAGTGAAACTGTCCTGCAAGGCCTCCGGATACATATTCGGCGAC TACTACATGCACTGGGTGCGCCAGGCCCCTGGACAAGGGGTTCGAGTGGGTGGGCCGGATCAACCCATACGGTGGTGGCACCAACTATGCACAG CGATTTCAGGGCAGGGTCACCATGACCAGGGACGCGGCCATTACCACAGTCTACTTGGAGTTGCGCGACGTTCGGTCAGACGACACGGCCGTC TATTTTTGTGTGAGAGATTTGAAGGGGACCAATCGTGGCCCCTCACCCTGGTTCGACCCCTGGGGACAGGGAACTCTGGTCACCGTCTCCTCCG
005	p110w6	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGGC TACTTTATGTACTGGCTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGACGGATCAACCCTACCAGTGGTGCCACAGACTATGCACAG AAGTTTCAGGGCAGGGTCACCATGACCAGGGACACGTCCATCAACACAGCCTACCTGGAACTGAGCAGGCTGGGATCTGACGACACTGCCATG TATTACTGTGCGAGAGATCTTTGTAGTGGAGGCAGCTGCTACTACTTTGACTGACTGGGGCCAGGGAAGCCTGGTCA
005	p110w62	*IGHV*	GGGCTGGAGTGGATGGGACGGATCAACCCTAACACTGCTGGCACAATGTATGCACAGAAGTTTCAGGGCAGGGTCACCATGACCACGGACACG TCCATCAGCACAGCCTACATGGAGGTGACCAGGCTGACGTCTGACGACACGGCCGTTTATTACTGTGCGAGAGGTCCAACTCGTGGATATGGTG GCAACGATTGGTCCTACTACTACTACTACATGGACGCCTGGGGCAAAGGGACCACGGTCACCGTCTCCTCA
005	p110w8	*IGHV*	GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGCCTCTGGATACAGCTTTACCAGC TACTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCTATCCTGGTGACTCTGATACCAAATACAGCCCG TCCTTCCAAGGCCAGGTCACCGTCTCAGCCGACAAGTCCATCACCACCGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATG TACTACTGTGTGAGACTTGATAGTGACGGTCGAATTCAGAAGTACTTCTTTGAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w83	*IGHV*	GGGGTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGTTGTCTCTGGTTATTTCATCAGTAGTGGTTATTATTGGGCCTGGATCCGGCAGC CCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTATTACAGTGGGAGGACTTTTCCAACCCGTCCCTCAAGAGTCGAGTCACCGTATCAGTC GACACGTCCAAGAATGAGTTCTCCCTGAACCTGTACTCTGTGACCGCCGCAGACACGGCCGTGTATTACTGTGCGCGAGGCCCCCGCTATAATT GGAATTTGGGGCCGATCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

005	p110w89		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCTCGGCTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACAGTCTCTGGTGACTCCATCAACAAT ATTAATTACTTCTGGAGTTGGATCCGGCAGCCCCCAGGGAGGGCACTGGAATGGCTTGGGAATGTCTATTATACTGGGAGAGCCAATTACAATC CCTCCCTCGGGGGGTCGAGCCACCATTTCGGTTGACACCTCCGCGACCCAGTTCTCCCTGACCCTCAGCTCTCTGACTACTGCGGACACGGCCG TGTATTATTGTGCGAGAGATCGACTGTTTTGTAGTGAGGTCAGGTGCTATGACTATCACCAGATGGACGTCTGGGGCAGAGGGACCACGGTCAC CGTCTCCTCA
005	p110w92		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGCTCCCTGAGACTCTCCTGTTCAGCCTCTGGATTCCCCCTTCAGTTAT TCTGCCATGCACTGGGTCCGCCAGGCTCCAGGAAAGGGACTAGAATGTGTTTCATCTATTGATAGTTATGGGATTAGCACAAACTACGCAGACTC CGCGAAGGGAAGATTCACCATCTCCAGAGACAATCAGAAGAACACACTCTATCTTCAAATGAGCAGTCTGAGACTTGAGGACACGGCTGTATATT ACTGTGTGAAATCTCGTGGCTCCTGGTTTGAGTACTGGGGCCAGGGAATTCTGGTCACCGTCTCTTCAG
005	p110w93		*IGHV*	CAGGTGCAGGTGGTGCAGTCTGGGGCTGAGGTGAGGAAGCCTGGGGCCTCAGTGAAAGTTTCCTGCAAGGCATCTGGATACACCTTCAGCAGC TACTTTATACACTGGGTGCGACAGGCCCCTGGACAGGGCCTTGAGTGGATGGGAATAATCAACCCTAGTGGTGGTAGCACAAGCTACGCACAGA AGTTCCAGGGCAGAGTCACCATGACCAGGGACACGCCCACGAGCACAGTGTTCATGGAGTTGAGCAGCCTGAGATCTGACGACACGGCCGTCT ATTATTGTGCGGGAGAGACGTATTACTATGATTCGGGCAGGCAGTACTTCTTTGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p110w97		*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACACCTTTAACAGC CATGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGCGCTTACAATGGGAACACAAACTATGGACAG AAGTTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGTCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTA TATTACTGTGCGAGAATGGAGTATTGTAGTGGTGGGTGCTTCGATTACTATGATAGTAGTGGCGAACTGGACTACTGGGGCCAGGGAACCCTGG TCACCGTCTCCTCAG
005	p111w100		*IGHV*	CACTCTCCTGTGCAACGTCTGGATTCATCTTCAGTAACTATGCCATGCACTGGGTCCGCCAGGCTCCTGGCAAGGGGCTGGAGTGGGTGGCAAT TATATGGTATGATGGAAGTAATAAAAACTATGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACGATTCCAAGAACACGCTATATCTGC AAATGGACAGCCTGAGAGCCGAGGACACGGCTCTTTATTTTTGTGTGAGAGCTGCAACTGGCAGACGTTATCTTTGGCCTGAATACTGGGGCCA GGGAACCCTGGTCACCGTCTCCTCAG
005	p111w101		*IGHV*	GAGCTGCAGGTGGTGGAGTCTGGGGGGGTCTGTGGTACGGCCGGGGGGGGTCCCTGAGACTCTCCTGTGAAGCCTCTGGATTCACGTTTGATGAT TTTGGCATGAACTGGGTCCGCCAAGCCCCAGGGAAGGGGCTGGAGTGGGTCTCTGGGATTTTTTGGGATGGTGCTGGAGTAGGTTATGCAGAC TCTGTGAAGGGCCGATTCACCATCTCCACAGACAACGGCAAGACCTCCCTGTATCTTCACATGAACAGTCTGAGAGTCGAGGACACGGCCTTGT ATCACTGTGTGAGGGACCGTGGATACAAATATGGTTCCTCCTACTACTACTACAGTATGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTC CTCA
005	p111w106		*IGHV*	AGGAGGCTTGATCCAGCCGGGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATCGTCAGTGACAACTACGTGAGCTGGGTCCGCCA GCCTCCAGGGAAGGGGCTGGAGTGGGTCTCAATTATTTATGTCGGTGGTACTACATTCTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCC AGAGACAATTCCAAGAACACAGTATATCTTCAGATGAACAGTCTGAAATCCAATGACACGGCCGTGTATTACTGTGTGGGGGGACAGTTCTTTCC TTCTTTGACTACTGGGGCCAGGGAGCCCTGGTCGACCGTCCCCTCA
005	p111w107		*IGHV*	GAGGTACAGTTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGGCTCTGGATTCATCTTCAGTAGT TATGAAATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTTTCATATATAAGTGGTAGTGGAACTATGATTCACTACGCAGACT CTGTGAGGGGCCGAGTCACCATCTCCAGAGACGACGCCAAGAACTCACTGTATCTGCAAATGAGGAGCCTGAGAGCCGACGACACGGCTGTTT ATTACTGTGCGAGACAGACCCGAAATTACAGTGGTGGCTGGTACTATCTTGACTTCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
005	p111w108		*IGHV*	CAGGTGCAGCTGGTGGAGACGGGGGGGAGGCTTGGTCAAGATTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGAC TACCATATGAGTTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTTCATTCATTAGTGATAGTGGTGAGTACATAAACTCCGCAGACT CCCTGAAGGGCCGAATCACCGTCTCCAGAGACAACGCCGAGAAGTCATTGTTCCTGCAGATGAACGGCCTGAGAGTCGAGGACACGGCCGTGT ATTACTGTGTGAGAATGGGAAGGAATTGTTTCAGTTGCCCCCATGATGCTTTTGATACCTGGGGCCAAGGGACAGTGGTCACCTGTCTCTTCA
005	p111w109	41	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCCGGTACAGCCTGGAGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAT TATGAAATGTACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATACATTAGTACTAGTCCGGCTATCACATATTATGCAGACT CTGTGAGGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAGCTCACTGTATCTGCACATGAACAGCCTGAGAGCCGAGGACACGGCTGTTTA CTACTGTGCGACCATTTCCCACCAACAATTTAGCAGTGGCTGGAACGCCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA C
005	p111w113		*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGGTTCACCTTCAGTGA CTCTGCTGTGCACTGGGTCCGCCAGACTTCCGGGAAAGGGCTGGAGTGGGTTGGCCGTATTAGAACCAAGGCTAACAATTTCGCGACATCATAT GCTGTGTCGGTGCAAGGCAGGTTCTTCATCTCCAGAGATGACTCAGAGAACACGGCATATCTCCAAATGAGCGGCCTGAAAACCGAGGACACG GCCGTCTATTATTGTACTAGGGGAACAGGATTTTGTGGTTATAATACCTGCTCCACCTACGGCTACTACTACGCTATGGACGTCTGGGGCCCAGG GACCACGGTCACCGTCTCCTCA

005	p111w114	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGAAGCCTCTGGATTCACCTTCAATAAT GATGAAATGCACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGCATACATTAGTAGTAGTGGTAGTACCATCTACTATGCAGACT CTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAGATGAACAACCTGAGAGCCGAGGACACGGCTGTTTA TTACTGTGCGAGAATGTGGCTGGTATCTCTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w115	*IGHV*	CAGGTGCAGCTGGTTGAGTCGGGGGGAGGCGAGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGAAG CAATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCAGTCATATCATATGATGGAAGTGAGAAATTCTACGCAGA CTCCGTGAAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAATACACTGTATCTCGAAATGAACAGCCTGAGACGTGAGGACACGGCTGCG TATTACTGTGCGCGAGATCGCTATGCAGCAGCTGCTGCGACCTTTCTCGACTATTGGGGCCAGGGAGCCCCGGTCACCGTCTCCTCAG
005	p111w118	*IGHV*	GAGGTGCAGTTGGTGGAGTCTGGGGGAGGCTTGCTTCAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAGTTTCTGGATTCACGTTTGGTGAT CACGCTATCAACTGGGTCCGCCAGGCTCCAGGAAAGGGGCTGGAGTGGGTTGGTTTCATTAGAAGTAAAGCTTATGGTGAGACAAGAGAATACG CCGCGTCTGTGGCAGGCAGAGTCAGCATCTCAAGAGATGATTCCAAAAACATCGCCTATCTGGAAATGAACAACCTGAAAAACGAGGACTCGGC CGTGTACTATTGTACTAGAGAGGAAGGGTATCGGAGCACCTGGTACCGGAAATTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
005	p111w119	*IGHV*	AGGGTCTCCTGCAAGACTTCCGGAATCACTTTACACAATTATGCTATTAGTTGGGTGCGACAGGCCCCTGGGCAAGGGTTTGAGTGGCTGGGAC AGATCATCCCTGTCTTAGGCACAACAAAGTACGCACAGAAGTTCCAGGGCAGAGTCACGATTACCGCGGACAAATCCACGAGCACAGTTTATAT GGATCTGGGCAGCCTGACATCTGAGGACACGGCCGTATATTTCTGTGCGAGATTGTGGGTCATGTACTACGGTCTGGACGTCTGGGGCCAAGG GACCACGGTCAGCATTTCCTCC
005	p111w122	*IGHV*	GTGTCCTTCAGTGGTTACTACTGGACCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACC AAGTACAAGTCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGACCTCTGTGACCGCCGCGG ACACGGCTGTATATTACTGTGCGAGAGTTTGGCAACGGGCGCTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w126	*IGHV*	GAGATGCTCCTGGTTGAGTCGGGGGGAGGCCTGGCGCAGTCTGGAGGGTCCCTGAGACTCTCCTGTGTTGGTTCTGGATTCACCTTCAGTTATT ACGACATGAATTGGGTCCGCCACATCCCAGGGAAGGGATTCGAGTGGGTCTCATTTATAAAGAATACTGGAGATGTAACATATTACGCAGAGTCT GTGAAGGGGCGATTCACCGTCTCCAGAGACAACTCCAAGAACTCACTATTTCTTCAGATGAATAACCTGAGAGGCGAGGACACGGCTACTTATTA TTGTGTGACCCTAGGAGTGGGGAAGAATTACTACTTCAAGCAAGTGGACGCCTGGGGCCAGGGGACCAAGGTCACCGTCTCCCCA
005	p111w127	*IGHV*	ACCAATACATACACTGGGTGCGACAGGTCCCTGGACAAGGGCTTGAGTGGATGGGATGGCTAAACACGCACACTGGCGGCTCAAACTATGCAC AGGACTTTCAGGGCAGAGTTATCATGACGAGGGCCACGTCCATCAACACAGCCTACCTGGAGTTGACTTGGCTGAGATCTGACGACACGGCCGT GTATTACTGTGCGAGAGAGCGGTTGGATAGTGATACTCTTGATTTATGGGGCCAAGGGACAAAGGTCATCGTCTCTTCAG
005	p111w129	*IGHV*	CAGGTGCAGGTGGTAGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAAGTCCCTGAGACTCTCCTGTGCAGTCTCTGGATTCACCTTCAGTAGC TATACTATGCACTGGGTCCGCCAGGCTCCAGGCAACGGACTAGCGTCGGTGGCACTTATATCGAATGATGGAACTAAGAAATACTATGCAGACT CCGTGAACGGCCGATTCACCATCTCCAGAGACAATTCCATGAACACTCTCTATCTGCAGATAGACAATCTGAGACCTGACGACACGGCTGTCTAT TACTGTGCGAGAGAGTACGCGTCCCAGAGGCGTGGCTAGCCCCTATGGTCCTCTTGACTACT
005	p111w13	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCAGGGCGCTCCCTGAGACTCTCCTGTGCAACTTCTGGATTCACATTTGGTGGT TTTCATATGAACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTAGGTTTCATCAGAAACAAAGCATATTATGGGACAACACAATATG CCGCGTCTGTCAAAGGCAGATTCACCATCTCAAGAGAT
005	p111w133	*IGHV*	CAGGTGCAGTTGCAGGAGTCGGGGCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTTTCTGGTGACTCCGCCAGTAGA TATCATTGGCACTGGATCCGGCAGGCCCCAGGGAAGGGACTGGAGTGGATGGGGAGTACCTATTACAGTTTGAGTTCCAAATACAACCCCTCCC TCAAGAATAGAGTCTTGATATCAATAGACAGGGCCAGCAACCTGATCTCCCTGAAACTGACCTCTGTGAGCGCTGCAGACACGGCCGTTTATTAC TGTGCGAGAGGTCGACTGGAAGATGATAGTGCGTTCTTCGACTCCTGGGGCCAGGGAATCCTGGTCACCGTCTCCTCAG
005	p111w14	*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCAGGGCGGTCCCTGAGAGTCTCCTGTACAGCTTCTGGATTCACCTTTGGTGAT TTTGCGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAAGTTTTATTGGAAGCAAACCCTATGGTGGGACAACAGAGTAC GCCGCGTCTGTGAAGGGCAGATTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTCCAAATGAACAGCCTGAAACACGAGGACACAG CCATCTATTTCTGTACTAGAGTCGCCTCCGAATTTTGTCGTGGCGGTGCCTGCTACGGGGGAGGTTCTGATTATTGGGGCCAGGGAACCCTGGT CACCTGTCTCCTCA
005	p111w144	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGAC CAATACATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGCTAAACACGCACACTGGCGGCTCAAACTATGCACAG GACTTTCAGGGCAGAGTTATCATGACGAGGGCCACGTCCATCAACACAGCCTACCTGGAGTTGACTTGGCTGAGATCTGACGACACGGCCGTGT ATTACTGTGCGAGAGAGCGGTTGGATAGTGATACTCTTGATTTATGGGGCCAAGGGACAAAGGTCGATCGTCTCTTC

005	p111w145	*IGHV*	GAGGTGGAACTGGTGGAGTCGGGGGGGGGCTTGGTACGGCCAGGGCGGTCCCTCAGACTCTCCTGTACAGGCTTTGGATTTACCTTTGGTGAT TATGCTTTGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTTATTAGAAGTAAAGGTTATGACGGGACCACAGACTAC GCCGCGTCTGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCCCAGAGCATCGCCTATCTGCAAATGAACAGCCTGAAACCCGAGGACTCAG CCGTGTATTACTGTGCGAGACCCCTCTATATTGGGAGCTACTACTCTAGTTATTTTGAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
005	p111w146	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCATGTTTAGAGAC TACTGGATGAACTGGGTCCGCCAGGCTCCAGGGAAAGGGCTGGAGTGGGTGGCCAGCATAAAGTACGATGGAAGTGAGAAATACTATGTGGAC TCTGTGAGGGGCCGATTCACCATCTCCAGAGACAACGACGAGGACTCATTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGT ATTACTGCACAAGGACGATGACACGGGGGGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w15	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAG CTATACCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCTCCATTACTAGTAGTAGTACTTTCATATACTACGCAGAC TCAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAGTGAACAGCCTGAGAGCCGAGGACACGGCTCTGT ATTACTGTGCGAGAG
005	p111w159	*IGHV*	CAGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACTTTCAGTAACT ATGCTATGAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACACCAACACTGGGAACCCAACGTATGCCCAGG GCTTCACAGGACGGTTTGTCTTCTCCTTGGACACCTCTGTCAGCACGGCATATCTGCAGATCAGCAGCCTCAAGGCTGAGGACACTGCCGTATA TTACTGTGCGAGAGACCTTCGGATTTCTGTGCCCTCAGATTACTACTACTACATGGACGTCTGGGGCAAAGGGACCACGGTCACCGTCTCCTCA
005	p111w162	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGGCTGGTGAAGCCTTCGGGGACCCTGACCCTCACCTGCGCTGTCGCTGGTGGCTCCCTGAGAAG TAATACCTGGTGGACTTGGGTCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGAGAAATCTATCATACTGAGAGCACCAACTACAACCC GTCCCTCAAGAGTCGAGTCACCATATCGATAGAC
005	p111w163	*IGHV*	TTGGTGCAGTCTGGGGGCGGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCGAGGCTTCTGGAGGCACCTTCAATGAATATGCTGTC CACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGCATCATCCCTTTCTTAGGTACAAACACTACGCGCAGAAGTTCCAG GGCACAGTCACGATTACCGCAGACGGATCCACGGGTCCTGTTTACATGGAGCTGAGCAGCCTGAAATATGAGGATACGGCCGTATATTATTGTG CGAGATCGCACGTCAGTAGCACCACGTATAGCAGGTTTGACCCCTGGGGCCAGGGAGTCCTGGTCACCGTCTCCTCAG
005	p111w167	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGAAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCTATAAA TATGGTATGCACTGGGTCCGGCAGACTCCAGGGAAGGGACTGGAATCTGTTTCAACTATTAGTAGTCATGGGAGTCACACATATTATGCAGACTC TGTGAAGGGCAGATTCACTATCTCCAGAGACAATTCCAGGGACACCCTGTTTCTTCAAATGGGGAGCCTGAGACCTGAGGACGCGGGTGTGTAC TTCTGTGCGAGGGACTCGTATGAGGATTTTTTGAGTTCCGGGGGCCTGAACTTCTACATGGACGTCTGGGGCAAAGGGACCACGGTCACCGTCT CCTCA
005	p111w168	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCATGAAAAAT CACCACTGGAATTGGATTCGGCAGGCCCCAGGGAAGGGACTGGAGTGGATTGGGTTGTTCCATGACGATGGGAACTCCGGCTACAATCCCTCC CTCAGGGGTCGAGTCACCATATCAATTGACACGTCCAAGAACCAGTTCTCCCTGCAGCTAGACTCTGTGACCGCTGCGGACACGGCCGTCTATT ACTGTGCGAGGGACAAGTCTGAATATTATGATACCATTTGGGGGAGTTATCGTTACAACTCCTTCGACTCCTGGGGCAGGGAACCCTGGTGCAC CGTCTCCTCAG
005	p111w169	*IGHV*	CAGGTGAACCTGGTGGAGTCTGGGGGAGACTTAGTCAAGCCTGGAGGGTCCCTGAGACTTTCCTGTGCAGCCTCTGGATTCACCTTTATTGACT ACTATATGACTTGGTTCCGCCAGGCTCCGGGGGGGGGCCTGGAATTTATTGCATACATTAGTAACAGAGTTTCTACTAAGTACTACGCAGACTCT GTGAAGGGCCGCTTCACCGTCTCCAGGGACAACGCCAAGGAGTCCATTTATCTGCAGATGGACAGCCTGAGAGCCGAGGACACGGCCGTCTAT TACTGTGCGAGGGTTGCGAATACTGTTTCTTTTCTTGACTCTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCCG
005	p111w17	*IGHV*	CAGGGGCACCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGACGTCCCTGAGACTCTCCTGTGTAGCCTCCGGATTCGCCTTCAGTAC CTATGCCATGCACTGGGTCCGCCAGGCTCCGGGCAAGGGACTAGAGTGGGTGTCAGCTATATCATATGATGGAAGTCATTTACATTATGTAGAC TCAGTAAAAGGCCGATTCACCATCTCCAAAGACAGCTCCAAGAACACACTATTTCTACAAATGAACAACCTGAGAGTTGAAGACACGGCTGTATA CTACTGTGCGAGATTGGGGTATTGTAGTGGCGGGAGTTGCTACTACCACGCTATGGACGTCTGGGGCCAAGGGACTACGGTCGCCGTCTCCTC A
005	p111w171	*IGHV*	CAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACCTTCGGTGAC TATTATATGAGTTGGATCCGCCAGGCTCCAGGAAAGGGACTGGAGTGGGTTTCATACATTAGTAATATTGGTAGTACCACAAAATACTCAGACGC TGTGAAGGGCCGATTCACCATCTCCAGGGACAACGCCCAAAACTCACTGTATCTGCAAATGGAGAGCCTGCGAGACGAGGACTCGGCCCTATAT TTCTGTGCGAGAGAGGGTCGATATTGTTCCAGTACCACCTGCCTTCGAACTTTTTGACCTGTGGGGCCAGGGGACCCTGGTCACCGTCTCCTCAG

005	p111w172	*IGHV*	TTCAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAGTTTCTGGATTCACGTTTGGTGATCACGCTATCAACTGGGTCCGCCAGGCTCCAGGAAA GGGGCTGGAGTGGGTTGCTTTCATTAGAAGCAAAGCTTATGGTGAGACAAGAGAATACGCCGCGTCTGTGGCAGGCAGATTCAGCATCTCAAGA GATGATTCCAAAAGCATCGCCTATCTGCAAATGAACAACCTGAAAAACGAGGACTCGGCCGTGTATTATTGTACTCGAGAGGAAGGGTATCGGA GCACCTGGTACCGGAAATTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w174	*IGHV*	ACAGCCAGGGCGGTCCCTGAAACTCTCCTGTACAGTTTCTGGATTCACCTTTGCTGATCACGCTATGAACTGGGTCCGCCAGGCTCCAGGAAAG GGGCTGGAGTGGGTTGCTTTCATTAGAAGCAAAGCTTATGGTGAGACAAGAGAATACGCCCCGTCGCTGGGAGGCAGATTTACCATCTCAAGAG ATGATTCCAAAAGCATCGCCTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCCGTGTATTATTGTACTCGAGAGGAAGGCTATAGGAGC ACGTGGTACCGGAAATTTGACCTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w175	*IGHV*	CAGCTGCACCTGGTGGAATCTGGGGGAGGCTTGGTCAGGCCTGGAGGGTCCCTGACACTCTCCTGTGCAGCCTCCGGATTCAAGTTTAGTGCA TATTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGTCTGGAGTGGGTTTCATATATAAGTAATACTGGGAATACCTTATATTATACAACCTCT GTGAGGGGCCGATTCACCATCTCCAGGGACAACGCCAAGAACTCACTGTTTCTGCAAATGAACAGCCTGAGAGCCGAGGACTCGGCCGTCTATT ATTGTGCGAGAGATAGTGGGACCTATGAGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w176	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCCTCAGCGAC AACTTTTTGCACTGGGTTCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGGCGGATCAACCCTAACAGTGGTGCCACAAACTATGCACTGA AGTTTCAGGCCAGGGTCAGCATGACCAGGGACACGTCCATCAGCACAGCCTACATGGAGATGTACAGGCTTACATCTGACGACACGGCCGTGT ATTATTGTGCGAGAGATAAAGTAGGTTTTTGGAGTGGCACACAGGTTCGGGATGGATGTCTGGGGCCAGGGGACCACGGTCACCGTGCTTGCC
005	p111w20	*IGHV*	GAGGTGCGCGTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAG TATGAAATGACCTGGGTCCGCCAGGCTCCAGGTAAGGGGCTGGAGTGGATTTCATATATTAGTCACGGGGGTGACGCCACATACTACGCAGACT CTGTGAGGGGCCGATTCACCATCTCCAGA
005	p111w21	*IGHV*	CAGGTGCACCTGGTAGACTCTGGCGGAGGCGTGGTCCAGCCTGGGGGGTCCCTGCGACTCTCCTGTGCAGGCTCTGGTTTCATGTTCAATCTC AATAGTCTCCACTGGGTCCGCCAGGCTCCAGGCAAGGGCCTAGAGTGGGTCGCGATTATTTCATATGATGGAAGTCAACAAAAATACACAGACT CCGTGAAGGGCCGATTCACCATCTCCCGAGACAACTCGAAGAACACACTGTATCTCCACATGGACAACCTCCGACCTGACGACACGGCTGTCTA TTACTGTGTGAGGGATCGTTATAGTGGGAGTGAAGCCTCATATCTTGACTATTGGAGTGGGGGAACTCCGGTCACCGTCTCTTCAG
005	p111w24	*IGHV*	GAGGCGCAGCTGGTGCAGTCTGGAGCAGAGGAGAAGAAGCCCGGGGAGTCTCTGAGGATCTCCTGTCAGTATTCTGGAGACAGTTTTACTACC TACTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGTATCATCTATCCTGGTGACTCTGATACCAGATACAGCCCG TCCTTCCAAGGCCAGGTCACCATCTCAGTCGACAAGTCCATCAGCACCGCCTACCTGCAGTGGGGCAGCCTGAAGGCCTCGGACACCGCCATG TATTATTGTGTGAGACATATGAGTACGACTTTTGGATACCTATCTGGCTACTACTACATGGACGTCTGGGCCAGAGGGACCACGGTCACCGTCTC CTCA
005	p111w25	*IGHV*	GAATTCACCCACTTCTATATTCACTGGGTGCGACGGGCCCCTGGACAAGGGCTTGAGTGGATGGGGCGAATCAACCCTAATACTGGAGACACGA AATTTGCAGAGAAATTTCACGGCAGGGTCACCATGACCAGGGACACGTCCACCAACACAGCCTACATGGAGCTGAACAGACTGACATCTGGCGA CACGGCCGTCTATTATTGTATGAAGGACTACGGTGACTATGTTTGGGGTGACTTCTGGGGCCAGGGAACCCAGGTCTCCGTCTCCTCCG
005	p111w26	*IGHV*	CAGGTACAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACGTTCAGTAGA TTTGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCCAGAGTGGGTGGGAGTTATATCATATGATGGACGTAATAAATACTACGCGGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAACTCCCAGGACACTTTGTATCTGGAAATGAACAGCCTGAGAGCTGAGGACACGGCTCTCTA TTTCTGTGCGAGATCAGTGAATGACTACGGTGACCCGTATTTCTGTGACTACTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
005	p111w3	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTTACTCCATCGGCAGT GGTTACTACTGGGGCTGGATCCGGCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTATCATGATGGGAACGCCTACTTCAACCCG TCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGT ATTTCTGTGCGAGAGACTACTATGACAGTAGTGGTTATTACCTTTACCACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAC
005	p111w35	*IGHV*	TGTTTAGGAGTTATGTCATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTATTACTGGAAGTGGAGGTACCACCA GGTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAACTCCAAGAACACGCTGAATTTGCAAATAAATGGTCTGAGAGTCGAAGA CACGGCCGTATATTATTGTGCGACATGGAAGGGCGGCTACTCTTATTACATGGACGTCTGGGGCAAAGGGACCACGGTCACCGTCTCCTCA

005	p111w37		*IGHV*	GAAGTGCAACTGGTGGAGTCTGGGGGAGGCCTTATACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGCTT ATGGCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCGCAGGTATTAATTCGAATAGTGGTACCATAGAATATGCGGTCT CTGTGAGGGGCCGCTTCGCCATCTCCAGAGACAACGCCAAGGGCTTCCTATATCTGCAAATGAACAGTCTGAGACCTGAGGACACGGCCTTGTA TTACTGTGCAAAGGATCAGGTATTAGCGACCTACTACTCTTCGTCTTTTGACTCCTGGGTCAGGGAACCCTGGTCACCGGTCTCTTCA
005	p111w39		*IGHV*	GGAGTCTCTGGCCTCGCCTTTAGCGGCTATGCCATGAGCTGGGTCCGCCAGACTCCAGGGAAGGCCCTGGAGTGGGTCTCCGCTATTAGTAAT ACTGGAGGTACCACATACTACGCAGACTCCGTGCAGGGCCGGTTCATCATCTCCAGAGACAATTCGCAGAACATGCTGTATCTGCAAATGGACA CCCTGAGAGCCGAGGACACGGCCGTATATTATTGTGCGAGTTCTCGCTTCCGGGGGGGATATTACAACGATGGTTGTGGTCGTTACTGGGGCCG GGGAACCCTGGTCACCGTCTCCTCAG
005	p111w43		*IGHV*	CAGGTCAGCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAGCCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGGTTCTCACTCACCGAT GCTAGAATGGGTGTGACCTGGATCCGTCAGCCCCCAGGGAAGGCCCTGCAGTGGCTTGCACACATTTCCTCGAACGACGAAAAATCGTACACC CCATCTCTGAAGAATCGACTCACCATCTCCAAGGAC
005	p111w44		*IGHV*	TGCTGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAATTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAGTGGGTCTCTACTATTACTGCT AATAGTGACACCAGATATTACACCGACTCCGTGAGGGGCCGGTTCACCGTCTCCAGAGACAACTCCAAGAACATCCTCTATCTCCAAATGAACAG CCTTAGAGTCGAGGACACGGCCCTATATTATTGTGCGCCATTCCCCGCGTATAGTCATGGACTCCCCCAGAGAAGTGCTATTAACATATGGGGC CATGGGACAATGGTCACCGTCTCTTCAG
005	p111w46		*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACGCTGTCTCTAGC ATCAGTGCTGCTTGGAACTGGTTCAGGCAGTCCCCCTCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCAAGTGGTATTTTGATT ATGCAGTATCTGTGAATAGTCGAATAACCATCAACCCAGACACATCCAAGAACCAGTTCTCCCTGCACTTGAGTTCTGTGACTCCCCGAGGACACG GCTCTTTATTTCTGTTCAAGAGACGACGGATTCAGCTATGGCTATTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w47		*IGHV*	AGGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTCAATTCATCAGTAGTGGTTTCTACTGGGGCTTCGTCCGGCAGACCCCTGGGA AGGGCCTGGAATGGATTGGCAGTATCTATCGTTCTCAGGTCTCCTTCTACAACCCGTCACTGAAGAGTCGAGTCACCATGTCAGTAGACATGTCC AAGAATCAATTCTCCCTAAGGATGAAGTCTGTGACCGCCGCAGACACGGCCGTCTATTACTGTACGAGACTATCAGGAGGAATGGGGGGGGCAG GAACGGCCTACTTTGACTGGTGGGGCCAGGGAACCTTGGTCGACCGTCTCCTCA
005	p111w48		*IGHV*	CAGGTTCAACTGGTGCAGTCTGGAGGTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTACACCTTCACCAAAT ATGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCCCTTCCAATGGTCACACAAACTATGCAGAGA AGTTCCAGGACAGAGTCACCGTGACCACTGATACATCCACGAGTACAGCCTACCTGGAGCTGAGGAGCCTGCGATCTGACGACACGGCCGTGT ATTACTGTGCGAGAGAGTTCGGTGACCACCTTCGTGGTGACTCTTTTGATACCTGGGGCCAAGGGGCATTGGTCACCGTCTCTTCAG
005	p111w5	40	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGGCTGGTGAAGCCTTCGGGGACCCTGACCCTCACCTGCGCTGTCGCTGGTGGCTCCCTGAGAAG TAATACCTGGTGGACTTGGGTCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGAGAAATCTATCATACTGAGAGCACCAACTACAACCC GTCCCTCAAGAGTCGAGTCACCATATCGATAGACGTGTCCAACAACCGCTTCTCCCTGACCTTGAGCTCTGTGACCGCCGCGGACACGGCCCTT TATTACTGTTCGAGAGCGTCCAGTAGATCGGGATCATTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTGCA
005	p111w55		*IGHV*	GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCCTTGGTACAGCCTGGCAGGTCGCTGAGACTCTCCTGTGCAGGCTCTGGGTTCACCTTTGACGAT TATGCCATGCACTGGGTCCGGCAAGCTCCCGGGAAGGGCCTGGAGTGGGTCTCAAGTATTGCTTGGAATGGTGCTGGCATAGGCTATGCGGAC TCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGCAAATGAACAGTCTGAGACCTGAGGACACGGCCTTGT ATTACTGTACAAAAGCCGATGCCCACAATTACCCCCCTGAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w57		*IGHV*	CTCTGGGTTCACCGTCAGTAGCAACCACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGCTGGAGTGGGTCTCAGTTATTTATACGGTGATA GCACACACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGTGTATCTTCAAATGAAGAGCCTGAGAGCC GAGGACACGGCCGTGTATTACTGTGCGAGAATGGAGTACCAATTGCAATCTTACTTCTACTACTACATGGACGTCT
005	p111w6		*IGHV*	GGGTCCTTCACTGGTCACTTCTGGACCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACC AATTATAATCCGTCCCTCAAGACTCGAGTCACCATATCAGCGGACACGTCCATGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCGG ACACGGCTGTTTACTACTGTGCCAGATACTATCGATTACCACCTCGGTTCACTTATGATTCCGGGTACAACGCCTTGGACGTCTGGGGCCGAGG GACCACGGTCACCGTCTCCTCA
005	p111w62		*IGHV*	CAGGTGCAGTTGCAGGAGTCGGGCCCCGGACTGGTTAAGCCCTCGGAGACCCTGTCCCTCACCTGCGCTGTCGCTGGTGGCTCCTTCATTAAT TACTACTGGACCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATAACACTGGGAGCACCAATTACAACCCCTCCC TCAGGAGTCGAGTCACCATATCAGTTGACAGGTCCAAGAGACTGTTCTCCCTGAAGCTGGACTCTGTGACCGCTGCGGACACGGCCATGTATTA CTGTGCGAGAGGGGGTGTTACTAATTATTTCCCCACCTACAACTTTGACTACTGGGGCCCGGGAGCCCTGGTCACCGTCTCCTCAG

005	p111w7	*IGHV*	GAAGTGCAACTGGTGGAGTCTGGGGGGAGCCGTGGTACAGCCTGGGGGGTCGCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGAT TATGCCATGAACTGGGTCCGGCAAGTTCCGGGGAAGGGTCTGGAGTGGGTCTCTTTTATTACTTGGGATGGGGGTCGAAGATACTATGTGGACT CTGTGAAGGGTCGATTCACCATCTCCAGAGACAACAGCAAGAACTCCCTGTATTTGGAAATGAACAGTCTGAGAACTGAAGACACCGCCTTGTAT TACTGTGCAAGAGAAGTGGGGCATGGGGGCTATGGTCCTAGTGGTTATTCGTCCGGCTGGTATTTCGATTTCTGGGGCCGTGGCACCCTGGTCA CTGTCGTCCTCA
005	p111w8	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTAGTGACACCTTCAGCAGT CGTAATTACTTCTGGAGTTGGACCCGGCAGCCCCCAGGAAGGGAAACTGGAGTGGGTTGGGCATGTCTATGCCAGTGGGGCCACCAATTACAAC CCCTCCCTGAAGGGCCGAGTCACCATGTCAATGGACACGTCGAAGAGGCAGTTCTCCCTGAAGCTGAGCTCTGTGACCCCTGCGGACACGGCC GTCTATTATTGTGCGAGAGGTTGGAATCACAGTGACTACCCTGAGGAATACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
005	p111w81	*IGHV*	ACTTCAGACAGGGGGCTGGAGTGGGTGGCAGTTATATGGTATGACGGCGGACAGAAAGCTTATGCAGAATCCTTGAAGGGCCGATTCACCGTC TCTCGAGACAATGCCAAGAACACAGTGGATCTGCAAATGGACAGCCTGAGAGTCGAGGACACGGCTCTATATTACTGTGCAAAATATCGTCTTCC TTTTTATGGTTCGGGGAGAAGTGCTCTTGATCTGTGGGGCCGAGGGACAATGGTCACCGTCGCTTCAG
005	p111w82	*IGHV*	GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGGGTCTGGATACAGCTTTACGAGG TTCTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCCATCCCGATGACTCTGATACCAGATACAGCCCG TCCTTCCAAGGCCAGGTCACCATCTCAGCCGACAAGTCCATCACCACCGCCTACCTGCAGTGGAGCAGCCTGCAGGCCTCGGACACCGCC
005	p111w83	*IGHV*	GAAGTGGAGGTGGTGGAGTCCGGGGGGAGGCTTAGTTCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGTAGTCTCTGGATTCACCTTCAATGAC TACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGCTCTCACGTATTAATATTGCTGGGACTGACATAAGGTACGCGGAC TCCGTGAGGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACACGCTGTATCTGGAAATGAACAGTCTGAGAGCCGAGGACACGGCTGTG TATTACTGTGTAAGAG
005	p111w89	*IGHV*	CAGGTGCACCTGGTGGAGTCTGGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCACCTTCAGTGAC TATAGCATGCACTGGGTCCGCCAGTCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTTATATGGTATGACGGAAGTAATAAGTTCTATGCAGACT CCGTGAGGGGCCGGATCACCATCTCCAGAGACAACTCCAAGAACACGCTGAATCTGCAAATGGACAGCCTGAGAGTCGAGGACACGGCTGTGT ATTTTTGTGCGAGAAACGGAGAATTGCGCGGTGGGTGGTGTGTTGGTGGTAACTGTTACCTTGACTACTGGGGCCAGGGAACCCTGGTCACCGT CTCCTCAG
005	p111w92	*IGHV*	GAAGTGCAGCTGGTACAGTCTGCAGCAGAGGTTAAGAAGCCCGGGGAGTCTCTGAGAATCTCCTGTCAGGGTTCTGGATACAGCTTTACCGACT ACTGGATCGACTGGCTGCGCCAGGTGCCCGGGAAAGGCCTGGAGTGGATGGGGAGGATCGATCCTAGTGACTCTTATACGTACTACAACCCGT CCTTCCAAGGCCACGTCTCCATCTCTACTGACAAGTCCATCAGCACTGCCTACCTACAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATTTA TTACTGTGCGAGACATGACAAGTCCCAACTGCTTTACGTTGCCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p111w93	*IGHV*	AGGCACCCCCAGCAGTTTTGCTATCAGCTGGGTGCGACAGGCCCCTGGACACGGGCCTGAGTGGATGGGAGGAATCATGCCTATGTTGGGGAC ACCAAATTACTCACAGAAGTTCCAGGGCAGAGTCACGATTACGGCGGACAAATCCACGAGCACAGCCTACATGGAGCTGAGCAGCCTGACATCT GAGGACACGGCCGTGTATTCGTGTGCCGGCCACAGTTGGGTGCCGCCTACGGTGACTCACTACTACTACTTCGGTATGGACGTCTGGGGCCAA GGGACCACGGTCACCGTCTCCTCA
005	p111w97	*IGHV*	CAGGTTCAGTTGGTGCAGTCTGGAGATGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGCTTACATGTTTACAAGAT ATGGTATCAGTTGGGTGCGACAGGCCCCTGGGCAAGGATTTGAGTGGATGGGATGGATCAGCGGTTATAATGGAAATACAGAATATGCACAGAA GTTCCAGGGCAGAGTCACCGTGACCAAAGACACAGCCACGACCACGGCCTACATGGAGGTGAGGAGCCTCAGATCAGACGACACGGCCGTTTA TTATTGTGTGAGAGACCGGATGGGTCCATTTCCCATAGCATCGCGCGATGATGCTTTTGATATTTGGGGCCAAGGGACAATGGTCACCGTCTCTT CAG
005	p112w100	*IGHV*	TAAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCTTCACCAGCTTTGAAATCAACTGGGTGCGACAGGCCCCTG GACAAGGCCTTGAGTGGATGGGGGGGGTCCTCCCTGTCTTTCATACAGCAAGCTACGCGCAGAAATTCCAGGACAGACTCACCATTACCGCGG ACAAGTCCACGGGCACAGTTTACATGGACCTCAGCAGCCTGACATCCGAGGATACGGCCTTTTATTACTGTGCGAGCCCCACCCATCAATTCGA TTTTGGCTACTGGGGCCAGGGGACCCTGGTCACCGTCTCCTCTG
005	p112w101	*IGHV*	GAGGCGCAGCTGGTGGAGTCCGGGGGGAGGCTTAGTTCAGCCTGGGGGGTCCCTGAGTCTCTCCTGTGAAGCCTCTGGATTCACCTTCAGTAGG TACTGGATGCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTGGTGTGGGTCTCACGTATTAGTCCGGATGGGACTGTCACAGGCTACGCGGAC TCCGTGAAGGGCCGATTCACCAGCTCCAGAGACAACGCCAAGAACACGGTGTATCTGCACATGAACAGTCTGAGAGCCGAGGACACGGCTGTG TATTTCTGTGCAAGAGATTTTGATTTTTTGAGTGCTCTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p112w104	*IGHV*	GACGTGCAGCTGGTGCAGTCTGGAGCAGGGGTGAAGAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGGTTCTGGATACAGTTTTCCCAAC TACTGGATAGGCTGGGTCCGCCAGATGCCGGGGAGAGGCCTTGAGTGGATGGGGGTCGTCCACCCTGACGACTCTGAGAGCAGATACAGCCC GTCCTTCGAGGGCCAGGTCACCATCTCAGCCGACAAGTCCATCAACACTGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACAGCGCCAT GTATTATTGTGCGTTGGCTCTGACCTACAGAGACTACGGCTTTGACTACTGGGGCCAGGGAACCCTGGTCTCCGTCTCCTCAC

| 005 | p112w109 | *IGHV* | GACGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATCGTCCTTTGACTTC
TATGCCGTGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGGCATAAGTGGCAGTGGTGCTAGCACATACTACGCGGA
TTCCGCGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTCCAGATGAATAGCCTGAGAGCCGAGGACACGGCCGTT
TATTACTGTGCGCAAGTTGGACGGGACCAGTGGGTGGCCCCCTTCCACTTCCAGTACTGGGGCCAGGGCACCCTGGTCACCGTGCTCCTCA |

| 005 | p112w111 | *IGHV* | CAGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGGAGAACCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACCTTCAGTGACC
ATGTTATAAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATG |

| 005 | p112w112 | *IGHV* | GAGATACAGCTGGTGCAGTCTGGCGCAGAGGTGAAAATGCCCGGGCAGTCTCTAACAATCTCCTGTAAGGGTTCTGGATACAACTTTAGAACTT
ACTGGATCGCCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCTATCCTGATGACTCTGATACCAAATACAGCCCGT
CCTTCCGAGGCCAGGTCACCATCTCAGCCGACAAGTCCACCAGTACCGCCTACCTTCAGTGGGGCAGCCTGAGGGCCTCGGACACCGCCATGT
ATTACTGTGCGAGAGGGGGGGCATGGGGCAAATACAATATTTTGAGCTGGTTATTCCCATAGGCCTTTTGATGTCTGGGGCCAAGGGACAGCGG
TCACCGTCTCTTCAG |

| 005 | p112w114 | *IGHV* | ACCGCGCAGGTGGCGGAGTCTGGGGGAGGCTTCGTCCAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGCCTTTAGCAG
CGATTGGATGAACTGGGTCCGCCAGACTCCAGGGAAAGGGGCTGGAGTGGGTGGCCAATATAAAGCCAGATGGAAGTGAGAAGTTCTATTTGGC
CTCTGTGAAGGGCCGATTCACCATCGCTAGAGACAATGGCGACAGGACACTGTATTTACACATGAACAGCCTGAGACCCGAGGACACGGCGAT
GTATTACTGTACTATAGGCCATTATCGAAATGTCTGGGGCCCGGGAACCCTGGTCACCGTCTCCCGG |

| 005 | p112w119 | *IGHV* | GAGGTGCAGCTGGTGGAGTCTGGGGGAGTCTTCGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGTAGGCTCTGGATTCACCTTCAGTAGT
TATGAAATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGCTTTCATCTATTAATAATATTGCTAGTACTATAGATTACGCAGACTC
TGTGAAGGGCCGGTTCACCATCTCCAGAGACAACGCCAAGAGCTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTTTAT
TACTGTGCGAGAGGGAATCAGGGTTGGGGGAGTTATGACCTTGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 005 | p112w126 | *IGHV* | GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGACTCAGCTTTAATACC
TATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGGTATTAGTGGTAGTGGTGGCAGTACACACTACGCAGAC
TCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATTTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTAT
ATTACTGTGTGAGAGATCGCGTAGGAGTGGCTGGTACTTTTGCATACTTTCAGCACTGGGGCCAGGGCACCCTGGTCACCGTCTCGTCAG |

| 005 | p112w127 | *IGHV* | GAAGTGCAGCTGGTGCAGTCTGGAGCAGAAGTGAGAAAGCCCGGGGAGTCTCTGACGATCTCCTGCAAGACTTCTGGAAGTAGCCTTAGCACC
GAGCGAATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGCCTATATTGATCCTCGTGACTCTTACACCATGTACAGCCCG
TCCTTCGCAGGCCACGTCACCGTTTCAGCCGACAAGTCCACCAGGACTGTCTACTTACACTGGGGCAGCCTGAAGGCCTCGGACACCGCCACA
TATTTCTGTGCGAACTATAAAGGCCCGATGCAGATTGCGGGCAGTCTTGACTTTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 005 | p112w129 | *IGHV* | CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGCAGCCTTCGGAGACCCTGTCCCTCACTTGCACTGTGTCTGGTGCCTCCCTCACTTAT
TACTACTGGAGCTGGATCCGGCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGCATATATCTATTACAGTGGGAGCACCAACTACAATCCCTCCC
TCAAGAGTCGAGTCTCCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAACTCTGTCACCGCTGCGGACACGGCCGTCTATTAC
TGTGCGAGGGGGGTTCGGGGAGTTGATTATTTTGACTACTGGGGTCCAGGGAACCCTGGATCAGCCGGCCTCC |

| 005 | p112w135 | *IGHV* | CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACAGGTGAAGCCGTCGGAGACGCTGTCCCTCAATTGCGTTGTCTCTGGCTATTCCATCGCGAGT
GGTTACTTCTGGGGCTGGTTCCGTCAGCCCCCTGGGAAGGGTCTGGAGTGGATTGGGAGCGTCCATGATAGCGGGAGCACCTATTCCAACCCG
TCCCTCCAGAGTCGCGTCACCATTTCAGTAGACTCGTCCAAGAATCAATTCTCCCTGCGGCTGAGGTCTGTGACCGCCGCAGACACGGCCACAT
ATTTCTGTGCGAGAGATCCCTTCTGTGCTTATGTTACCTGCCACATGCGTGACGACTGGCGCGACTCCTGGGGCCAGGGAACCCTGGTCACCGT
CTCCTCAG |

| 005 | p112w136 | *IGHV* | GAGGAGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCGGGGGGGTCCCTCAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGGAAC
GTCTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCGTCATTAAAAGCAACGATGACGGTGGGACAACAGACTA
CGCTGGACCCTTTAAAGTCAGATTCACCATCTCAAGAGATGATTCCAAAAACACAGTGTATCTACAGATGAACGACCTGAAAGCCGAGGACACAG
CCGTTTATTACTGTACCACATGGACTGCCTACTGGGGCCAAGGAACCCTGGTCACCGTCTCCTCAG |

| 005 | p112w146 | *IGHV* | CCAGGCCTCTGGTTACAATTTTAACACCCATGGAATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGGATGGATCAGCGT
TTACAATGGGAACACAAACTATGGACAGAAGTTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCTCAGTCTACATGGAGTTGAGG
AGCCTGAGATCTGACGACACGGCCGTATATTACTGTGCGAGAATGGAGTATTGTAGTGGTGGGTGCTTCGATTACTATGATAGTAGTGGCGACC
TGGACTACTGGGGGCCAGGGAACCCTGGTCACCGTCGTCCTCA |

| 005 | p112w159 | *IGHV* | GAAGTGCAGCTGGTGGAGTCGGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCGTGTGTAGCCTCTGGATTCACCTTTGAGGAT
TATGGTATATATTGGGTCCGCCAGGTTCCAGGGAAGGGCCTGGAGTGGGTCTCAAGAATTGATTGGAATAGTGGCAGGACAGCTTATGCGGACT
CTGTGAAGGGCCGATTCACTATCTCCAGAGACAACGCCAAG |

005	p112w162	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTCGT TACTACTGGAGCTGGCTCCGGCAGTCCCCAGGGAAGGGACTGGAGGTGATTGGCTGTATCTATGACAGCGGGAGCACCAACTACAACCCCTCC CTCAAGAGTCGAGTCACCATGTCAGTTGACCCGTCCAACAGCCAGTTCTCCCTGAGGCTGACTTCTGTGACCGCAGTGGACTCGGCCGTATATT ACTGTGCGAGAGCTGGGGACTGGAACTCATACGGACACCTTGATCACTGGGGCCAGGGAATCCTGGTCACCGTCTCTGCAG
005	p112w163	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCGGGGGGGGTCCCTGAGACTCTCCTGTACAGCCTCCGGATTCACCTTTCGCAG CTATGTCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGGTATTAATCCTGGTGGTGGCAGCACAAACAACGCAGA CTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAACAACACCCTATATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCATA TATTACTGTGCGAAATGGAAGGGCGGCTATTACTATTACTTGGACGTCTGGGGCAAAGGGACCACGGTCACCGTCTCATCA
005	p112w164	*IGHV*	GAGATGCAGGTGGTGGAGTCTGGGGGAGGCTTCGTACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGAATTCATCTTCAGTAATT CTGAGATGAATTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTTCATATATTAGTAGTGGCGGTTCTGTCATATATACCGCAGACTC TGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTCAGTGTTTCTGCAAATGAACAGCCTGAGAGTCGAGGACACGGCTGTTTATT ACTGTGCGAGAGAGGATTACCGGATTCTACCGATACATGGACGTCTGGGGCAAAGGGACCACGGTCACCGTATCCCCA
005	p112w167	*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATCGTGGGTCCTTCAATAATT ATTACTGGAGCTGGATCCGCCAGACCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCTTTTCTAGTGGAAGCACCAAGTACAACCCGTCCC TCAAGAGTCGAGTCACCATATCAGTAGACACATCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCGGACACGGCTGTATATTA CTGTGCGAGAGTCCGAGGGGGGGGGATCTACCGTCAATACCTAGCTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
005	p112w168	*IGHV*	GAGGTGCAGCTGGTGGAGTCCGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGACACTCTCCTGTGCAGGCTCTGGGTTTGCCTTCAGTGC CTCTGAAATGCACTGGGTCCGCCAGGCTTCCGGGAAAGGGCTGGAGTGGGTTGGCCGTATTAGAAGCAAAGTTAATGATTACGCGACGGCACA TGCTGCGTCACTGAAAGGCAGGTTCACCATCTCCAGAGATGATTCACAGAACACGGCCTATCTGCAAATGAACAGCCTGAAAACCGAAGACACG GCCGTCTATTACTGTACTCCCAATAATTACTATGATAGTAGTGGTTATAAGTACTACTACGGTCTGGACGTCTGGGGCCAAGGGACCACGGTCAC CGTCTCCTCG
005	p112w17	*IGHV*	GAGGTGCAACTGTTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGAGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATAAC TATAACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCTTCGGTTAGTGTCATTAATAACATATACTATGCAGACTCAGT GAAGGGCCGATTCAGTATTTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGACAGCCGAAGACACGGCTGTGTATTAC TGTGCGAGA
005	p112w172	*IGHV*	GAGCTGCAGCTGGTGGAATCTGGAGGAGCCTTGATCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGTAGCCTCTGGGTTCTTCGTCAGTAATA ACTACATGATGTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTTATAGTGGTGGTAGCACATACTACGCAGACTCCGT AAAGGGCCGATTCACCATCTCCAGAGACAATTCCAGGAACACGCTGTACATTCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTATTAC TGTGCGCGAGGGGCCCCAGTTACCAATTGGGATTCCTACTACTACATGGACGTCTGGGGCAAAGGGACCACGGTCACCGTCTCCTCA
005	p112w174	*IGHV*	CAGGTGGAATTGGTGGAGTCTGGGGGAGGCTTCGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCAGGATTCACCTTCAGTGAC TACTTCATGACTTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTATCATACATTAGTCGAGGTCGAAGTTACACAAAGTACGCAGACT CTGTGAGGGGCCGATTCACCATCTCCAGAGACAACGCCGACAACTCACTTTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGGCGTCTA TTACTGTGCGAGAGATAGTCCCCCATTATATTGTGATCGTTCTAACTGCTTCTACTACTACATGGACGTCTGGGGCAAAGGGACCACGGTCA CCGTCTCTTCA
005	p112w175	*IGHV*	GCCTGCAAGACTTCTGGATACACCTTCACCACCTACTATATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGACGGATCA ACCCTACCGTTGGTGTCACATACTATGCACAGAACTTTCAGGGCAGGGTCACCATGACCTTGGACACGTCCATAACCACAGCCTACATGGAGCT GAGCAGTCTGACCTCTGACGACACGGCCGTGTATTTCTGTACGAGAGGGGTCTACGGTGGCCCCTTTGACTATTGGGGCCAGGGATCCCTGGT CACCGTCTCCTCAG
005	p112w176	*IGHV*	GAGGTGCAGCTGGTAGAGTCTGGAGGAGGCTTGATCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGGTTCACCGTCAGTCGC AGCTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTCTCAATTATTTATAGTATTGGTTCGACATACTACGCGGACTCCG TGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGGATCTTCAAATGAACAGCCTGAGAGCCGAGGACACGGCCCTGTATTA CTGTACAAAAGATCCCGCACCTTTTTGGAGTGGTTTCCAACCTTTTCCCCTCTGGGGCCAGG
005	p112w178	*IGHV*	GGGACAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGATTATGGAATGACCTGGGTCCGCCAGGCTCCAGG GAAGGGACTGGAGTGGATTTCATATATTAGTAGTAGTGGCATAATCATAAAGTACGCAGATTCTGTGAAGGGCCGATTCACCATCTCCAGAGACA ACGCCAAGAACTCACTCTTTCTGCAGATGAACAGCCTGAGAGCCGAGGACACGGCTGTTTATTACTGTGCGAGAGAAAAAGGATATAGGTATGG TTCCTCCTATTACTACTACTCCATGGACGTCTGGGGCAATGGGGCCACGGTCACCGTCTCCTCA

005	p112w25		*IGHV*	CAGGTGCATCTACATGAGTCGGGCCCAGGACTGATGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCGTCAGCAGC CGTGCTTACTACTGGAGCTGGATTCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGACATATTTATTACAGTGGGAGCACCAATTACAGCC CCTCCCTCCAGAGTCGAGTCACCCTATCAATTGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAACTCTGTGACCGCTGCGGACACGGCCCT ATATTACTGTGCGAGATCTGACGTTTTACGATATTTTGACTGGTCTAATTATTGGTACTTCGATTCTCTGGGGCCGCGGCACCCAGGTCACTGTCT CCTCAG
005	p112w26		*IGHV*	CAGGTGCACCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCTCCTGCACTGTCTCTGGTGACTCCATCGACAGC GGAACTTACTACTGGACCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGAAATGTCTATTATAGTGGGACCACCAACTACAACC CCTCCCTCGGGAGTCGAGTCAGGATATTACTCGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAACTCCGTGACCACTGCGGACACGGCCGT GTATTTCTGTGCGAGAGATCGACTGTTTTGTAGTAGTGTGAGGTGCTATGATTACTACCAGATGGACGTCTGGGGCAAAGGGACCACGGTCACC GTCTCCTCA
005	p112w3		*IGHV*	TTTTGGATACACCCTCACCGGCTACTATATGCACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGACGGATCAACCCTAACACT GGTGGCACAGTCTCTGCACAGAAGTTTCAGGGCAGGGTCACCATGACCACGGACACGTCCATCAGCACAGCCTACATGGAGCTGAGCAGGCTG AGATCTGACGACACGGCCGTCTATTACTGTGCGAGAG
005	p112w30		*IGHV*	CTGAGGTGCAGAGGCCTGGGGCCTCAGTGACGGTCTCCTGCAAGCCTTCTGGATACACCTTCACCGACTACTATATGAGCTGGGTGCGACAGG CCCCTGGACAAGGGCTTGAGTGGATGGGACGGATCAACCCTAGCAGTGGTGCCACAGTCTATGCACCGAAGTTTCAGGGCAGGGTCACCATGA CCAGGGACACGGCCATCGACACATTCTACATGGAGTTGAACAGCCTACAATCTGGCGACACGGCCGTCTATTATTGTGCGAGAGATTTCTCTATT CGATTTTTACCCGACCGACCGTGGTTCGACCCCTGGGGCCAGGGGACCCTGGTCTCCGTCTTCCTCA
005	p112w36		*IGHV*	CAGGTTCACCTGGTGCAATCTGGAGCTGAGGTGCAGAAGCCTGGGGCCTCAATGAAGGTCTCCTGCAAGGCCTCTGGTTACACCTTTACCAGCT ATGATATTAGTTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCAGCGTCTACAATGGTAACACAAACTATGCCCAGAA GTTCCAGGGCAGAGTCACTATGACCACAGACACATCGACGATGACAGCCTACGTGGAACTGAGGAGCCTGAGATCTGACGACACGGCCGTGTA TTTCTGTGCGAGAGA
005	p112w37	50	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAACTTCTGGATTCACTTTCGGTGAT TATGCTATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAGCCTTATGGTGGGACAACAGATTAC GCCGCGTCTGTGAAAGGCAGATTCAGCATCTCAAGAGATGATTCCAAAGGCATCGCCTATCTGCAGATGAACAGCCTGAAAACCGAGGACACAG CCGTGTATTATTGTAGTAGACCCTCGGGAATCTCTATAAATTCGGGGAGTTCAAACACTTTTGATATTTGGGGCCAAGGGACAATGGTCACCGTC TCTTCAG
005	p112w44		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCACCTTCACTAGC TATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATGGTATGATGGAACTAATGAATACTATGCAGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAGCAGCCTGAGAGCCGAGGACACGGCTGTGTA TTACTGTGCGAGAGATTTAGAACCCGTAGTAGTAGAAGTTGCTTTTGCCCACTACTACTACGGTATGGATCGTCTGGGCCAAGGGACCACGGTCA CCGTCTCCTCA
005	p112w46		*IGHV*	CAGGTGCAGCTGGTGCACTCTGGGCCTGAGGTGAAGAAGCCTGGGGACTCAGTGAGGGTCTCCTGTAAGACTTCTGGATACACTTTCATCGACT ATTGGATGCACTGGGTGCGCCGGGCCCCTGGACGAGGGCTTGAGTGGTTGGGCCAGATCAACCCTAACAGTGGCCGCACACACTATGCAGGGG AACTTTGAGGGCAGGGTCACCATGTCGAGGGACACGTCCATTAAGACAGCCTACTTGCAACTGAAAGGCCTGACTTCTGACGACACGGCCGTCT ATTATTGTGCGAGGGGGCCAGCCCATTCCAGTTTGGGGGGACTCTTCGCCCACTCGAATTTTGGGGCCAGGGAACCCTGGTCACCGTCTGCCTCA
005	p112w5		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCGTCAGTCCT TATTTCTGGAGTTGGATCCGGCAGCCCCCAGGGAAGGGCTGCAGTGGATTGGCTATATCTCTTTAAGTGAGGGTATCAACTACAATCCCTCCCTC AAGAGTCGAGTCACCATATCACTTGACACGTCCAAGAATGAGTTCTCCCTGAGACTGACCTCTGTGACCGCTGCAGACACGGCCGTCTACTATTG TGCGAGAGACTCGAGGCCGGGCGTTCACTCTTTTGATCTCTGGGCCTAGGGACAATGGTCACCGTCTCTTCAG
005	p112w55		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGTCAGGTGAAGCCGTCGGAAACCCTGTCCCTCACTTGCGGTGTCTCTGGTTATTCCATCATTAGT GGCTACTTCTGGGGCTGGATTCGGCAGTCCCCAGAGAAGGGGCTGGAGTGGATTGGGAGCGTCCATGAAGTGCGGGTATTTACTATAATCCG TCCCTCACCAGTCGCCTCAGAATATCGTTAGACACGTCCAGGAACACAGTCTCTTTGAGGCTGAACTCCGTCAGCGCCGAAGACACCGGCGTCT ATTACTGTGTGAGGGGATGCACAATTTTCACCTGCCATGGCAGATGGGGGTTCGGCCCCTGGGGCCAGGGAATTCCGGTCACCGTCTCCTCAG
005	p112w59		*IGHV*	CAGGTACAGCTGCAGGAGTCGGGGCCAGGACTGGTGAAGCCCTCGGAGACCCTGTCCCTCACCTGTACTGTCTCTGGTGCCTCCATCAGTAAT TACTACTGGACGTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAATGGATTGGATATATCTATAACAATGGGAACACCAACTACAACCCCTCCC TCAAGAGTCGAGTCACCATATTAGTAGACAAGTCCAACAAACTATTGTCCCTGAAAGTGAGCTCTGTGACCGCGGCGGACACGGCCGTGTATTAT TGTGCG

005	p112w6		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGCAG CTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCAGTTATATCATATGATGGAAGTAAAGAATACTACGCAGAC TCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCTGAGGACACGGCTGTGT ATTACTGTGCGAGAGA
005	p112w69		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGGTAAAGCCGGGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTTTG GCCTGGATGAACTGGGTCCGCCAGGCTCCGGGGAAGGGGCTGGAGTGGGTTGGCCGCATTAAAGGCAAAACTGATGGTGAGACAACAGACTA CATTGCACCCGTGAAAGGCAGATTCATCATCTCAAGAGATGATTCAAAAAAGACGCTGTATCTGCAAATGAACAACCTGAGAACCGAGGACACAG CCGTGTATTACTGTACCCCAGA
005	p112w7		*IGHV*	AGTTCAGTCTGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACTGGATGCACTGGGTCCGCCAAGCTCCAGGA AAGGGGCTGGTTTGGGTCTCACGTATTAGCAGTGATGTGAGAACCATAGGCTACGCGGAGTCGGTGAAGGGCCGATTCACCATCTCCAGAGAC AACGCCAAGAACACACTCTATCTGCAAATGAACAGTCTGCGAGCCGAGGACACGGCTGTGTATTACTGTGTGAGAGATTTCGGACTATATAGTCG TGACTGGTACGTTCCCACCACTTTGGGTCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCGCAG
005	p112w81		*IGHV*	GGAGCCTGGGTCTTCGGTGAAAGTCTCCTGCAAGACCTCCGGGGTCACCCCCCCCAGCCATGCCATCACCTGGGTGCGACAAGGCCCTGGAC AAGGCCTTGAGTGGTTGGGGCGCATCATCCCTGTCCTTGGGACAGCCACCTACGCACAGAAATTTCAGGGTCGAGTGACGATTACCGCGGACA AATCCACCAGTACAGTCTACATAGAACTGAACAGCCTGCGATCTGACGACACGGCCGTATATTACTGTGCGAGAGTGTGGGTCCAGTATTACGCT ATGGACGTCTGGGGGCCAAGGGACCACGGTCTCCGTCTCTTCA
005	p112w82		*IGHV*	AATAATCAACACTAAAGGTGGTAGCACAATCAACGCACAGAAGTTCCAGGGCAGAGTCGACATGACCAGGGAGACGTCCACGGGCACAGTCTAC ATGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCATTTATTATTGTGCGAGAGATGAAGCGGTGGGGTATTGTGGTGGTGACTGTTCCCCTG AATATTGGGGCCAGGGAACCCTGGTCAGCCGTCTCCTCA
005	p112w93	42	*IGHV*	GAGGTGCAGCTGATGGAGTCTGGGGGGAGGCTTGGTACAGCCTGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAACTTTAGGAAC TATGCCATGAACTGGGTCCGCCAGGCTTCAGGGAAGGGACTGGAGTGGGTCTCATCTATTAGATCTGGGGGGTACTGGCACATACTACGCAGACT CCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTACGGGAACACGCTGTCTCTGGAAATGAGCAGCCTGAGAGCCGAGGACTCGGGCATTT ATTACTGTGCGGCCTCCCGGATTTACTCTGATTACTACTACTACGGTCTGGACCTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
005	p112w97		*IGHV*	CAGGTGCACCTGGTGGACTCTGGCGGAGGCGTGGTCCAGCCTGGGGGGGTCCCTGCGACTCTCCTGTGCAGCCTCTGGTATCGTCTTCAATCTC AATAGTCTCCACTGGGTCCGCCAGGCTCCAGGCAAGGGCCTAGAGTGGGTGGCAATTATCTCATATGATGGAAGTCAACAAAAATACGCAGACT CCGTGAAGGGCCGATTCACCATCTCCCGAGACAATTCCAAGAACACACTGTATCTCCAAATGAACAACCTGCGACCTGACGACACGGCTGTCTA CTATTGTGTGAGGGATCGTTATAGTGGGAGTGAAGCCTCATATCTTGACCATTGGAGTGGGGGAACTACGGTCACCGTCTCTTCAG
005	p109w100		*IGLV*	CAGTCTCTTCTGACTCAGCCACCCTCAGCCTCTGGTGCCCCCGGACAGAGGGTCACCATCTCTTGTTCTGGAAGGAGCTCCAACATCGGAAGTA GCTATGTCTACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTGTAACAACAATCAGCGGCCCTCAGGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCTGCCTCCCTGGCCATCACTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAACATGGGATGAC AGCCTGGGTGGTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w107		*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCCTCTCCAACATCGGGAC AGGTTATGATATACACTGGTACCAGCAGGTTCCAGGGACAGCCCCCAAACTCCTCATCTTTGGTGACACCAATCGACCCTCAGGGGTGCCTGAC CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCTTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATG ACAGCAGCCTGAGAGCTTATGTCTTCGGAACTGGGACCAGGGTCACCGTCCTCA
005	p109w108		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCCTGTTCTGGAAGCAGTTCCAATATCGGAGATA ATACTGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATTTATGATAATGATCAGCGGCCCTCAGGGGTCCCTGGCCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAACCTGGGATGAC AGCTGCTCGTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w109		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTAACGTTGGTGCTT ATGATTATGTCTCCTGGTACCAACAACACCCAGGCACAGCCCCCAAACTCATGATTTATGAGGTCAGTAATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGGTCATTATTATTGCAGCTCATATACAA CCAGTAGCAATCTCGATGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p109w111	62	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCCTCTGGTACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAACTCCGATATCGGAAGTA ATTATGTGTACTGGTACCAGCAGTTCCCAGGAACGGCCCCCAAACTCCTCATCTATAAGGATAATCAGCGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGTGGCATGGGATGA CAGCCTGAGTAGTCCGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAA

| 005 | p109w115 | *IGLV* | AGAAATGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTATAATAACTGGCCTCGGACTTTTGGCCAAGGGACCAAGCTGGAGATCAAAC |

| 005 | p109w118 | *IGLV* | CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCTGTCACCATCTCCTGCACTGGATCCAGCAGTGACCTCGGTAGTTATAATTATGTCTCCTGGTACCAACAACTCCCCGGCAAGGCCCCCAACTCCTGATTTATGACGTCAATAAACGGCCCTCAGGGGTCCCCGATCGCTTCTCTGCCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGACTGACGATGAGGCTGATTATTATTGCGCCTCATTTGCCGGTTACAACAACTTAAGACTCTTTGGCGGAGGGACCAAGTTGACCGTCCTAG |

| 005 | p109w126 | *IGLV* | GATGTTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGTCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCGTATACAGTGATGGAGGAACCTACTTGAGTTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAGGGTTTCTAATCGGGACTCTGGGGTCCCAGACAGGTTCAGCGGCAGTGGGTCAGGCACTGACTTCACACTGAAAATCAGCAGCGTGGAGGCTGAGGATGTTGGGATTTATTACTGCGTGCAAGGGACACACTGGCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC |

| 005 | p109w127 | *IGLV* | GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCAGCATCTGTGGGAGACAGCGTCACCATAACTTGCCGGGCAAGTCAGACCATTAGCACCTTTGTGAATTGGTATCGGCATAGACCTGGGAGAGGCCCTGAACTCCTGATCTATGGTGCATCCACTTTACAACGTGGGGCCCCATCAAGGTTCAGTGGCGGTGGATCTGGGACAGAGTTCACTCTGACCATCAGCGGCCTGCAGCCTGAAGATTTTGCAACTTACTCCTGTCAACAGAGTTTCACTACCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC |

| 005 | p109w130 | *IGLV* | CAGTCTGTATTGACTCAGCCACCCTCAGCCTCTGCTACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGTAACTCCAACATCGGAAGGAATTATGTGTACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGAGAGTGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAGGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGTTTATTACTGTGTGGCATGGGATGACAGTCTGAGTGGTCCGGTATTCGGCGGAGGGACCAAAATGACCGTCCTAG |

| 005 | p109w135 | *IGLV* | CAGGCTGTGGTGAGTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTTTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGTGGTCATTATCCCTACTGGTTCCAGCAGAGGCCTGGCCAGGCCCCCAGGGCACTGATTTATGATGCAAGCAATAAACTCCTCTCGACACCTGCCCGGTTCTCAGGGTCCCTCCTTGGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGTTTGAGGATGAGGCTGACTATTACTGCTTACTCTCCTATAGTAATATTCGGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAC |

| 005 | p109w136 | *IGLV* | CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCGTCATTTATGAGGTCAGTAATCGGCCCTCAGGAGTTTCTAATCGGTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATCACTGCAGCTCATACACAAGCAGTAGCTCTCTCGCAGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG |

| 005 | p109w143 | *IGLV* | CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCCTGGAGGGACAGTCACACTCACTTGTGGCTTGACCTCTGGCTCAGTCTCTACTAGTTACTATCCCAGCTGGTACCAGCAGGCCCCAGGCCAGGCTCCACGCACTCTCATCTACACCACAGACACTCGCTCTTCTGGGGTCCCTGATCGCTTCTCTGGCTCCATCGTTGGGAACAAAGCTGCCCTCACGATCACGGGGGCCCAGGCAGATGATGAATCTAATTATTACTGCGTGTTGTATATGGGTAGTGGCAATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTGG |

| 005 | p109w146 | *IGLV* | CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGAATATAACTATGTCTCCTGGCACCAACAACACCCAGGCCAAGCCCCCAAAGTCATGATTTATGATGTCAATAAGCGGCCCCCGGGGGTCCCTGATCGGTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGATGAGGCTGATTACTACTGCTGTTCATATGCAGGCAGCTTCAGTTATGTCTTCGGAACTGGGACCCAGGTCACCGTCCTAG |

| 005 | p109w15 | *IGLV* | GACATCCAGATGACCCAATCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGACCATTAGCAGCTATTTACATTGGTATCAGCAGAAACCAGGGAGAGCCCCTAAGCTCCTGATCTATGGTGCATCCAGTTTGGAAGGTGGGGTCCCATCAAGGTTTAGTGGCAGTGGTTCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCTACTTACTTCTGTCAACAGACTTACACTTACTCATTCACTTTCGGCCCTGGGACCAAAGTGGATATCACAC |

| 005 | p109w158 | *IGLV* | GATATTGTGATGACCCAGACTCCACTCTCCTCACCTGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCCTACACAGTGATGGAAGCACCTACTTGAGTTGGCTTCAGCAGAGGCCGGGCCAGCCTCCAAGCCTCCTAATTTATAAGATTTCTAACCGGTTCTCTGGGGTCCCAGACAGATTCAGTGGCAGTGGGGCAGGGACAGATTTCACACTGAAAATCAGCAGGGTGGAAGCTGAGGATGTCGGGGTTTATTACTGCCTGCAAGCTACACAATTTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAAATCAAAC |

| 005 | p109w159 | *IGLV* | TGCATAATTATGGAAATAACTATTTGGATTGGTATTTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGTCCCTGATAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAACTCTACAAACTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAGATCAAAC |

| 005 | p109w162 | *IGLV* | GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGCAGTTATTTAGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGCTTCCACTGTGCAAAGTGGGGTCCCCTCAAGGTTCAGCGGCAGTAAATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTTTTGTCAACAACTTAATAGTTACCCGCTCACTTTCGGCGGAGGGACCGAGGTGGAGATCAAAC |

005	p109w163	*IGLV*	TTCTGTCGGAGACAGAGTCACCATCACTTGCCGGTCAAGTCAGACCACTAACAACTATTTAAGTTGGTATCAACAGAGACCAGGGGAAGCCCCTAAACTTCTGATCTATGCTGCCTCCATTTTGGAGAGTGGGGTCCCATCAAGGTTCGGTGGCAGTGGCTCTGGGACGGATTTCACTCTCACCATCAGCAGTCTACAACCTGAAGATTTTCCACTTACTACTGTCAACAGACTTACAGTTTCCCGTATACTTTTGGCCAGGGGTACCAAGCTGGAGTATCAA
005	p109w167	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTGGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTGGCGGTTTTTTAAATTGGTATCAGCAGAACCCAGGGGAAGCCCCTAAACTCCTGATCTATGGTGCATCCACTTTGCACACTGGCGTCCCATCAAGGTTCAGTGGCGGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTTCAACCTGAAGATTTTGCAACTTACTTCTGTCAGCAGAGTTTCAATACGCCTCGAACGTTCGGCCAGGGGACCAAGGTGGAAACCAGAC
005	p109w172	*IGLV*	AATTTAATGCTGACTCAACCCCACTCTGTGTCGGAGTCTCCGGGGAAGACGGTAACCATCTCCTGCACCGGCAGCAGTGGCAGCATTGCCAGCAACTATGTGCAGTGGTACCGGCAGCGCCCGGGCAGTGCCCCCACCACTGTAATCTATGAGAATTACCAAAGACCCTCTGGGGTCCCTCCTCGATTCTCTGGCTCCATCGACAGGTCCTCCAACTCTGCCTCCCTCACCATCTCTGGACTGCAGACTGACGACGAGGCTGACTACTACTGTCAGTCTTATGACAGCAACAATCTTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p109w174	*IGLV*	CAGTCTGTCTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATGTCCTGCTCTGGAAGCACCTCCAACATTGGACAGTATCATGTCTCCTGGTACCAGCAGTTCCCAGGATCAGCCCCCAAACTCCTCATTTATGACAATGATAAGCGACCCTCAGGCATCCCTGACCGATTCTCCGGCTCCAAGTCTGGCACGTCAGCCACCCTGGCCATCAGCGGACTCCAGGCTGCGGACGAGGGCGATTATTACTGCGGAACATGGGACAGCAGCCGGAATCCTCATTGGGTGTTCGGCGGCGGGACAAGGCTGACCGTCCTAG
005	p109w175	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAACAGTGATGTTGGTGGTTATAACTATGTCTCCTGGTACCAACAATACCCAGGCAAAGCCCCCAAAGCCGTGATTTATGATGTCACTAAGCGGCCCTCAGGGGTCCCTGAGCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGAATATTACTGCTGCTCATATGCAGGCCTGTATAGGTATGTCTTCGGAAGTGGGACCAAGGTCACCGTCCTAG
005	p109w176	*IGLV*	AATTTTATGCTGACTCAACCCCACTCTGTGTCGGAGTCTCCGGGGAAGACGGTAACCATCTCCTGCACCGGCAGCAGTGGCAGCATTGCCAGCAGCTATGTGCAGTGGTACCGGCAGCGCCCGGGCAGTGCCCCCACCACTGTGATCTATGAGAATTACCAAAGACCCTCTGGGGTCCCTGCTCGATTCTCTGGCTCCATCGACAGGTCCTCCAACTCTGCCTCCCTCACCATCTCTGGACTGCAGACTGACGACGAGGCTGACTACTACTGTCAGTCTTATGACAGCAACAATCTTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p109w177	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGTGAATATAACTATGTCTCCTGGTACCAGCAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGGTGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCTGCTCATATGCAGGCAGTTACACTTCCCCTTATGTCTTCGGACCTGGGACCACGGTCACCGTGCTAG
005	p109w18	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGCTTATAACTATGTCTCCTGGTACCAACAGCACCCAGGGAAACCCCCCAAACTCATGATTTATGAGGTCAGTGATCGGCCCTCAGGGGTTTCCAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACTATCTCTGGGCTCCAGGCTGAGGACGAGGCTGCTTATTACTGCAGCTCATATACACTCAGCACCATTCTTATTTTCGGCGGAGGGACCAAGCTGACCGTCCTGA
005	p109w2	*IGLV*	CAGTCTGCCCTGACTCAACCTCCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGGAGCAGCAGTGACATTGGTTATTATAATTATGTGTCCTGGTACCAACAGCGCCCAGGCAAAGTCCCCCAACTCATCATTTATGAAGTC
005	p109w20	*IGLV*	GACATCCAGCTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTGGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGTATTAGTAGTTATTTAAATTGGTATCAGCAAAAACCAGGGAAGGCCCCTAAACTCCTGATCCATGCAGCACGCAGTTTGCAGAGCGGGGTCCCATCAAGGTTCAGTGGCGATGCATCTGGGCCAGATTTCACTCTCACCATCAGCAGTCTGGAGCCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTATGCCTGTGTTCACTTTCGGCGGCGGTACCAAGGTGGAAATCAAAC
005	p109w21	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTCTCCTGGTACCAGCACCTCCCGGGAACAGCCCCCAAACTCCTCATTTATGACAATGATAAACGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAATCTGACACGTCAGCCACCCTGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATGGCAGCCTGAGTGCTGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w25	*IGLV*	GACATCCAGATGGCCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCTCCATCACTTGCCGGGCAAGTCAGAACATTAACAATTTTTTAAATTGGTATCAACAGAAACCAGGCAAAGCCCCTGAACTCCTGATGTATGGTGCTTCCACTTTACAAAGTGGGGTCCCATCAAGATTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCACCAGTCTGCAACCTGCAGATTTTGCAACTTACTTCTGTCAACAGAGTTTCAGTTTCCCTCGATCTTTTGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p109w26	*IGLV*	GAAATTGTTTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGTCACCCTCTCCTGCAGGGCCAGTCGGAGTGTTAGTAGGTACTTAGCCTGGTACCAGCAAAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCGTCCCACAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATGTTGGAGTTTATTACTGTCAGCAGCGGACGTTCGGCCCAGGGACCAAGGTGGAAATCAGGC

005	p109w3	61	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGGGGCAGCTCCAACATCGGGAC AGGTTATGATGTACACTGGTACCAGCACCTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTCACACCAATCGGCCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAAGTCTGACACCTCTACCTCCCTGGCCATCACTGGGCTCCAGCCTGAAGATGAGGCTTATTATTACTGCCAGTCCTATGA CAGGAGTCTGAGTGCTTTCGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p109w30		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGTGCCCCCGGGCAGAGGGTCAGCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAACT AATTATGCATACTGGTACCAGCAAGTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGGAATGATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCGGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATG ACAGCCTGATGGTCGGGTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w37		*IGLV*	CCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAAGCAACAGTGACATTGGTTATTATAACTATGTGTCCTGGTACCA ACAGCGCCCAGGCGAAGTCCCCCAACTCATCATTTATGAAATCAATAGTCGACCCTCGGGAGTTTCTAGTCGCTTCTCTGGCTCCAAGTCTGGCA ACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGCAGACGAGGCTGATTATTTCTGTGCCTCCTTCACAAGCCCTATCATGCTATTATTCGGC GGCGGGACCAGGCTGACCGTCCTGA
005	p109w39		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGCTT ATAACCATGTCGCCTGGTACCAACAGCACCCCGGCAAAGCCCCCAAACTCATGATTTATGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCAGTTCATATGCA GGCAGCTACACCTTATTTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p109w43		*IGLV*	AAGCAGCAGAGACGTTGGTGGTTATGACTATGTCTCCTGGTACCAGCAACACCCAGGCAGAGCCCCCAAACTCATGATTTTTGATGTCAGTAATC GGCCCTCAGGGGTTTCTAATCGCTTCTCCGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTG ATTATTACTGCAGCTCATACTCAAGTAGCACCACTCTCGATGTCTTCGGAACTGGGACCAAGGTCTCCGTCCTAG
005	p109w44		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAGCTGCAAGTCCAGCCAGAGTCTATTCTACA GCTCCGACAATAAAAATTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAAGTGCTCATTTACTGGGCATCTACGCGGGAATCCGG GGTCCCTGATCGATTCAGTGGCAGCGGGTCTGGGACTGATTTCACTCTCGCCATCAGCAGCCTGCAGGCTGAAGATGTGGCACTTTATTACTGT CAGCAATATTATAGTCTTCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p109w46		*IGLV*	GCAGCTCCAACATCGGAAGTAAGTATGTCTACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTGTAACAACAATCAGCGGCC CTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCGGTCCGAGGATGAGGCTGATTA TTACTGTGCAACATGGGATGACAGCCTGGGTGGTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w47		*IGLV*	GGCAATTTGCTTATTGGTACCAGCAGAAGCCAGGCCAGGCCCCTGTGTTGGTGATATATAAAGACACTGAGAGGCCCTCAGGGATCCCAGAGCG ATTCTCTGGCTCCAGCTCAGGGACTACAGTCACGTTGACCATCAGTGGAGTCCAGGCAGAAGACGAGGGTGACTATTACTGTCAATCAGGAGGC TTCAGTGCGGTGTTCGGCGGAGGGACCACGCTGACCGTCCTAG
005	p109w48		*IGLV*	TGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATAGTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGG CAGTCTCCACAGCTCCTGATCTATTTGGGTTCTGAGCGGGCCTCCGGGGTCCCTGACAGGGTCAGTGGCAGTGGATCAGGCACATATTTTACAC TGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGCTCTACAAACTCCTCGGACGTTCGGCCAAGGGACCAAGGT AGAAATCAAAC
005	p109w5		*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTAATT ATAATTATGTCTCCTGGTACCAACAACACCCCGGCAAGGCCCCCAAACTCCTGATTTATGATGTCACTAGGCGGCCCTCAGGAGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCTACACGGCCTCCCTGACCATCTCTGGCCTCCAGACTGAGGATGAGGCTGATTATTACTGCTGCTCATATGCAG GCACTAAGACTGATTATGTCTTCGGAAGTGGGACCAGCGTCATCGTCCTAG
005	p109w51		*IGLV*	CAGTCTGTCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGCTT ATGACTTTGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCACTAGTCGGCCCTCAGGGGACTCTGATCG CTTCTCTGGCTCCAATCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCACCTCATATACTAC CAGTAGTACTTGGGTGTTCGGCGGAGGGACCAAGTGACCGTCCTGAG
005	p109w55		*IGLV*	TCCTATGAATTGACTCAGCCACCCTCAGTGTCCGTGTCCCCAGGACAGACAGCCAGCATCACCTGCTTTGGAGATAAATTGGCGAATAGATATGT TTATTGGTATCAACAGAAGCCAGGCCAGTCCCCTGTGTTGGTCATTTATGAAGATACTAAGCGTCCCTCAGAGATCCCTGAGCGATTCTCTGGCT CCAACTCTGGGAGCACAGGCACTCTGACCATCAGCGGGACCCAGACTATGGATGCGGCTGACTATTACTGTCAGGCGTGGGACGGCGACGTTG GTTATGCGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
005	p109w58		*IGLV*	TCCTATGTGCTGACACAGCCACCCTCAGTGTCGGTGGCCCCAGGAACGACGGCCAGGATTACCTGTGGGGGAAACAACATTGGAGGTGAGACT GTGCACTGGTATCAGCAGAAGTCAGGCCAGGCCCCTGTGGTGGTCATCTATGAGGATACCGACCGGCCCTCGGGGATCCCTGAACGCTTTTCT GGCTCCAATTCTGGGCACACGGCCACCCTGACCTTCAGCAGGGTCGAGGCCGGGGATGAGGCCGACTATTACTGTCACGTGTGGGATCCTAGT AGTGA

005	p109w6		IGLV	CCGTATGTGCTGACTCAGCCACCCTCAGTGTCAGTGGCCCCCGGACAGACGGCCAGGCTCTCCTGTGAAGGAAATAATATTGGAGTTAAGAGTG TCCATTGGTACCTGCAACGGCCAGGCCAGGCCCCTGTCTTGGTCATGTTTGATGATAGTGATCGGCCCTCAGGGATCCCTGAGCGACTCTCTGG CTCCAATTCTGGGAACATGGCCACCCTGACCATCAACGGGGTCGAAGTCGGGGATGAGGCCGACTATTATTGTCAAGTCTGGGACAGGACAAC CAATGGCCGGGTGTTTGGCGGAGGGACCAGGCTGACCGTCCTAA
005	p109w69		IGLV	GAAATAGTGATGACACAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCA ACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCTAACAGGGCCACTGGTATCGCAGCCAGGTTCAC TGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTATAAAGATAGGC CTCAGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
005	p109w7		IGLV	TCCTATGAGCTGACTCAGCCGCCCTCAGTGTCCGTGTCCCCAGGACAGACAGCCAATATTCCCTGTTCTGGAGATAAATTGGGGGGAAAAATATG CTTCTTGGTATCAACACAAGCCAGGCCAGTCCCCTGTGGTGGTCATCTATCAAGACTCCAAGCGGCCCTCAGGGATCTCTGAGCGATTCTCTGG CTCCAACTCTGGGAACACAGCCACTCTGACCATCAGCGGGACCCAGACTGTGGATGAGGCTGACTATTTCTGTCAGGCGTGGGAGAGCAACAC TGTCCTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w8		IGLV	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGACATTAGCAGTTA TTTAGCCTGGTATCAGCAAAAACCAGGTAAAGCCCCTAAACTCCTGATCTATGCTGCATCCTCTTTACAAAGTGGGGTCCCATCAAGGTTCAGCG GCACTGCATCTGGGACAGAGTTCACTCTCACAATCGCCAACCTGCAGCCTGAAGATTTTGCAATTTACTACTGTCAACACCTTAAAGCTTACCCAT TCACTTTCGGCCCTGGGACCAAGGTGGATCTCAGAC
005	p109w82		IGLV	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGGCTCAGAACCTATTCTG CAAGCTGGTTCCAGCAGAGGCCAGGACAGGCCCCTCTACTTGTCATCTATAATAAAGACTCCCGGCCCTCAGGGACCCCCGACCGATTCTTTGG CTCCAGCTCAGGAAACACAGCTTCCTTGACCATCACTGGGCTCAGGCGGAAGATGAGGCTGACTATTTCTGTTACTCCCGCGAGAGAAGCGATA GTCAGGTGTTCTTCGGCGGAGGCACCAGGCTGACCGTCCTTA
005	p109w83		IGLV	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCGCCATCTCTTGTTCTGGAAGCAACTCCAACATCAGAGGT AATTCTGTTAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATACTAATAATCAGCGGCCCTCAGGGGGTCCCTGACCGATT CTCTGCCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGAC AGCCTGAATGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w89		IGLV	GAAAAAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTAGGCACC AACTTAGCCTGGTACCAGCAAAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGCCAGGTTCA GTGGCAGTGGGTCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCACTATAATAACAGG CCTCTCACCTCCGGCCAAGGGACACGACTGGAGATTAAAC
005	p109w92		IGLV	CTCTACTAGTTACTACCCCAGCTGGTACCAGCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAGCACAAACACTCGCTCTTCTGGGGTC CCTGATCGCTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAATCTGATTATTACTGTGTGC TGTGGGATAGTGGCAATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p109w93		IGLV	GAAATACTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAGGAGTCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGAAGC GACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGCGCATCCACCAGGGCCACTGGTTTCCCAGCCAGGTTC AGTGCCAGTGGGTCTGGGACAGAGTTCACTCTCAGCATCAGCAGCCTGCAGTCTGAAGATTCTGCAGTTTATTACTGTCAGCAGTATTATGACTG GCCTCCGTACACCTTTGGCCAGGGGACCAAGGTGGAGATCAGAC
005	p109w94		IGLV	TATAACCTTGTCTCCTGGTACCAACACCACCCAGGCCAAGCCCCCAAAGTCATGATTTATGATGTCACTAAGCGGCCCTCAGGGGTCCCTGAGC GCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGAATATTACTGCTGCTCATATGC AGGCCTGTATAGTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p110w100		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAAGCAGCACTGACATTGGTGATT CTAACTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAACTCATAATTTATGAGGTCAGAAATCGGCCCTCAGGAATTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGATGACGAGGCTGATTATTACTGCAGCTCATATACAGC CACCACCTGATGTCTTCGGAACTGGGACCAAGGTTACCGTCCTAG
005	p110w101	38	IGLV	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTTTTTATGGA GCTTCAACAATAAGAACTTCTTAGCTTGGTACCAGCAAAAACCAGGACAGCCTCCTAAACTGCTCATTTACTGGGCATCTACCCGGGAGTCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGAGACAGACTTCACTCTCACCATCAGCAGCCTGCAGGCTGAGGATGTGGCAGTTTATTACTGTC TGCAGTCTTATAGTACTCCTCACACTTTTGGCCAGGGGACCAAGGTGGAGATCGAAC
005	p110w104		IGLV	CAGTCTGTGCTGACTCAGCCACCTTCTGCATCAGCCTCCCCGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGACTATAGTCATTATA ACGTGGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCCGGTTTGTGATGCGAGTGGGCACTGGTGGGATTGTGGGACCCAAGGGGGATGAC ATCCCTGATCGCTTCTCAGTCTTGGGCTCAGGCCCGAATCGGTACCTGACCATCAAGAACGTCCAGGAAGAGGATGAGAGTGACTACTACTGTG GGGCAGACCATGGCACAGGGAGCAAGTACTTTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC

005	p110w106	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCCTCTCCAACATCGGGAC AGGTTTTGATATACACTGGTACCAACAGATTCCAGGGACAGCCCCCAAACTGCTCATCTTTCGTGACACCAATCGGCCCTCAGGGGTGCCTGAC CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTAC
005	p110w107	*IGLV*	AATTTTATGCTGACTCAGCCGCACTCTGTGTCGGAGTCTCCGGGGAAGACGGTAACCATCTCCTGCACCCGCAGCAGTGGCAGCATTGCCAGCA ACTATGTGCAGTGGTATCAGCAGCGCCCCGGGCAGTGCCCCCACCACTGTGATCTATGAGGATGAGAAAAGACCCTCTGAGGTCCCTGATCGGTT CTCTGGCTCCATCGACAGGTCCTCCAACTCTGCCGCCCTCACCATCTCTGGACTGAAGACTGAGGACGAGGCTGACTACCACTGTCAGTCTTAT GATAGTAGCAATTTTTTGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p110w108	*IGLV*	AAATATGAACTACTTAGGCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCCTCGGTGCACTAAGCAGGGCCACTGGCATCCCA GACAGGTTCACTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTATTGTCAGCAATA CGGCACCTCTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
005	p110w112	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCGGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGGTCCAACATTGGAAGT TCTACTGTAAACTGGTACCAACAGCTCCCAGGAACGGCCCCCAAACTCGTCATCTCTACTAATGATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGCGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGA CAGCCTGAATGGTCCGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w113	*IGLV*	CAGTCTGTGCTGACGCAGGCGCCCTCAGTGTCTGGGGCCCCAGGACAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGGC AGGTTATGATGTACACTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAACTCCTCATTCATGGTAATACCAATCGGCCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTCATTATTACTGTCAGTCCTATG ACAGTAGCCTGAGTGTCGCGGTTTTCGGCGCAGGGACCAAGGTGACCGTCCTAG
005	p110w118	*IGLV*	TCCTTTGAGCTGACTCAGCCACCCTCAGTGTCCGTGTCCCCAGGACAGACAGCCACCATCTCCTGCTCTGGAGATAGATGGGGGGGACAAATATG CTTCCTGGTTTCAACAGAAGCCAGGCCAGTCCCCTGTGCTACTCATCTATGAAAATAACAAGCGCCCCTCAGGGATCCCTGAGCGATTCTCTGG CTCCAACTCTGGGACCACAGCCACTCTGACCATTAGTGGGACCCAGACTATGGATGAGGCTGACTATTATTGTCAATCGTGGGACAGCGCCACT GTGGTGTTCGGCGGGGGGACCAAGCTGACCGTCCTAG
005	p110w119	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTTACCATCACTTGCCGGGCGAGTCAGGGCATTAGAACTT ATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAGACTCCTGATCTATGATGCATCGACTTTGGAATCAGGGGTCCCATCTCGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGACTGCAGCCTGAAGATGTTGCAACTTATTACTGTCAAAAGTATAACACTGTCCC TGGGACGTTCGGCCAAGGAACCAAGGTGGAAATCAAAC
005	p110w122	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAACGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCTCTCCAACATCGGAAGTA ATAAAGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAATTCCTCATCTATAATAATAATCAGCGACCCTCAGGGGTCCCTGACCGATTC TCTGGCTCCAAGTCTGACACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAACATGGGATGACA GCCTGAATGGAGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w123	*IGLV*	CAGGCAGGGCTGACTCAGCCACCCTCGATGTCCAAGGGCTTGAGACAGACCGCCACACTCACCTGCACTGGGAACAGCAACAATGTTGGCAAC CAAGGAGCAGTGTGGCTGCAGCAGCACCAGGGCCACCCTCCCAAATGCCTTTCCTCCAGGAATAACGACCGGCCCTCAGGGATCGCAGAGAGA TTCTCTGCATCCAGGTCAGGAAACACAGCCTCCCTGATGATTACTGGACTCCAGCCTGAGGACGAGGCTGACTATTACTGCGCAGCATGGGACA GCAGCCTCAGTGTCTGGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w130	*IGLV*	TGAAAACAACTATGTGTCCTGGTACCAGCAGGTCCCGGGAACGGCCCCCAACCTCGTCATTTATGACAATAATAAGAGACCCTCAAGTATTCCTG ACCGATTCTCTGGCTCCCACTCTGGCACGTCAGCCACCCTTGACATCGCCGGTCTCCAGCCTGGGGACGAGGCCGATTACTACTGCTTCACATG GGATTCAACTCGCGATGTCGGCGTCTTCGGCGGAGGGACCAAACTGACCGTCCTGA
005	p110w133	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATTTTGGTGGTT ATAAGTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATCATTTATAGTGTCGATAGGCGGCCCTCAGGGGTCCCTGCTCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGTCTGACGATGAGGCTGATTATTACTGCCTCTCATATGCAG GCAGGTACACTTGGGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p110w135	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGT AATAGTGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCCATAGTAATAATCAGCGGCCCTCCGGGGTCCCTGACCGAT TTTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGACTGAGGATGAGGCTGAGTATTACTGTGCAACTTGGGATAA CAGCCTGAGTGGTAATGTGTTCGGCAGCGGCACCTGGGTGACCGTCCTCG
005	p110w143	*IGLV*	CAGTCTGCCCTGTCTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGCTCACCATCTCCTGCACTGGATCCAGCATTGGACTTTATAACCT TGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTG GCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATA
005	p110w145	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAAGTGCAAGTCCAGCCAGAATGTTTTCTCCA AGTCCAAGAATAAGAATTATGTAGGTTGGTACCAGCAGAGACCAGGACAGCCTCCCAAACTTCTTCTTTATTGGGCGTCTATTCGCGAATTTGGA GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCCGAAGATGTGGCAGTCTATTTCTGTC AGCAGTATTATAGTCGCCCTCCGACGTTCGGCCAAGGGACCAAGGTGGAAGTCAAAC

005	p110w146		*IGLV*	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGGCAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAAACTATTATG CAAGTTGGTACCAGCAGAAGCCAGGACAGGCCCCTGTTCTTCTCTTCTATGGTAAAAACAACCGGCCCTCAGGGATCCCAGACCGGTTCTCTGG CTCCAGCTCAGGAAACACAGCTTCCTTGACCATCACTGGGACTCAGGCGGAAGACGAGGCTGACTATTACTGTAATTCTCGGGACAACAATGAT AACCATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w15		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTCTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCAAC CGCTACTTAGCCTGGTACCAGCAGAAACCTGCCCAGGCTCCCAGGCTCCTCATCTTTGAAGCGTCCAACAGGGCCACTGGCATCCCAGACAGG TTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAACAATATGGTAG GTCACCTCAGACGTTCGGCCAAGGGACCAAGGTGGAGATCAAAC
005	p110w153		*IGLV*	TCTTCTGCGCTGACTCAGGACCCTGTTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAGGGAGACAGTCTCAGAACCTATTATG CAAGTTGGTATCAGCAGAAGCCTGGACAGGGCCCTGTAGTTGTCCTCTATGGTAAAGACAAGCGGCCCTCAGGGATCCCAGACCGATTCTCTGG CTCCAGTTCAGGGGACACAGCCTCCTTGACCATCACTGGGGCTCAGGCGGAAGATGAGGCTGTCTATTACTGTAATTCTCGTGACAGTACTGGT GATTTCACTTATGTCTTCGGAGGTGGGACCAAGGTCACCGTCCTAG
005	p110w162		*IGLV*	TCCTCTGACCTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAGACGGCCAGGATCACCTGTTCTGGAGATGCATTGGCAAAGAAATTTA TTAATTGGTATCAGCAGAAGCCAGGCCAGGCCCCTGTGGCGGTGATATATAAAGACACTGAGAGGCCCTCAGGGATCCCTGAGCGATTCTCTGG CTCCGGCTCTGGGACAACAGTCACCTTGACCATCAGTGGCGTCCAGGCAGAGGACGAGGCTGACTATTATTGTCAATCAACAGACAGGAGTCCT AATTATGTGATCTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p110w164	39	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTCTCTCTGGGCGAGAGGGTCACCGTCAACTGCAGGTCCAGTCAGAGTATTTCATACA GCTCCAACAATAAGAACTTCTTAACTTGGTTCCAGCAGAAACCAGGACAACCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGATCCGGGG TCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCATTTATTACTGTCAG CAATATTATAGTCTTCCGCTCACTTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p110w167		*IGLV*	TGGTCACCATCACTTGCCGGACAAGTCAGAACATTGGCAACTATTTAAATTGGTATCAACAGAAATCAGGGGAAGCCCCTAAACTCCTGATTTATG GTGCATCCAGATTGCAAAGTGGGGTCCCATCAAGATTCAGTGGCAGTGGATCTGGGACATATTTCACTCTCACCGTCAGTGGTCTTCAACCTGAA GATTTTGCAACTTACTTCTGTCAACAGAGTTACGATCCGCCTCGAACGTTCGGCCAGGGGACCACGGTGGAAGCCAGAC
005	p110w169		*IGLV*	GCAGCTCCAACATCGGGGCAGGTTATGATGTACACTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTAACAACAATCG GCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGA TTATTACTGCCAGTCCTATGACAGCAGCCTGAGTGGTTGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w17		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGCACCAGCAGTGATGTTGGGAGTT CTAACGTTGTCTCCTGGTATCAACAACACCCAGGCAAAGTCCCCAAACTCTTGATTTTAGAGGACACCAAGCGGCCCTCAGGGGTTTCTGATCGG TTCTCTGGCTCCAGGTCTGTCAACACGGCCTCCCTGACAATCTCAGGGGTCCAGGCTGAGGACGAGGCTGATTATTACTGTTGCTCATACGCAG GCAGTACTAGTCGCGTTCTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p110w172		*IGLV*	GAGTCAGGGCATTTACAGTTATTTAGCCTGGTATCAACAGAAACCAGGAAAAGTTCCTAACCTCCTGATCTATGATGCATCCACTTTGCAATCAGG GGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAGGATGTTGCAACTTATTACTGTC AAAAATATAACAGTGCCCCCCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p110w175		*IGLV*	CAGGCAGGGCTGACTCAGCCACCCTCGGTGTCCAAGGGGGTTGAGACAGACCGCCACACTCACCTGCACTGGGAACAGCAACAATGTTGGCAGG CAAGGAGCAGCTTGGTTGCAGCAGCACCAGGGCCACCCTCCCAAACTCCTGTCCTACAGGAGTAACAACCGGCCCTCAGGGATCTCAGAGAGA TTCTCTGCATCCAGGTCAGGAAACACAGCCTCCCTGACCATTATTGGACTCCAACCTGAGGACGAGGCTGACTACTACTGCTCAGCATGGGACA GCAGCCTCAGTGCTTGGGTGTTCGGCGAAGGGACCAAACTGACCGTCCTAG
005	p110w177		*IGLV*	CAATCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTACTGCTT ATAACTATGTCTCCTGGTACCAACAGCACCCAGGCAAGGCCCCCAAACTCATGATTTATGATGTCAATACCCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGCCTTCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGATGAGGCTGATTATTACTGCTGCTCATATGCAG GCAGGTACACTTGGGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p110w178		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAATCGGCCCTCAGGCGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCAGATAGAG GGAGGGGCAATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w180		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGTACCCCCGGACAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGTA AGTATGTCTACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAAGAACAATCAGCGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTCAACATGGGATGAC AGCCTGAGTGGTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

005	p110w183	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGCGGCAGCTCCAACGTCGGAAGT AATACTCTAAACTGGTATCAGCAGCTTCCAGGAACGGCCCCCAAACTCCTCATCTATAGTGATAGTCAGCGGCCCTCAGGGGTCCCTCACCGATT CTCTGGCTCCGAGTCTGGCACCTCAGGCTCCCTGGCCATCAGTGGGCTGCAGTCTGAGGATGAGGCTGTCTATTACTGTGCAGCATGGGATGA CAGCCTGACTGTTTGGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p110w20	*IGLV*	GCAGCCTCCCTCCGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTCGTTATAACCGTGTCTGC TGGTACCAGCAGCCCCCAGGCACAGCCCCCAAACTCCTCATTTATGAGGTCAATAATCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGGTCTA AGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCAGATACAGGCAGCTACAGTTT CGTGTTCGGCGGAGGGACCAAGCTAACCGTCCTAG
005	p110w21	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ACAACTATGTCTCCTGGTACCAACAGCACCCCGGCAAAGTCCCCAAACTCATGATTTATGAAGTCACTAGTCGGCCCTCAGGTGTTTCTTATCGC TTCTCTGGCTCCAAGTCTGGCGACACGGCCTCCCTGACCATCTCTGGACTCCAGGCTGAGGACGAGGCTGAATATTACTGCAGCTCATATACAA GCAGCGGCACTCTGGTTTTCGGCGGGGGACCAAGGCTGACCGTGCCTA
005	p110w24	*IGLV*	CAGTCTGTACTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGCGTCACCATCTCCTGCACTGGGAGCAACTCCAACATCGGCGCA GGTTATGACGTCCACTGGTACCAGCAATTTCCAGGAACACCCCCCCAACTCCTCATGTTCAATAACGACATTCGGCCCTCAGGGGTCCCTGACC GATTCTCTGGCTCCAAGACTGGCACGTCAGCCTCCCTGGTCATCTCTGGGCTCCGGGCTGAGGATGAGGCTGACTATTACTGCCAGACCTATGA GACCACCCTGGGTGGTTCGAGGGTGTTCGGCGGCGGGACCAGATTGACCGTCCTAC
005	p110w26	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGTGAAT ATAACTATGTCTCCTGGTACCAACAGCGCCCAGGCAAAGCCCCCAAACTCATCATTTATGCTGTCACTAACCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGGTTATTACTGCTGCTCATATGCA GGCAGCTTTCAGTTCCCGTATGTCTTCGGAAGGGGGACCAAGGTCACCGTCCTAG
005	p110w3	*IGLV*	CAGTCTGTCCCGGCTCAGCCACCCTCAACGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCCTCTCCAACATCGGCAGT AATGTAAACTGGTACCAGCACCTCCCAGGAACGGCCCCCAAAACTCCTCATGTACAATAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCT CTGGCTCCAAGTCTGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCT
005	p110w30	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGCTT ATAACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAGACTCATGATTTAT
005	p110w35	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGTACTGGAACCAATAATGATGTTGGTGTTTA TGACTATGTCTCCTGGTACCAACATCACCCAGGCAAGGCTCCCAAACTCATCATTTATGATGTCAATAAGCGGCCCTCAGGTGTCCCTAGTCGGT TCTCTGGCTCCAAGTCTGGCAATACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATCACTGCTGCTCATTTGCTGG CAGGTACCCTGTGATATTTGGCGGAGGGACCAAGCTGACCGTCCTGG
005	p110w37	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACGGGAGGTGTCACCAGT AATCATGATACCTACTGGTTCCAGCAGAAGGCTGGCCAAGGCCCCAGGACACTGGTTTATGGCACAACCAAGAAACACTCCTGGACACCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGGCTGAGGATGAGGCTGAGTATTATTGTTTGCTCTCTTA TAGTGGTGATCGGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
005	p110w39	*IGLV*	GTGTTTTCTACAGCTCCGACAATAAAAATTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAACTGCTCATTTACTGGGCATCTACCC GGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACTGATTTCACTCTCGCCATCAGCAGCCTGCAGGCTGAAGATGTGGCAC TTTATTACTGTCAGCAATATTATAGTCTTCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p110w46	*IGLV*	AACACCCCGGCAGAGCCCCCAAACTCATCATTTCTCAAGTCACTAATCGGCCCTCAGGCGTCTCTAGTCGCTTCTCTGCCTCCAAGTCTGGCTAC ACGGCCTCCCTGACCATCTCTGGACTCCAGTCTGAGGACGAGGCTCGTTATTTCTGCTGCTCGCTTTCCCTTAGTCCTACTCTCGTGGTCTTCGG CGGAGGGACCCAGCTGACCGTCCTAG
005	p110w47	*IGLV*	GACTTCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACTATCAACTGCAAGTCCAGCCAGAGTCTTTTCTACA GCTCCGACAATAAGAATTACTTAGCCTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTCCTGGGCATCTACCCGGGAATCCGG GGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCAGCATCAGCAGCCTGCAGGCTGAAGATGTGGCTGTCTATTACTGT CAGCAGTATTATAGTAATTCGGTCACTTTCGGCGGAGGGACCAAGGTGGAGAGCAAAC
005	p110w5	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCCTCTCCTGCACTGGGAACAAGTCCAACATCGGGGC TGGTCATGATGTACACTGGTACCAGCACCTTCCAGGAACAGCCCCCAAACTCCTCATCTATAGTAACACCAATCGGCCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTTCTGCCAGTCCTATG ACAGCAGCCTGAGTGGTTATATCTTCGGAACTGGGACCAAAGTCACCGTCCTAG
005	p110w51	*IGLV*	CACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGACATTAGCAATTATTTAGCCTGGTTTCAGCAGAAACCGGG GAAAGCCCCTAAGTCCCTTATCTTTGCTGCATCCAGTTTGCACAGTGGGGTCCCGTCAAAGTTCAGCGGCAGTGGATCTGGGACATATTTCACTC TCACCATCAGCAGCCTGCAGCCTGAAGATTTTGGAACTTATTACTGCCAACAATATAGTAGTTATTCCTCGGACGTTCGGCCAAGGGACCAAGGT GGAAATCAAAC

005	p110w55	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAGACTTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCGTCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGC
005	p110w59	*IGLV*	CAGTCTGTGCTGAGTCAGCCACCCTCAGTGTCTGGGACCCCCGGCCAGAGGGTCACCATCTCTTGTTCCGGCAGCAGCTCCAACATCGCAACTAATTATGTATATTGGTACCAGCAGTTCCCAGGAACGGCCCCCAAAGTCCTCATCTATATGAACAGTCAGAGGCCCTCTGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCCGGCGCCTCAGCCTCCCTGGCCATCAGTGGCCTCCAGTCCGAGGATGAGGCTGACTATTACTGTGCAACATGGGATGACAGCCCGAATACTCCGGTCTTCGGCGGAGGGACCAAATTGACCGTCCTAC
005	p110w6	*IGLV*	AGAAAAGTAATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTAGGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCACTATAATAACTGGCCTCTCACCTCCGGCCAAGGGACACGACTGGAGATTAGAC
005	p110w62	*IGLV*	CCAGTCAGGGCATTAGCAGTTATTTGGCCTGGTATCAGCAAGAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGCATCCACTTTACAAAGTGGGGTCCCATCAAGGTTCAGCGGCACTGGATCTGGGACAGAGTTCACTCTCACAATCGCCAACCTGCAGCCTGAAGATTTTGCAATTTACTACTGTCAACACCTTAGAACTTACCCATTCACTTTCGGCCCTGGGACCAGGGTGGATCTCAAAC
005	p110w8	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACCTCGGGGCAGGCTATGATGTACATTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAAGTCCTCATCTATGCTAGCAACAATCGTCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCGCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGACACCAGTCTGAGTACTTGGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
005	p110w83	*IGLV*	TACATTGACAACTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTTTGCTGCTTCCAGTTTGCAAAGTGGGGTCCCAGCACGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTACCCCTCCGATCACCTTCGGCCAAGGGACACGACTGGACACTAAAC
005	p110w89	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGTAGTGACGTTGGTGGTTTTAACTTTGTCTCCTGGTACCAACAGTTTCCAGGCGGCGAAGCCCCCAAACTCATGATTTATGAGGTCAATAATCGGCCCTCAGGGGTTTCTACTCGCTTCTCTGGCTCCAAGTCTGGCAATACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAAGACGAGGGTTATTACTACTGCAGCTCATATACAACCATCGCCACCCGGGTGTTGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p110w92	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCCGGGTCTCCTGGACAGTCGATCAGCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGAGTTCTAACGTGGTCTCCTGGTATCAACAACACCCAGGCAAAGCCCCCAAACTCATACTTTTAGAGGACACTAAGCGGCCCTCAGGGGTTTCGAATCGCTTCTCTGGCTCCAGGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGGTCCAGGCTGAGGACGAGGCTAATTATTACTGCTGCTCATATGCAGGTAGTAGTAGTGTCGTTCTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p110w93	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGCTCTCAGTATCCCCTGGAGGGACAGTCACACTCACTTGTGGCTTGAGCTCTGGCTCAGTCTCTACTAGCTTCTACGCCAGCTGGTACCAGCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAACACAAACATTCGCTCTTCTGGGGTCCCTGATCGCTTCTCTGGCTCCGTCCTTGGGAACAAAGTTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGACTCTGATTATTACTGTGTGCTGTCTATGGGTGGTGGCATTTGGGTGTTCGGCGGAGGGACCAAACTGTCCGTCCTAG
005	p110w97	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCACTCCAACATCGGAAGTAATATGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGCCTGAGGATGAGGCTGATTATTACTGTGTGGCATGGGATGACAGCCTGAGTAGTCCGGTATTCGGCGGAGGGACCAAGCTGACCGTCCT
005	p111w100	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAACTATGTCTCCTGGTACCAACATCACCCAGGCAAAGCCCCCAAACTCATGATTCATGAGGTCAGTAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAAGCAGCAGCACTTGGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
005	p111w101	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGGTTATCATTTTGTCTCCTGGTATCAACAGCAGCCAGGCAAAGTCCCCAAAGTCTTGATTTATGATGTCACTTACCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGCCTGACGATGAGGCTGATTATTACTGTTGCTCTTATGCAGGCAGATACATTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTGG
005	p111w106	*IGLV*	CAGCTTGTACTGACTCAATCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGTAGTGGACACAGTGACTACGCCATCGCATGGCATCAGCAGCAGCCAGAGAAGGGCCCTCGATACTTGATGAAGATTAGCAGTGATGGCAGCCACAGCAAGGGGGACGGGATCCCCGATCGCTTCTCAGGGTCCAGCTCTGGG
005	p111w107	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTATCAACTACTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGTATCCACTTTGCAAAGTGGGGTCCCGTCAAGGTTCAGTGGCAGTGGATCTGGGACAGACTTCACTCTCACCATCAGCACTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCACCAGAGTTACAGTACACATAACTTCGGCCAAGGGACACGACTGGAGATGAAAC

005	p111w108		*IGLV*	GAGATAGTGCTGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTCTGGTGCATCCACCAGGGCCACTGGTATCCCAGCCAGGTTCAGTGGCAGTCAGTCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGACTCTGCAGTTTATTACTGTCAGCACTATAATAGCTGGCCGTACTCCTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
005	p111w109	41	*IGLV*	AACTTTATGCTGACTCAACCCCACTCTGTGTCGGAGTCTCCGGGGAAGACGGTAACCATCTCCTGCACCGGCAGCAGTGGCAGCATTGCCAGCAACTATGTGCAGTGGTACCGGCAGCGCCCGGGCAGTGCCCCCACCACTGTGATCTATGAAAATTACCAAAGACCCTCTGGGGTCCCTGCTCGATTCTCTGGCTCCATCGACAGGTCCTCCAACTCTGCCTCCCTCACCATCTCTGGACTGCAGACTGACGACGAGGCTGACTACTACTGTCAGTCTTATGACAACAACAATCTTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p111w113		*IGLV*	GATGTTGAGATGACTCAGTCTCCACTCTCCCTGCCCGTCAGTCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAGTGATGGCAACACCTTCTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGTGGCAGTGGGTCAGGCACTGATTTCACACTGAGAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGGTACACACTGGCCTCCGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
005	p111w114		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCTGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATCATTACATATCCTGGTACCAGCAGCTCCCCAGAACAGCCCCCAAACTCCTCATTTATGACACTGATAAGCGACCCTCAGGGATTCCTGCCCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGACTATTACTGCGGAACATGGGATGCCAACCTGACTGCTGGCCTTTGGGTATTCGGCGGGGGGACCAAGCTGACCGTCCTAG
005	p111w115		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCAGCGGCCCCAGGACAGAAGGTCACCATCTCATGCTCTGCAAACACCTCCGTCTTTGCATACGATTATGCATCCTGGTACCAGCACTTTTCAGGAGCACCCCCCAAGCTCGTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAACTCTGACACGTCGGCCACCCTGGCCATCACCGGACTCGAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAGCAGCCTGAGT
005	p111w118		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCAAGTCAGAGCATTAGCAGCTATTTAAATTGGTATCAGGCGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGGTGCTTCCAGTTTGGAAAGTGGGGCCCCATCAAGGTTCAGTGGACGTGAATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTTCAACCTGACGATTTTGCAACTTACTTCTGTCAACAGACTTACAGTCCCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
005	p111w119		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGGTCACCATCTCCTGCACGGGAATTCCCAGTGACATTCGATTTCCTGACTTTGTCTCCTGGTACCAACAACCCCCAGGCAACGTCCCCAAACTCATCATTTTTGAAGTCAATAAACGGCCCTCAGGGGTTTCCGATCGCTTCTCTGGCTCCAAGTCTGGCAATACGGCCTCCCTGACGATCTCTGGCCTCCTGCCTGAGGACGAGGCCGATTATTACTGCAGTTCATATACAAACTTCGTCACTCACTTCGGCGGAGGGACCAAGGTGACCGTCCTAA
005	p111w122		*IGLV*	AGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTAGCGGCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTGAACTCCTGATCTACGGTGCCGGCAATTTGCATACAGGGGTCCCATCAAGGTTCAGTGGGAGTGCATCTGGGACAGATTTTACTTTCACAATCAGCAGTCTGCAGCCTGAAGATATTGCAACATATTACTGTCAACAGTATGATAGTCTCCCTCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAGGC
005	p111w126		*IGLV*	GACATCCAGATGACCCAGTCTCCCTCCACCTTGTCTGCGTCTGTCGGAGACAGAGTCTCCATCTCTTGCCGGGCCAGTCAGAACATTAATTACTGGTTGGCCTGGTATAAACAAAAACCAGGAAAAGCCCCTCAACTGCTGATCTATAGGGCGTCTAATTTAGAAAGTGGTGTCCCGACAAGGTTCAGCGGCCGCGGATCTGGGACAGAGTTCACTCTCACCATCACTAACCTGCAGCCTGACGATTTTGCAACTTATTACTGCCAACAATATAGTAATTTTTGGACATTTGGCCAAGGGACCAGGGTGGACATCAAAC
005	p111w127		*IGLV*	GACATCGTGCTGACCCAGTCTCCGGAGTCCCTGGCAGTGTCTCTGGGCGAGCGGGCCACCATCACCTGCAGGTCCAGCCACAGTCTCTTATCCTCCTCAAGTTATAAGAACTTCTTGGGTTGGTACCAGCAGAAAGCAGGACAGCCTCCTAGACTCCTTCTTTACTGGGCATCTGCCCGGGAATCCGGGGTCCCTGACCGATTCACTGGCAGCGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTGCAACCTGAAGATGTGGCAGTTTATTTCTGTCAGCAATATTATAGTGCTCCTCCGACCTTCGGCCAAGGGACCAAGGTGGAGCTCAAGA
005	p111w129		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCCTCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTCAGCAGCTGGTTGGCCTGGTATCAGCAGAGACCAGGGAAAGCCCCTAAACTCCTGATCTATAAGGCGTCTAGTTTAGAATTTGGCGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAACCTGATGATTTTGGAATTTATTACTGCCAACATTATGATAGTTATTTCTTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
005	p111w13		*IGLV*	CGGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACCGGAACCAGTAGTGACGTTGGTGGTTATGACTATGTCTCCTGGTACCAACACCTCCCAGGCAAAGCCCCCAAACTCGTGATTTATGATGTCACTCATCGGCCCTCAGGG
005	p111w133		*IGLV*	GACATCCAGATGACACAGTCTCCATCGTCCCTGTCTGCATCTTTAGGAGACAGAGTCACCATCACTTGTCGGGCAAGTCAGAGTATTGATAAGTCTTTAAGTTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGGTGCATCTCTTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGACTTCACTCTCACCATCAGCACTCTGCAGCCTGAAGATTTTGCAACTTACTATTGT

005	p111w14	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGACCATCTCCAACATCGGGGCAGGTTTTGATGTACACTGGTACCAGCAGTTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTAACAAATATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGACAGCAGCCTGA
005	p111w144	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTTCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTACATCCATCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGCGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAGGATTTTGCAGTGTATTATTGTCAGCAGTATGGTGGCTCACCTCAAACCTTCGGCCAGGGGACCAAGGTGGAAATCAAAC
005	p111w145	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATTTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAACTATGTATCCTGGTACCGGCAATTCCCAGGAACAGCCCCCAACCTCCTCATTTATGACAATGATAAGCGACCCTCGGGGATTCCTGACCGATTCTCTGGCTCCAGGTCAGGCACGTCAGCCACCCTGGCCATAGCCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATACCAGCCTGAGTGCTGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTGG
005	p111w146	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGCTTATAACTATGTCTCCTGGTGCCAACAACACCCAGGCAAAGCCCCCAAACTCATCATTTATGAGGTCAGTAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTACTCATATACACGCAGCACCACTATCGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p111w15	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAACCGCTACTTAGCCTGGTACCAGCAGAAACCTGCCCAGGCTCCCAGGCTCGTCATCTTTGAAGCGTCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGC
005	p111w159	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGCATTAATCGTGTATACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATCACTGCTGC
005	p111w162	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTCTCTGGGGCCCCTGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGCCCCTTATGATGTACACTGGTACCAGCACCTTCCAGGAGCAGCCCCCAAACTCCTCATCTTTGATAACAAGTTTCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTATTGCCAGTCCTATGACAGCGCCCTGAGTGGTAGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p111w163	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCAGCATCACCTGCCGGGCCAGTCAGACTGTTAAGACTTGCTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGGTGTATCCACTTTG
005	p111w167	*IGLV*	GCCATCCAGCTGACCCAGTCCCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGACATCAGTATAGATTTAGCCTGGTATCTCCAGAGACCAGGGAAAGCGCCTCAACTCCTGATCTCTCATGGCTTTCGTTTGGAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGCCTGAGGATTTTGCAACTTATTACTGTCAACAGTTTAAAAGTTATCCCTTCCTCACTTTCGGCCCTGGGACCAGAGTGGATGTCAAAC
005	p111w168	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTTCAACATTGGGAATAATTATGTCTGCTGGTATCAGCAGCTCCCAGGGACAGCCCCCAAACTCCTCATTTATGACAATGATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGACATCACCGGACTCCAGACTGGGGACGAGGCCGATTACTACTGCGCAGCATGGGATGGCGGGCTGAGTTCGGTGGGTTTCGGCGGAGGGACCGAAGCTGACCGTCCTAG
005	p111w169	*IGLV*	GAAATTGTGTTGAAACAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTGAGAGTGTCTTCAAAAATCTTTAGCCTGGTATCAACAAAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTATGATTCTTCTCAGAGGGCCACTGGCATCCCAGTCAGATTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCAGCATCAGCAACCTAGAGCCTGAAGATTTTGCAATTTATTTCTGTCAAGGCCGTGGCGAGTGGCCTCCAGTGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
005	p111w17	*IGLV*	GACTTCTACATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACCTGCCGGGCGAGTCAGGCCATTGGTCATTATTTAGCCTGGTATCAGCACAAAGCAGGAAGCATTCCTAAACTCCTCATCTATGCTGTATCCACTTTGCAGTCAGGGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATAAGTAGCCTGCAGCCTGAAGATGTTGCGACTTATTACTGTCAAAAGTATTTCGGTGACCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAGATCGAAC
005	p111w171	*IGLV*	ACCTTTAAGAGCTACTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTGTATCCACTTTGCAAAGTGGGGTCCCGTCAAGGTTCAGTGGCAGTGGATCTGGGACAGACTTCACTCTCACCATCAGCACTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCACCAGAGTTACAGTACACATAACTTCGGCCAAGGGACACGACTGGAGATGAAAC
005	p111w172	*IGLV*	AGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCAGCTATTTAAATTGGTATCAGGTGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGGTGCTTCCACTTTGGAAAGTGGGGCCCCATCAAGGTTCAGTGGACGTGAATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTTCAACCTGACGATTTTGCAACTTACTTCTGTCAACAGACTTACAGTCCCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

| 005 | p111w174 | *IGLV* | GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCGTCTGTTGGAGACAGAGTCACCATCACTTGTCGGGCAAGTCAGAGTATTAGCAGCTATTTAAATTGGTATCAGGAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGGTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCCGTGAATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTTCAACCTGAAGATTTTGCAACTTACTTCTGTCAACAGACTTACAGTCCCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC |

005	p111w174	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCGTCTGTTGGAGACAGAGTCACCATCACTTGTCGGGCAAGTCAGAGTATTAGCAGCTATTTAAATTGGTATCAGGAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGGTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCCGTGAATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTTCAACCTGAAGATTTTGCAACTTACTTCTGTCAACAGACTTACAGTCCCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
005	p111w175	*IGLV*	CCACTACTCACTACCCCAGCTGGTACCAGCAGACCCCAGGTCAGCCTCCACGCACACTCCTCTACAGCACAAATACTCGCTCTTCTGGGGTCCCTGATCGCTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAACGTGATTATTACTGTATGTTGTATCTGGGTACTGGCCAGTTTGTCTTCGGTTCTGGGACCAAGGTCACCGTCCTAG
005	p111w176	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACACAGTCACCATCACTTGCCGGGCAAGTCAGAGCATGAGCACGTATTTAAATTGGTATCAGCAGAAACCCGGGAAGGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGATCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACGGATTTCACTCTCACCATCAGCAGTCTACAGCCTGAAGATTTTGCAACTTATTATTGTCAACAGAGTTCCACTACCCTCATGTACACTTTTGGCCAGGGGACCAAGTTGGAGATGAAAC
005	p111w20	*IGLV*	ACAGTCACCATCTCCTGCACTGGGAGCCCTTCCAACATCGGGGCAGGCTATGGTGTACATTGGTACCAGCAGCTTCCAGGAACTGCCCCCAAACTCGTCATCTTTGATAACAACAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGACACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGCCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGACAGCAGTCTGAGTGCAGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCGTGG
005	p111w21	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCCGTGTCTGCGGCCCCAGGACAGAGGGTCACCATCTCCTGCTCTGCAACCACCTTCAGCATTGAAAAAAGTTATGTGTCATGGTACCAGCAGGTCCCGGGAACGGCCCCCAAACTCGTCATTTATGACAATAACAAGCGACCCTCATCTATCGCTGACCGATTCTCTGGCTACCAGTCTGGCACGTCAGCCACCCTGGTCATCGCCGGTCTCCAGCCTGGGGACGAGGCCGACTACTACTGCCATACATGGGATGCAAGTCGCGATGTCGGCGTCTTCGGCGGCGGGACCAAACTGACCGTCCTGA
005	p111w24	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATCATTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATGATGAGCGACCTGCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAGCAGCCTGACTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p111w25	*IGLV*	AACTTTATGCTGACTCAGCCCCACTCTGTGTCGGAGTCTCCGGGGAAGACGGTGACCATCTCTTGCACCCGCACCAATGGCAGCATTGGCAGCAACTTTATACAGTGGTACCAGCAGCGCCCGGGACAGTGCCCCCAGCATTGTGATCTATGAGGATAATGAAGACCCTCTGGGGTTCCTGATCGGTTCTCTGGCTCCATCGACAGATCCTCCAACTCTGCCTCCCTCACCATCTCCGGCCTTAAGACTGAGGACGCGGCTGACTACTCTTGTCAGTCTTATGATGACGAAAATTATGTGATTTTCGGCGGAGGGACCAGGCTGACCGTCCTAG
005	p111w26	*IGLV*	GCCATCCAGTTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAAGAGACAGAGTCAGCATCACTTGCCTGGCAAGTCAGGACATTAACAGTGCTTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCTCCTAAGGTCCTGATCTATGATACAACCGGTTTGGAGAGTGGGGTCCCATCTAGGTTCAGCGGCAGTGGAACTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGTATCATTCTTACCCGTTCACTTTGGCCAGGGACCAAGCTGGAGATCAAAC
005	p111w3	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGGCAGTCACCGTCTCCTGCACTGGAACCAGCAGTGACGTTGGTAGTTATAACCGTGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCAGCTCATATGGAGGCAACAACAATATCCTTTATGTGTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p111w35	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGTGAATACAACTCTGTCTCCTGGTACCTACAGCACCCAGGCAAAGCCCCCAAACTCATCCTTTATGATGTCAATAAGTGGCCCTCAGGGGTCCCTGGTCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGATGAGGCTCATTATTACTGCTGCTCATATGCTGGCGCCTACACCTTGATTTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
005	p111w37	*IGLV*	TCTTCTGAGCTGACTCAGGACCCTACTGTGTCTGTGGCCTTGGGACAGACAGTCACGATCACATGCCAAGGAGACAGGCTCAGAAGCTTTTATGCAAGTTGGTATCAGCAGAAGCCAGGACAGGCCCCTATACTTTTCATCTATAATAAAGACAACCGGCCCTCAGGGATCCCAGACCGATTCTCTGGCTCCAGTTCAGGAAACACAGCTTCCTTGACCATCATTGGGGCTCAGGCGGATGATGAGGCTGACTATTACTGTTCCTCTCGAAACAGCATTGGATAACCGTGTGGGTTTTCGGCGGAGGGACCAAGCTAACCGTCCTTG
005	p111w39	*IGLV*	GACATCCAGCTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCGTCACTTGCCGGGCAAGTCAGGATATTAGTATCAATTTAAATTGGTATCGCCAGAGACCAGGGCGAGCCCCTGAACTCGTGGTCTACTTTGCATCCAATTTGCAAAGTGGGGCCCCATCGAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACTATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTTTCCCTGCCACTTTTGGCCAGGGGACCAAGCTGGGGATCAAGC
005	p111w43	*IGLV*	TCTCCAGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCGATGACGTTGGTGGTTTTAACTTTGTCTCCTGGTACCAACAGTATCCAGGCAAAGCCCCCAAACTCATAATTTCTGAGGTCACTAATCGGCCCTCAGGGATTTCTCGTCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGACGACGAGGCTGATTATTACTGCTGTTCATATACAACCAGTAATACTTGGGTGTTCGGCGGCGGGACCAAGGTGACCGTCCTCA

| 005 | p111w44 | | IGLV | GATATTGTTATGACTCAGTCTCCACTCTCCCTGTCCGTCACCCCTGGAGAGTCGGCCTCCATTTCCTGCAACTCTAGTCGGAGCCTCCTGCATAC
TAATGGATTCAACTATTTGGATTGGTACCTGCAAAGGCCAGGGCAGTCTCCACAGCTCCTGGTCTATTTGGGTTCTATTCGGGCCTCCGGGGTCC
CTGACAGATTCAGTGGCAGTGGATCAGGCACAGATTTTACTCTGAAAATCAGCAGGGTGGCGGCTGAGGATGTTGGAGTTTATTACTGCATGCA
AGTTCTACAAACCACATTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC |
| 005 | p111w46 | | IGLV | TCACCTGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTACACAGGGATGGAAACACCTACTTGAGTTGGCTTC
AGCAGAGGCCAGGCCAGCCTCCAAGACTCCTAATTTATAAGCTTTCTGAGCGGTTGTCTGGGGTCCCAGACAGATTCAGTGGCAGTGGGGCAG
GGACAGATTTCACACTGAAAGTCAGCAGGGTGGAAGCTGAGGATGTCGGGGTTTATTACTGCATGCAAGCTACACAATTTCCTCACACTTTTGGC
CAGGGGACCAAGCTGGAGATCAAAC |
| 005 | p111w47 | | IGLV | GCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGGATTGGCGGATACTTAAATTGGTATCAGCAGAAACCAGGCAAAGCCC
CTAAGTTGTTGATCTATGATGCATCTCGTTTGGAAGCTGGGGTCCCACTAAGGTTCAGTGGCGGTGGATCTGAGACAGAATTCACTCTCACCATC
AGCAGCCTGCAACCTGAAGATTTTGCAACTTATTACTGTCAAGAGAGTCAAAGTGACACGTACACTTTTGGCCAGGGGACAAGGCTGGAGATCAA
AG |
| 005 | p111w48 | | IGLV | TCTTCTGAGTTGACTCAGGACCCTGTTGTGTCTGTGGCCTTGGGACAGATAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAACGTATTATG
CAAGCTGGTACCAGCAGAAGCCAGGACAGGCCCCTGTCCTTGTCATCTTTGGTAATAATAATCGGCCCTCTGGGATCTCAGACCGATTCTCTGG
CTCCAACTCAGGAGACTCATCTTCCTTGACCATCACTGGGGCTCAGGCGGAAGATGAGGCTGATTATTACTGCAACTCCCGGGACAACAGTGGT
AAGCTTTATATCTTCGGAAATGGGACCAAACTCATCGTCCTAG |
| 005 | p111w5 | 40 | IGLV | CAGTCTGTGCTGACGCAGCCGCCCTCAGTCTCTGGGGCCCCTGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGC
CCCTTATGATGTACACTGGTACCAGCACCTTCCAGGAGCAGCCCCCAAACTCCTCATCTTTGATAACAAGTTTCGGCCCTCAGGGGTCCCTGACC
GATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGA
CAGCGCCCTGAGTGGTAGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA |
| 005 | p111w55 | | IGLV | CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT
ATAACTTTGTCTCCTGGTACCAACAGCACCCAGGCAAAGTCCCCAAACTCATGATTTATCAGGTCACTCAGCGGCCCTCAGGGGTCCCTGATCG
CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCTCCTCATCTGCA
GGCCCCGACAATCATATTGTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG |
| 005 | p111w57 | | IGLV | CCCTCCTCCCTGTCTGTTTCTGTGGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGTTATCTTTTAAATTGGTATCAGCAGAG
ACCAGGCACTGCCCCTAAGCTCCTGATCTATGCTGCTTCCCATTTGCAGAGTGGCGTCCCATCCAGATTCAGTGCCGATAAATCTGGGACAGATT
ACACTCTCACCATCACCAGTCTGCAACCTGAAGATGTTGCAACTTACTACTGTCAACAGAGTTACAGATCTTCCACTTTTGGCCAGGGGACCAGA
TTGGAGATCAAAC |
| 005 | p111w6 | | IGLV | GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTATCAACTA
CTTAAATTGGTATCAGCGGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTACGGTGCATCCAATTTGGAAACAGGGGTCTCATCAACGTTCAGTG
GAAGTGGATCTGGGACAGATTTTACTTTCACCATCAGCAGCCTGCAGCCTGAAGATATTGGAACATATTTCTGTCAACAATATGATACTCTCCCTC
CGACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC |
| 005 | p111w62 | | IGLV | CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGTGAAT
ATAACTATGTCTCCTGGTACCAACAGCGCCCAGGCAAAGCCCCCAAACTCATCATTTATGCTGTCACTAACCGGCCCTCAGGGGTCCCTGATCG
CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGGTTATTACTGCTGCTCATATGGG
GGCACTTTCAGTTCCCCGTATGTCTTCGGAAGTGGGACCACGGTCAGCGTGCTAG |
| 005 | p111w7 | | IGLV | CGGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTAGTT
ATAACTATGTCTCCTGGTATCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAATCGGCCCTCAGGGGTCTCTAATCGC
TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGTTCATATACAG
CCAGCACCTCCTATGTCTTCGGACCAGGGACCAGGGTCACCGTCCTGG |
| 005 | p111w8 | | IGLV | GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTCTTGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATCAGTGATTA
CTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTTTAAGGCGTCTAGTTTAGAAAGTGGGGTCCCATCAAGGTTCAGC
GGCACTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATCTCGCAACTTATTACTGCCAACAGTATAATGGTTATTC
TCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC |
| 005 | p111w81 | | IGLV | CAGTCTGTCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACAGGAACCAGCAATGATGTTGGTGGTT
ATAACTCTGTTTCCTGGTATCAACAGAATCCAGGCCAAGCCCCCAAACTCATTATTTATGATGTCGATAAGCGGCCCTCAGGGGTCCCTGATCGC
TTCTCTGGCTCCAGGTCTGGCAACACGGCCTCCCTGACCATCTCT |
| 005 | p111w82 | | IGLV | GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGCCAGAGTGTTGCCAGTT
ACTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTAT |

005	p111w83	*IGLV*	GAGATAATGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTAACCTACA AAGTAGCCTGGTATCAGCAGAAAGCGGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCGCCAGGGCCCCTGGTATCTCAGCCAGGTTCA GTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCCGAAGATTTTGCAGTTTATTACTGTCAACAGTATGAATACTGG CTCTACACTTTTGGCCAGGGGACCAACCTGGAGATCAAAC
005	p111w89	*IGLV*	CAGACTGTGGTGACTCAGGAGTCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTTTCACCTGTGCTTCCAGCACTGGAACAGTCACCAGTG CTAACTATCCAAACTGGTTCCAGCAGAGACCTGGACAAGCACCCAGGGCACTGATTTATAAAACAAGCAACAAACACTCCTGGACCCCAGCCCG GTTCTCAGGCTCCCTCCTTGGGGCAAAGCTGCCCTGACACTGTCAGGTGTGCAGCCTGAGGACGAGGCTGAATATTACTGCCTGATCTACAATG CTGGTACCCTTGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p111w92	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCCGGGAGCAGCTCCAACATCGGAAGT AATACTGTAAACTGGTACCAGCGGGTCCCAGGAACGGCCCCCAAACTCCTCATCTATACTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGA CGGCCTGAATGGTCCGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCGAG
005	p111w93	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGTCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCCAACATCGGAAGT AATTATGTATACTGGTACCAGCAGATCCCAGGAACGGCCCCCAAAGTCGTCATTTTTACTACTAATCAGCGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGA CAGGCTGAAAGAAGTGCTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p111w97	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTCTATA GTAATGGATACAACTATTTGGATTGGTTCCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATATGGGTTTTAATCGGGCCTCCGGGGTC CCTGAGAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTACTACTGCATGC AAGCTCTACAAAATCCTCGTACGTTCGGCCAAGGGACCAAGGTGGAAATCAGAC
005	p112w100	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGCC TATAGTTATGTCTCCTGGTATCAACAACACCCAGGCAAAGCCCCCAGACTCCTGATTTATGGGGTCAATAGGCGGCCCTCAGGGGTCCCTGATC GCTTCTCTGGCTCCAGTCTGGCAACACGGCCTACCTGACCGTCTCTGGGCTCCAGCCAGAGGATGGGGCTGATTATTACTGCAGCTCATATAC AGGCACCGGGTACTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p112w101	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGATT CTAACTTGGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAAGTCATGATTTATGAGGTCAGTCAGCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTACTACTGCAGCTCATATGCA GGCAGCGACATTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
005	p112w104	*IGLV*	TCCTTTGAACTGACACAACCACCCTCGTTGTCAGTGTCCCCAGGACAGACGGCCCGGATCACGTGTTCTGGAGACACACTGCCAAAACAGTATG CTTATTGGTATCAACAGAAGACAGGCCAGGCCCCTGTTTTGGTGATATATAAAGACACTGAGAGGCCCTCAGGGATCCCTGAGCGATTTTCTGGC TCCAGCTCAGGGCCGACAGTCACGTTGACCATAAGTGGAGTCCGGGCAGAAGACGAGGCTGACTATTACTGTCAATCAGCAGACAGCGCTGGC ACTTATTGGATGTTCGGCGGAGGGACCACCCTGACCGTCCTGG
005	p112w109	*IGLV*	CAGCTTGTGCTGACTCAATCGGCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAACCTCACCTGCACTCTGAGCAGTAGTCACAGCTACTACG CCATCGCATGGCATCAGCAGCAGCCAGAGAAGGGCCCTCGGTACTTGATGAAGGTTAACAGTGATGGTAGTCACACCAAGGGGGACGGGATCC CTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCGCCATCTCCAGTCTTCAGTCTGAGGATGAGGCTGACTATTACTGTCAGAC CTGGGGCCCTGGCAGTAATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p112w111	*IGLV*	CAGGCAGGGCTGACTCAGCCACCCTCGGTGTCCAAGGACTTAAGACAGACCGCCACACTCACCTGCACTGGGGACAACAACAATGTCGGCGAC CAAGGAGCAGCTTGGCTGCAGCAGCACCAGGGCCACCCTCCCAAACTCCTGTCCTACAGGAATAACAACCGGCCCTCAGGGATCTCAGAGAGA TTGTCTACATCCAGGTCAGGCAACACAGCCTCCCTGACCATTGCTGAGCTCCAGCCTGAGGACGAGGCTGACTATTACTGCGCAGCTTGGGACA GGAGACTCGATGCTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w112	*IGLV*	TATTAGTACCTATTTACACTGGTATCAACAGAAGCCAGGGAAAGCCCCTAGGCTCCTCATTTCTGATGCATCCAGCCTGCAGAGTGGGGTCCCAT CAACGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTACCATCAGCAGTCTGCAACCTGAAGACTTTGCAAGTTACTACTGTCAACAGACTT ACAGTACCCCGATGTACAGTTTTGGCCAGGGGACCAGCCTGGAGATCAAAC
005	p112w114	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCGTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAATATTTATCACTA CTTGGCCTGGTATCAGCAGAGACCAGGGAAAGCCCCTACACTCCTGATCTTTGATGCCTCCATTATGGAAGGTGGGGTCCCATCAAGGTTTAGC GGCGGTGGATCTGGGACGGAGTTCACTCTCACCATCAGCAGCCTGCAGCCTGATGACTTTGCTACTTACTTCTGCCAACAGTATAATAGTGATTC TCCCCCGTGGACGTTCGGCCAAGGGACCAGAGTGGAGATCCAAC
005	p112w119	*IGLV*	TCTTCTGAGCTGACTCAAGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACGTGCCAAGGAGACAGCCTCAGAAGGTTTTATG CCAGCTGGTACCAGCAGAAGCTAGGACAGGCCCCTGTTCTTATCATCTATGGTAACAATTACCGGCCCTCAGGGATCCCAGACCGATTCTCTGG CTCCAACTCAGGAAACTCAGCTTCCTTGACCATCACTGGGGCTCAGGCGGAAGATGAGGCTGACTATTACTGTAACGTACGGGTCTTCGGAACT GGGACCAAGGTCACCGTCCTCG

005	p112w126	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACACAACGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATTGGGAAGAGTTATGTCTCCTGGTACCAGCAACTCCCAGGAACAGTCCCCAAGCTCCTCATTTATGACAATAATAATCGACTCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCGCGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTATTGCGGAACATGGGATACCAGCCTGAGTGGTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTGG
005	p112w127	*IGLV*	ACCTGACTCAACCGCCCTCCGCGTCCGGGTCTCCGGGACAGTCAGTCACCATCTCCTGCACTCGAACCACCGGTACCCTGGGTCCTAATGATCATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCACACTCCTGATTTATGAAGTCACTAAGCGGCCCTCGGGGGTCCCTGACCGGTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGCCTCCAGCCTGAGGATGAGGCTGATTAT
005	p112w129	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGTAGCTCCAACATTGGGCGTAATTCTGTATCGTGGTACCAGCAGTTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGACATCACCGGTCTCCAGACTGGGGACGAGGCCGATTATTACTGCGGTACATGGGATAACAGCCTGAGTGCTGGGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w135	*IGLV*	GATGTTGAGATGACTCAGTCCCCACTCTCCCTGCCCGTCACCCTCGGGCAGTCGGCCTCCATCTACTGCAGGTCTAGTCAGAGCCTCGTATACAGTGATGGAGGCACCTACTTGAACTGGTATCAACAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAGGATCGACAGGGTGGAGGCTGACGATGTTGGGGTTTATTTTTGCATGCAGGGTACACATCGGCCGTGGACGTTCGGCCCTGGGACCAAGGTCGAAATCAAAT
005	p112w136	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCCTGGAGGGACAGTCACACTCACTTGTGGCTTGACCTCTGGCTCAGTCTCTACTACTTACTACCCCAACTGGTACCAGCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAGCACAAACGTTCGGTCTTTTGGGGTCCCCGATCGCTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAATGTGATTACCACTGTGCACTGTATATGGGAAGTGGCATTTGGGTGTTCGGCGGAGGGACCAGGCTGACGGTCCTAA
005	p112w146	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCCTCTGGTACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCCACTCCAACATCGGAAGTAATTATGTGTACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCCATAAGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGGTGATTATTACTGTGTGGCATGGGATGACAGCCTGAGTCGTCCGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w159	*IGLV*	AGAGCGCGTCACCATCACTTGCCAGGCGAGTCAGAACATTAGAACCAAGGTTAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTACGATGCATCCGATTTGGAGGCGGGGGTCCCATCAAGGTTCAGTGGACGTAGATCTGGGACACTTTTTACTTTCACCATCAGTAGCCTGCAGACTGAGGATGTTGCAACATATTACTGTCTACAGTATGATGATCTAGTGTTCACTTTCGGCCCTGGGGACCACAGTGGATATCAAGC
005	p112w162	*IGLV*	GCCATCCAGTTGACCCAGTCTCCAACCTCCCTGTCTGCATCTGTAGGAGACAGAATCACCATCACTTGCCGGGCCAGTCAGGACATTAGACGTTCTGTAGCCTGGTATCAGCAAAAACCAGGGAACGCCCCTAGGCTCCTGATCTATGCTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATCTTGCAACTTATTACTGTCAAGAACTTGATAGGTCCCCTCTATTTAGTTTCGGCCCTGGGACCAAAGTGGAAATCAAAC
005	p112w163	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATTTCCTGCACTGGAACCAGCAGTGATGTTGGTGGTTATGGCTCTGTCTCCTGGTACCAACATCACCCAGGCACAGACCCCAAAGTCCTGATTTATGATGTCAATAAGCGGCCCTCAGGGGCCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCTGCTCATATGCAGGCAGCTACAATTTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w164	*IGLV*	CAGACTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGCTTCCAGCACTGGAGCAGTCACCAGGGATTACTCTCCAGGCTGGTTCCAGCAGAAACCTGGACAAGCACCCAGGGCACTAATTTATAGTATAACCAACAAACACTTCTGGACCCCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAGGCTGCCCTGACACTGTCAGATGTGCAGCCTGAGGACGAGGCTGACTATTACTGTCTGCTCTACTATGGTGGTGGTCGGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w167	*IGLV*	CTCATGATTTATGCGGTCAGTGATCGGCCCTCAGGGATTTCTAGTCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAAGCAGTAGTAGTGTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w168	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTACAACTATGTCTCCTGGTACCAACAGCACCCCGGCAAAGTCCCCAAACTCATGATTTATGAAGTCACTAGTCGGCCCTCAGGTGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCGACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGAATATTACTGCAGCTCATATACAAGCAGCGGCACTCTGCTATTCGGCGGGGGACCAAGCTGACCGTCCTAG
005	p112w17	*IGLV*	CATCCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAATGACATTGGTGGTTATAACTATGTCTGTTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAATCGACCCTCAGGGGTTTCTCATCGCTTCTCTGGCTCCAGGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCAGCAATATTGTCTTCGGCGGAGGGACCAAGGTGACCGTCCTAG

005	p112w172		*IGLV*	ACTTATCATGTACACTGGTACCAGTATCTTCCAGGAAGAGCCCCCAAAGTCCTCATCTATGGTGACACCAATCGGCCCTCAGGGGTCCCTGACC GATTCTCTGGCTCCAAGTCTGGCACCTCCGCCTCCCTGGCCATCACTGGGCTCCAGCCTGAGGATGAGGCTGATTATTACTGCCAGTCATATGA CAGCAGCCCTACTTGGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
005	p112w174		*IGLV*	CAGTCTGCCCTGACCCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAGCCAGCACTGACATTGGTTCTT ATAACTTTGTCTCCTGGTATCAACAGTACCCAACCAAAGCCCCCAAACTCCTGATTTATGAG
005	p112w175		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCTCTTGCCGGGCAAGTCAGGGCGTTAGAAATG ATTTAAGCTGGTTTCAGCAGAAACCAGGGAAAGCCCCTGAGCGCCTGATCTATGCTTCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCTGGGACAGAATTCACTCTC
005	p112w176		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTATTTTATACA CCTCCAACAATCGCAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAACTGCTCATTTACTGGGCATCTACCCGGGAATCCGG GGTCCCTGACCGATTCAGTGGCAGCGGGTCTGCGACAGATTTCACTCTCACTATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGT CAGCAATATTATAGTGCTCCTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAGTC
005	p112w178		*IGLV*	CCAGCAGTGACATTGGTGGTTATAACTATGTCTCCTGGTACCAACAACACCCGGCAAAGCCCCCAAAGTCTTGATTTTTGATGTCGATGATCGG CCCTCAGGAATTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCGGGCTGAAGACGAGGCTGATT ATTACTGCAGCTCATATTCACGCACCAGTCATTATGTCTTCGGAAGTGGGACCAGGGTCACTGTCGTAG
005	p112w25		*IGLV*	CCCTCTCCTGCACTGGGAACAAGTCCAACATCGGGGCTGGTCATGATGTACACTGGTACCAGCACCTTCCAGGAACAGCCCCCAAACTCCTCAT CTATAGTAACACCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGTTCCAACTCTGGCACCTCCGCCTCCCTGGGCATCACTGGGCTCCAG GCTGAGGATGAGGCTGATTATTTCTGCCAGTCCTATGACAGCAGCCTGAGTGGTTATATCTTCGGAACTGGGACCAAAGTCACCGTCCTAG
005	p112w26		*IGLV*	TGCACTGGAACCAGCAGTGACGTTGGTGGTTTTAACTTTGTCTCCTGGTACCAACAACACCCAGGCAAAGTCCCCAAACTCATGCTTTATGAGGT CACTAATCGGCCCTCAGGGGTTTCTGATCGCTTCTCTGGCTCCAAGTCGGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGA CGAGGCTGATTATTACTGCACCTCATATACAACCAGCGCCACTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTGA
005	p112w3		*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGC AGGTCATGATGTACACTGGTACCAACAACCTCCAGGAGCAGCCCCCAGACTCCTCATGTATGGTAAGACTAATCGGGCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAAGTCTGACACCTCAACCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGGTGAATATTACTGCCAGTCCTATG ACAGCAGCCTGAGTGCCGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w30		*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAATCACCATCTCCTGCACTGGAGCCAGCAGTGATTTTGGTGGTG TTAATTTTGTCTCGTGGTACCAGCACCACCGAGGCAAAGCCCCCAAACTCATTATTTATGATGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGCCTGAGGATGAAAGTGATTATTACTGCTGCACATATGTGG GCAGCTACACTTCTGTGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w36		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGCATTGGTAGTT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGGTCGTGATCAATTCTGCCTCCAGTTTGGAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTTATTCTCACCATCAACAACCTGCAGCCCGATGATTTTGCAACTTATCACTGCCAACAGTATAAAAGTTACCC TTGGACGTTCGGCCAAGGGACCAAGGTGGAAGTCAAAC
005	p112w37	50	*IGLV*	GAAAAAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTAGGCAGC AACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGCCAGGTTC AGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCACTATAATAACTG GCCTCTCACCTCCGGCCAAGGGACACGACTGGAGATTAAAC
005	p112w44		*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGC AACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATACACCAGGGCCACTGGTATCCCAGCCAGGTTCA GTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTATAATAACTGG CCTCCCTCTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
005	p112w46		*IGLV*	CAGTCTGTCCTGACTCAGCCACCCTCAGCGTCTGGGGCCCCCGGACAGAGGGTCACCATCTCCTGTTCTGGAGGAAGTTCCAATATCGGAAGG AATAGTGTCGTTTGGTACCAACAACTCCCAGGAACGCCCCCCCACCTCCTCATTCATTATGATAATCAGCGTCCCTCAGGGGTCCCTGACCGATT CTCCGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGACTCCAGTCTGAGGATGAAGCTGACTATCATTGTGGAGCATGGGATGAC GGCCTGAATGCTTGGCTGTTCGGCGGAGGGACCAAGGTGACCGTCCTCG
005	p112w5		*IGLV*	TACTTATAAGTATGTCTCCTGGTATCAGCAACACCCAGGCAAAGCCCCCAAATTCATAATTTTTGATGTCAGTAATCGGCCCTCAGGGATTTCTAA TCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGTCTCCGGGCTGAGGACGAGGCTGATTATTACTGCACGTCATAT GCAACCAAACCATCCTACTCGGTCGGAGGGACCAAGCTGACCGTCCTAG
005	p112w55		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGATGAAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCGGCA ACTACTTAGCCTGGTATCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATTTATGGTGCATCC

005	p112w59		*IGLV*	GACATCCACATGACCCAGTCTCCATCTTCCCTGTCTGCATCTGTTGGGGACAGAGTCACCATCACTCGCCGGGCAAGTCAGACCAGGGAAAGCC CCCAACCTCCTAGTGTTTGGTGCATCCAATTTGCAAAGTGGGGTCCCGTCAACGTTCAGTGGCAGTGGATCTCGGACAGATTTCACTCTCACCAT CAACAGTCTGCAATCTGAAGATTTTGTCACTGTTGGCCTAGGGGACCTAGCTGGAGATCAATCGAACTGTGGCTGCACCTTCT
005	p112w6		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAGGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCA CCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCTGCAGTCTGGTAGC TCACCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
005	p112w69		*IGLV*	CAGCTTGTGCTGACTCAATCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAACCTCACCTGTACTCTGAGCAGTGGGCACAGCAGCTACG CCATCGCATGGCATCAGCAGCAGCCACAGAAGGGCCCTCGGTACTTGATGAAGCTTAATAGTGATGGCAGCCACACCAAGGGGGGCCGGGATCC CTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCTCCATCTCCAGCCTCCAGTCTGATGATGAGGCTGACTATTACTGTCAGAC CTGGGGCACTGCCATTGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
005	p112w7		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAACCAGCTCCAACATTGGGAATA ATTATGTATCCTGGTACCAGCAGTTCCCAGGAACAGCCCCCAGACTCCTCATTTTTGACAATGATAAGCGACCCTCAGGGATTCCTGACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATCACTGCGAAGCGTGGGATAGC AGCCTGAGTGCTGGGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAA
005	p112w81		*IGLV*	CCACCAGTGTCTTTGGTGATTATGAATTTGTCTCCTGGTACCAACAGCACCCCGGCAAAGCCCCCAAACTCATGATTTATGAGGTCGATAAACGG CCCCCAGGAATTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGAGCATCTCTGGGCTCCATGCGGAAGACGAGGCTTATT ATTACTGCAGTTCATATACAATGACCACAACTTATTTCGGCGGAGGAACCAAGCTGGCCGTCCTAA
005	p112w82		*IGLV*	TCCTATGAGCTGACACAGCCATCCTCAGTGTCAGTGTCTCCGGGACAGACAGCCAGGATCACCTGCTCAGGAGATGTACTGGCAAAGAAATATG CTCGGTGGTTCCAGCAGAGGCCAGGCCAGGCCCCTGTTCTAGTGATTTATAAAAACAATGCGCGGCCCTCTGGGATCCCTGAGCGATTCTCCG GCTCCAGCTCAGGGACCACAGTCACCTTGACCATCAGCGGGGCCCAGCTTGAGGATGAGGCTGACTATTACTGTTACTGCGGCTGACAAAAG TCTAGGAATGTTCGGCGGAGGGACCAGGCTGACCGTCGTAG
005	p112w93	42	*IGLV*	GCTCACCATCTCCTGCACTGGATCCAGCATTGGACTTTATAACCTTGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCAAACTCATGATTT ATGAGGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGC TGAGGACGAGGCTGATTATTACTGCTGCTCATATGTAGGTAGTAACACTATGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
005	p112w97		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCCGTGTCTGCGGCCCCAGGACAGAGGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGAAAAC AATTATGTGTCCTGGTACCAGCAGGTCCCGGGAACGGCCCCCAAACTCGTCATTTATGACAATAATAAGAGAGCCTCAGGTATTCCTGACCGATT CTCTGGCTACCGCTCTGGCACGTCAGCCACCCTTGACATCGCCGGGCTCCAGCCTGGGGACGAGGCCGATTACTACTGCAATACATGGGATTC AAGCCGCGATGTCGACGTCTTCGGCGGAGGGACCAAACTGACCGTCCTGA
004	p132w10		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGAGGCTCCGTCACCAGT GGTAGTTATTCATGGAGCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCATATCTATACCAGTGGGAGCACCGACTACAAC CCCTCCCTCAAGAGTCGAGTCACCATATCAATGGACACGTCCAAGAACCAGTTCTCCCTGAAACTGATCTCTGTGACCGCCGCAGACACGGCCG TGTATTACTGTGCGAGAAACCATCCTGCTTACATTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w101		*IGHV*	CAGATCACCCTGAAGGAGTCCGGACCTACGCTGGTGAATGCCACACAGACCCTCACGCTGACCTGCACCTTCTCGGGATTGTCACTCACCATAA GTGGAGAGAGTGTGGGCTGGTTCCGTCAGGCCCCAGGAAAGGCCCTGGAGTGGCTTGCGCTCATCTCTTGGGATGATGATAAGCTCTACAGGC CATCTCTGAAGAACAGGCTCACCATTTCCAAGGACACCCCCAAAAACAGGTAGTCCTAACAATGACCAACATGGACCCTGTGGACACAGCCACAT ATTATTGTGTTAATAAGAGGAGAGGTCAATTCCAAACGACTTCTGGCCTACACACATTTGTGGACTGGTTCGACCCCTGGGGCCAGGGGACCCT GGTCACCGTCTCTTCAG
004	p132w106		*IGHV*	GAGGTGCACCTGTTGGAGTCGGGGGGAGCCTTGGTGCAGCCGGGGGGTCCGGTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTAGC GATGCCATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTGGAAGTGAGAGTGATAACATACACTATGCAGAC TCAGTGAGGGGCCGGTTCACCATCTCCAGAGACAATTCCATGAACGCGCTATATCTGCAAATGAACAGCCTGACACCCGAGGACACGGCCGTCT ATTACTGA
004	p132w107		*IGHV*	CAGGTGCAACTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGTAGCCTCTGAATTCACCTTCAGTACC TATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAGACAACATATATTATACAGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAATACGCTGTTTCTGCAGATGAACAGCCTGAGACCTGAAGACACGGCTGTCTA TTACTGTGTGAAACAGATGGGGAGGAACTTTAACTACTACGGTCTGGACATCTGGGGCCAGGGGACCACGGTCACCGTCTCGTCA

004	p132w108	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGATCCAGCCTGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGGTTCACCGTCAGTAG CAACTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTTATAGCGGTGGTGACACATACTACGCAGACTC CGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAGGACCACGCTGTATCTTCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTAT TTCTGTGCGAGAGCAAAGTATAGCACTGGCTGGTGGGATGCGTTTGATATCTGGGGCCAAGGGACAAAGGTCACCGTCTCTTCAG
004	p132w113	*IGHV*	GCGGTGGACCTGGTGGAGTCTGGGGGCGGTGTGGCGCGGCCGGGGGGGTCCCTGAGACTGTCCTGTGCAGCCTCTGGATTCACCTTTGATGA TCTTGGGATGACCTGGGTCCGCCAAGTTCCAGGGAAGGGGCTGGAATGGGTCGCTGATATAAATTGGAGTGGGACTGACACAGGTTATGCAGA CTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTTCCTGTATCTGCAAATGAACAGTCTGAGAGTCGAAGACACGGCCTTCT ATTACTGTGCGAGGGGTATTCACCCCATAAGAGGGCCGCCTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w117	*IGHV*	CAGGTGCAGCTTCAAGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGTCCGTGTCCCTCACGTGCACTGTGTCTGGTGGCTCCATCAGCAGT GGTCGTTACTACTGGAACTGGATCCGCCAGCAACCAGGGAAGGGCCTGGAGTGGATTGGTTATATTTCTGATAGTGGCACTTATTACAACCCGT CCCTCAAGAGTCGAGTTACCATATCAATAGACGCGTCTAAGAACCAGTTCTCCCTGGAGCTGAAGTCTGTGACTGCCGCGGACACGGCCGTCTA TTATTGTGCGAGAATGACTACGTTGACCCCCCTTGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w119	*IGHV*	GAGATGCAGCTGGTGGAGTCTGGCGGAGGCCTTGTAAAGCCTGGGGGGTCCCTGAGAATCTCCTGTGCAGCCTCTGGATTCATGTTCGAAAAC ACCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTGGCCATATTTACAGCAAAAATTCTGGTGGGACAGCAGTTTAT GCTGCACCCGTGAAAGGCAGATTCACCATCTCGAGAGATGACTCAAAAAACATGTTGTATCTGCAAATGAGCAGCCTGAAAATCGAGGACACAG CCGTGTACTATTGTACCATTTTGAGTGGATATTATATTGACAAATGGGGCCAGGGAACCCCGGTCACCGTCTCCTCAG
004	p132w125	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCAGCTTCTCTGGGTTCTCACTCAGCACTA GTGGAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAGGCCACTGGAGTGGCTTGCAGTCATTTATTGGGATGATGATAAGCGCTACAGCC CATCTCTGGAGAGCAGGCTCACCATCACCAGGGACACCTCCAAGAACCAGGTGGTCCTTACACTGACCAACATGGACCCTATGGACACAGCCAC ATATTACTGTGCACACAGGCCCGAGGTAGCAGCTTCGGACTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w126	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGCTTTTAATAGT TATGACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTATTAGTGCTACTTACATATATTACGCAGACTC AGTGAAGGGCCGATTCACCACCTCCAGAGACAACGCCAAGAACTCACTTTATCTGCAAATGAACGGCCTGAGAGTCGAGGACACGGCTGTGTAT TACTGTGCGGCATCCTCGTATAGCAGCAGCACGTCAAACCCGTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w128	*IGHV*	CAGGTCCAACTGCAGGAGTCGGGCCCAGGGCTGGTGGAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCCGGTAGTTCCATCACAAAT AGTAACTATTACTGGGCCTGGATTCGCCAGGTCCCAGGGAAGGGGCTGGAGTGGATTGGCAGTGTCTATTATAGTGGCTCCTATTACAACCCGT CTCTCGAGAGTCGTCTCAGCCTGTCGAAAGACACGTCCAAGAATGAATTCTTCCTGAAGTTGCTCTCTGTGACCGCCGCAGACTCGGGTATTTAT TACTGCGCGAGGATCCTCTACACTTATGGCCGTCACTATTTTGACTTCTGGGGCCAGGGCACCCTGGTCACCGTCGCCTCAG
004	p132w130	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGGCTGGTGAGGCCTTCGGAGACCCTGTCCCTCACCTGTACTGTCTCTGGTGCCTCCATCAACAAT AATGTTTACCACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGCTTGGGAGTCTCTCTTACGGTGGGAGCACCTACTCCAAC CCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGGTCGCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCT GTTTATTTCTGTGCGAGACGGGGTAAGAGCAGCTGGTATCACCGATCAGACTACTATTACTACGGTCTGGACGTCTGGGGCCAAGGGACCACGG TCACCGTCTCTTCA
004	p132w132	*IGHV*	CAGTTGCAACTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT AGTGATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGACTATCTATTATACCGGGCGCGCCTATTCTAACC CGTCCCTCGAGAGTCGAGTCACCATATCCGTTGACACGTCCAAGAACCAGTTCTCCCTGAATCTGAGCTCTGTGACCGCCGCAGACACGGCTGT GTATTACTGTGCGAGACATGTAGCCTCCTTATATTACGATTTTTTGGAGTGGTTATTATACGACCTTTGACTACTGGGGCCAGGGAACCCTGGTCA CCGTCTCCTCAG
004	p132w133	*IGHV*	CAGGTGCACCTGGTGCAGTCTGGGGCTGAGGTGAGGAAGCCTGGGGCCTCAGTGAAAATTTCCTGCGAGGCATCCGGATATGATTTCGGCAGT TTTTATTTGCACTGGCTGCGTCTGGCCCCTGGACAAGGGCTTGAGTGGATGGGAATAATCAACCCTTATGGTGGTCTGTCAAGTTACGCAAAGAA GTTCCAGGGGAGAGTCACCATGACCGCTGACACGTCCTCGGACACAGTTTACATGGAATTGAGTGGTCTGACATATGACGACACGGCCGTCTAT TACTGTGCGAGAGTTCCGGGTAGCGCCAGCTGGTGGTTTGACTACTGGGGCCAGGGAACCCAGGTCAGCGTCTCCTCAG
004	p132w134	*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAC TACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTATGCAGGCTCCG TGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAATTCCTTATATCTTCACATGAACAGCCTCATAGCCGGGGACACGGCTGTGTATTAC TGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCGCCCTGGTCACTGTCTCC TCAG

004	p132w135	*IGHV*	CAGGTCCAGCTTGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACAGCTTCACTTATCACGTTATGCATTGGGTGCGCCAGGCCCCCGGACAAGGGCTTGAGTGGATGGGATCGATCAACGGTGGCAATGGTCACACACAATTTTCACAGAAGTTCCAGGGCAGACTCACCTTTACCAGGGACACATCCGCGGGCACAGCCTACATGGAGCTGAGCAGTCTGAGGTCTGAAGACACGGCTGTTTATATGTGTGCGAGAGATGCGTGTACTAATGGTATTTGTCCCTACTATTACTACGCCATGGACGTCTGGGGCCTAGGGACCACGGTCACCGTCTCCTCA
004	p132w137	*IGHV*	CAGCTGCAGTTGCACGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTATCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCGGCACTAGTAATTACTACTGGGGCTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTTTCTATTATAGTGGGAGCACCTACTCCAACCCGTCCCTCAAGAGTCGAGTCACCATTTCCGTAGACACGTCTAAGAACCACTTCTCCCTGAAGCTGAGTTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGGATTTACAGTTGGGGGAGTTACCCCGCCGGCTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p132w142	*IGHV*	CAGATCACCTTGGAGGAGTCTGGTCGTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTAGTGCAGTGGTTGTGAGCTGGATCCGTCAGCCCCCAGAACGGCCGCTGGAGTGGCTTGCACTCATTTATGGGGATGGTGATAAGCGCTACAGCCCATCTCTGCAGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACATTGACCAACATGGACCCTCTGGACACAGGCACATATTACTGTGCACACAGAGATATTTCGTCTGGTTATGGGCACTACTACGGTGTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p132w15	*IGHV*	CAGGTCCAACTGCAGGAGTCGGGCCCAGGGCTGGTGGAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCCGGTAGTTCCATCACAAATAGTAACTATTACTGGGCCTGGATTCGCCAGGTCCCAGGGAAGGGGCTGGAGTGGATTGGCAGTGTCTATTATAGTGGCTCCTATTACAACCCGTCTCTCGAGAGTCGTCTCAGCCTGTCGAAAGACACGTCCAAGAATGAATTCTTCCTGAAGTTGCTCTCTGTGACCGCCGCAGACTCGGGTATTTATTACTGCGCGAGGATCCTCTACACTTATGGCCGTCACTATTTTGACTTCTGGGGCCAGGGCACCCTGGTCACCGTCGCCTCAG
004	p132w21	*IGHV*	CAGATCACCCTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCTCTAGTGGAGAGGTTGTGAGCTGGATCCGTCAGCCCCCAGGAAGGCCGCTGGAGTGGCTTGCACTCATTTATGGGGATGGTGATAAGCGCTACAGCCCATCTCTGCAGAGCAGGCTCACTATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACATTGACCAACATGGACCCTCTGGACACAGCCACATATTACTGTGCACACAGAGATCTTTTGAGTGGTTATGGGCACTACTACGGTTTGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p132w22	*IGHV*	CAGGTGCAGTTGGTGGAGTCGGGGGGAGGCGTGGTCCAGCCTGGGACGTCTCTGACACTCTCTTGTGCAGTGTCTGGAGTCTCCTTCAACAAATATGCCATTCACTGGGTCCGCCAGGCTCAAGGCAAGGGGCTGGAGTGGGTGGCAGTTATGTGGAGTGATGGAAGTCAGAAATATTATGGAGCCTCCGTGAAGGGCCGATTCACCATCTCCCGAGACACTTCCAAGAACACGGTGTTTCTGCAGATGAACAGCCTGAGAGCCGAGGACACGGCTGTCTATCACTGTGCGAGCGATAGGTGTGGTGGTGGTGGCTGCTACTACCTTGACAACTGGGGCCAGGGAACCCTGGTCGCCGTCTCCTCAG
004	p132w26	*IGHV*	GAGGTGCAGCTGGTGGAGTCGGGGGGAGGCCTGGTCAACCCGGGGGGTCCGGTCGAGACTCTCCTGTGCAGCATCTGGATTCACCTTCAATACGTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCGTCCATTGCTCCTGGTAGTGCTTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCGTCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGGGTCGAGGACACGGCTATATATTACTGTGCGAGAGTTATTTGTGACAGTAATGGTAATTCCTGCTACCAGAGAGATGATGCTTTTCACATATGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
004	p132w28	*IGHV*	CAGCTGCAGTTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCATTTGCACTGTCTCTGGTGGCGCCCTTCAGCAGTAGTAGTTACTATTGGGGCTGGATCCGCCAGCCCGCAGGGAGGTGGAGTGGATTGGGACTATCTATTATGATGGGAGCACCCACTACAGCCCGTCCCTCGAGAGTCGAGTCACCATATCCATAAGCGCGTCCAAGAACCAGTTCTCCCTGAAGCTGAGTTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGGCGTCCGGGAAATAAGAACTGGTCCCACTTTGACTACTGGGGCCAGGGAACCCTGGTCTCTGTCTCCTCAG
004	p132w31	*IGHV*	CAGATGCAGCTGGCGGAGTCCGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTGACTATTACATGAGTTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGCATATATTAAATATAGTGGTGATTACACGAATTATGCAGACTCTGTGAAGGGCCGATTCGCCGTCTCCAGAGACAACGCCAGGAACTCAGTGTTTCTGGAAATGGACAGCCTGAGAGCCGAGGACACGGCCATTTATTACTGTGCGAGAGTCGCAAATTATGAGACGAAGAAAGAAGATGCTTTGGATGTCTGGGGCCAAGGGACACTGGTCACCGTCTCGTCAG
004	p132w32	*IGHV*	AACCTACTGGATTCACTGGGTCCGCCAAGCTCCAGGGAAGGGGCTAATGTGGGTCTCAAATATTAATAGTGATGGGACTACCACACACTACGCGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACACGCTCTATCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTGTGTATTATTGTGCAAGAGAATATAGTGGGAGCCTTGACTACTGGGGCCAGGGAACCCTGCTCACCGTCTCCTCAG
004	p132w33	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACAGCTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGTCTCCATCAGCAGTGGTAGTTACTACTGGGACTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGCCGTATCTATACCAGTGGGTACACCAACTACAACCCCTCCCTCAGAGTCGAGTCACCATATCGGTAGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTACTGTTCGAGTGGCTACTTCTACGTTGTGGGTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p132w34	*IGHV*	GAGGTGCAGTTGTTGGAGTCTGGGGGAGGCCTGGTTCAGCCGGGGGGGTCCTGAGACTCGCCTGTGCAGCCTCTGGATTTTCCTTTAACGACTACTCCATGAGTTGGGTCCGCCAGCCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGGCATCAGTGGCAGTGGTGGTGGCACATATTACGCTGACTCCGTGAAGGGCCGGTTCACCATCTCCAGACACAATGGCATAAACAAGTTGTATTTGGAAATGAACAGCCTGAGAGCCGAGGACACGGCCATATATTTTTGTGTGAAAGATAGGGACAACTGGAATCCTCCTCGCGATGCTTTTGATATGTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
004	p132w36	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGGCTCCATCAGCAGTAATACTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGAAGGGGCTGGAATGGATAGGGAGTATGTATTATACTGGGGGCACCTTCCACAACCCGTCCCTCAAGAGTCGAGTCTCCATACCCGTAGACAGGTCCAGGAATCAGTTCTCCCTGAAACTGATCTCTGTGACCGCCGCAGACACGGCTATATACTACTGTGCGCGACATTCCCTGAACGGGGCAGCAGACTTTGACTACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
004	p132w37	*IGHV*	CTGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCGTCACAGACCCTGTCCCTCACCTGCATTGTCTCTGGTGACTCCATCAGCCATAGTGATGGTCACTGGGCCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATCGGGCACATCCATCACTATGGGACCACCTACTACAATCCGTCCCTGAAGAGTCGACTTACTATATCAGTGGACACGTCTAGGAACGAGTTCTCCCTGAAGTTGAACTATGTGACGGCCGCGGACACGGCCATTTATTACTGTGCGAGAGATTTGGGGGGTCATCGATTGTAGTGATGGAATCAGCTGCTTTTCTTCAAACTGGTACGACACCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w38	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCGTCAGCAGCGATAGTCACTACTGGGCCTGGGTCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTTTTATAGAGGGGGCACCTACAACAACCCGTCCCTCAAAGGTCGAGTCACCATCTCCGTAGACACGTCCAAGGACCAGTTCTCCCTGGACCTGACCTCTGTGACCGCCGCAGACACGGCTGTATATTACTGTGCGAGGCGTAGGGGTTCAGGAACTGGCACTTTCGTGAGCTGGTTCGACCCCTGGGGCCAGGGAATCCTGGTCACCGTCTCCTCAG
004	p132w46	*IGHV*	CAGGTCCAGCTTGTGCAGTCTGGGACTGAGGTGAAGAAGCCTGGGGCCTCAGTGACGGTTTCCTGCAAGGGTTCTGGATACAGCTTCACTGACCATGCTATGCACTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGGTGGATCAACGGTGGCAGTGGTAACACACAATATTCACAGAAGTTCCAGGGCAGAGTCACCATTACCAGGGACACATCCGCGAGCACAGCCTATATGGAGTTGAGGAGCCTAAAATCTGAAGACACGGCTGTGTATTACTGTGCGAGACTACATGTGACTAAAGCTTTGGAAGGCGCCTACTACTTTGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w47	*IGHV*	CTGGTGCAGCTGGTGGAGTCTGGGGGAGGCGAGGTCCAGCCTGGGAAGTCCCTAAGACTCTCCTGTGTAGCCTCTGGATTCAACTTCAATAACTATGGCATGTACTGGGTCCGCCAGGCGCCAGGCAAGGGCCTGGAATGGGTGGCACTCATGTCATATTCTGGAAGTGTTAAATTTTATGTAGATTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAGTACACTGTATCTGGAGATGAACAGCCTGAGAAGTGAGGACACGGGTGTCTATTATTGTGCGAGAAATTCCTATCTATACTATAGTAATAGTCTGTTCGCCATGGACGTCTGGGGCCAAGGGACCACGGTCAGCGTCTCGTCA
004	p132w52	*IGHV*	CAGCTGCACCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCGGAAACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTCGAAGTGATTACTCCTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGCATCTTTCATACTGACACCTACTACAGCCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAGTTCTGTGACCGCCGCAGACACGGCTATTTATTACTGTGTGAGAAGTGTGGGTAGGGGGCTACTGCAATGGCCTGACTACGTTATGGAAGTCTGGGGCCAAGGGGCCACGGTCGCCGTCTCCTCA
004	p132w55	*IGHV*	CAGGAGCAAGTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTACAGCCCCTGGATTCTTTGTCACTGACTACTACATGAATTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATACCTTGGTCGTTGGGACAGTTCTACAGCCTACGCAGACTCTGTGAAGGGCCGATTCACCGTCTCCAGAGACAACGCCAAGAATTCAGTGTATCTACAATTGAACAGCCTGAGAGCCGAGGACACGGCCGTCTATTACTGTGCGAGACGGTTAGAGATGGCTACAAATAGTGCCTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
004	p132w58	*IGHV*	CAGGTGCACCTGCTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAAGTCCCTGAGACTCTCCTGTGTAGCGTCTGGATTCACCTTCAGTAACAGTGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGCAATATGGTATGATGGAAGTCAGCAATATTACGCAGACGCCGTGAGGGGCCGATTCACCATCTCCAGAGACGATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGACGACACGGCTGTCTATTACTGTGCCAGAGA
004	p132w8	*IGHV*	GAGGGGCAGTTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGCTCCTATACCATCAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTTCCAGTAGTAGGTACATCTACTACGCGGACGCAGTGAAGGGCCGATTCACCATTTCCAGAGCCAACGCCAACAACTCGGTTTATTTGCAACTGAACAGCCTGAGAGCCGAGGACACGGCTCTTTATTACTGTGCGAGGACCGAAGACAGCGGGAGGTACCCTGCTTTTGATGTCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
004	p132w89	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGTCTGGGGGGTCCCTTAGGCTCTCCTGTGCAGCCTCTGGATTCAGGTTCCCTAACGCCTATATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAACAAAAATGATGCTGTGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTGTATCTGCAAATGACCAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACAGACTGGGAATATAGCGGTACGCCTCGGCCATTGTTCCCAGATGCTTTTGATATCTGGGGCCACGGGACATTGGTCACCGTCTCTTCAG

004	p132w9	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGCGCCTCCATTAAGAGG GGTGGCTCCTACTGGAGCTGGGTCCGCCAGCGCCCAGGGGAGGGCCTGGAGTGGATTGGGTACACCTATTACAGTGGGACCACCTCCTACAAT CCGTCCCTCACGAGTCGACTTACCATATCAGTTGACACGTTTAAGAACCAATTCTCCCTGGAGCTGAGGTCTATGACTGCCGCGGACACGGCCG TGTATTATTGTGCGAGAGGAACGGTTAGCAGCAACTGGTATCGCGACGAATATCCCCTGGATTGGGGCCAGGGCACCCTGGTCACCGTCTCCTC AG
004	p132w90	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCGGTTAT TACTACTGGAGCTGGGTCCGGCAGCCCCCGGGAAGGGACTGGAGTGGATTGGCTATATCTATTACAGTGGGAGCACCAACTACAACCCCTCCC TCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCACTTCTCCCTGCACCTGAGCTCTGTGACCGCTGCGGACACGGCCATATATTA CTGTGCGAGAGGAATCTGTAGTGGTGGTAGCTGCTACTCTTGGCCGCTTGACAACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p132w91	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTTACTCCATAAGCAGT GGTAGTTACTACTGGAGCTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTATACCAGTGGGAGCACCAACTACAAC CCCTCCCTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCAGACACGGCC TTTTATTACTGTGCGAGCGCATATTTTTATGCTCCGGGGAGTTCCTGGGGCCAGGGAACCCTGGTCATCGTCTCCTCAG
004	p132w92	*IGHV*	GAGGTGAATCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGTGCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGAAGC TATTGGATGATGTGGGTCCGTCAAAGTCCAGGGAAGGGTCTGGAGTTGGTGGCCAACATAAAGGAAGATGGAAGTGAGAAATACTATGTGGACT CTGTGAGGGGCCGATTCACCATGTCCAGAGACAATGCCAGGAATTTATTGTCTCTGCAGATGAGTAGTCTCAGAGCCGAGGACACGGCCGTGTA TTATTGTGCGGGAGGGATCGGTTGGCACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCCAG
004	p132w93	*IGHV*	GAGGTGCAGTTGGTGGAATCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCAGTTTCGATTCC TATGCCATGAACTGGGTCCGCCAGGCTCCTGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTTTTGGCAGTGGATTCAAAAAGTATGCAGACT CAGTGAGGGGCCGATTCACCGTTTTCAGAGACAACGCCGAGAACTCACTGTTTCTGCAACTGAACAACCTGCGGGCCGAGGACACGGGTGTTTA CTTCTGTGCGAGGGAACCTCCAGAGGTCGGTAGGGGGGAGGTGTTTGGCCACTGGGGCCAGGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w10	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGATCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCGGT AGTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACC CGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGT GTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
004	p134w100	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGAGTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT GGTGGTTACTACTGGAGTTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTTTTACAGTGGGAGCACCTCCTACAAC CCGTCCCTCAAGAGTCGAGTTATCATTTCAGTAGACACGCCTAAGAACCAGTTCTCCCTGAGGCTGAGTTCTGTGATTGCCGCGGACACGGCCG TGTATTACTGTGCGAGAGGTGGGCTGGCTACAATTGGGGGCGATCGTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w106	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCACCAGT GGTGGTTACTATTGGACCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGATACATCTCTTACAGTGGGAGCACCTACTACAACC CGCCCCTCAAGAGTCGAGTGACCATATCAATGGACACGTCTAAGAACCAGTTCTCCCTGAAGCTGACCTCTGTGTCGGCCGCGGACACGGCCG TGTATTATTGTGCGAGGGGAATTGTGATGAACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p134w107	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAAGTGAGGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGACTTCTGGTTACAGGTTTACCAGAT ATGGTATCACCTGGGTGCGACAGGCCCCTGGACAGGGGCTTGAGTGGATGGGATGGATCAGCACTGACAATGGTAACACAAAGTATGCACAGA ACATACAGGGCAGAGTCACCATGACTACAGACACATCTACGGACACAGCCTACATGGAATTGAGGAGCCTGAGATCTGACGACGCGGCCGTGTA TTACTGTGCGAGAGGGAACTACGGTGACCACCCAGTAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w11	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGGCTGGTGAGGCCTTCGGAGACCCTGTCCCTCACCTGTACTGTCTCTGGTGCCTCCATCAACAAT AATGTTTACCACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGCTTGGGAGTCTCTCTTACGGTGGGAGCACCTACTCCAAC CCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGGTCGCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCT GTTTATTTCTGTGCGAGACGGGGTAAGAGCAGCTGGTATCACCGATCAGACTACTATTACTACGGTCTGGACGTCTGGGGCCAAGGGACCACGG TCACCGTCTCTTCA
004	p134w110	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGGCTCTGGATTCACTTTCAATAAT GCCTGGATGATCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCTTATAAAAAGCGGTGGGACAGCACACTACGCTGCACC CGTGAAAGGCAGATTCACCATCTCAAGAGATGATTTAAAAAACACGCAGTATCTGGAAATGAACAGCCTGAAAACCGAGGACACAGCCGTGTATT TCTGTGCCACAGATCTTCCGGGACTGGGGTCGGGTGAATTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p134w111	*IGHV*	GAGGACTCTTTGATGGAGTCTGGGGGAGGCCTGGTCCAGCCTGGGGGATCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGCCATCAGAAAC AATTACAGAATTTGGGCCCGCCAGGCCCCAGGGAAGGGGCTGGAGTGGGTCTCATCTATTTATAACGGTGATAGTACATACTACGCAGACTCTG TGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAATACAGTGTTTCTTCAAATGAGGAGCCTGAGACCTGACGACACGGCTATTTATTAC TGTGCGACTTCCTCAAATCGTGTCAATGGCCGATATAGTGGCTACGAGTGGGGCCAGGGAACCGCGGTCACCGTCTCCTCAG
004	p134w113	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAGGGTCTCCTGCCAGGCCTCTGGGTACTCCTTCACCGG CTACTATATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGCATGGATCAACCCTAACAGTGGTGGCACAAACTTTGCACAG AAGTTTCAGGGCCGGGTCACCGTGAGCAGGGACACGTCCATCACCACTGCCCACATGGAGCTGACCAGGCTGACATCTGACGACACGGCCGTG TATTACTGTGCCAGGGACGCACATTACTTTGAAAGTAGTCATTATTCCTTTTCTCATATGGACTACAAGGGAATGGACGTCTGGGGCCAAGGGAC CACGGTCACCGTCTCCTCA
004	p134w115	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCATCGGATACACCTTCACCAAC TACTTTATGCACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAATAATCAACCCTAGTGGTGGTAGTACAACCTACGCACAGA AGTTCCAGGGCAGAGTCTCCATGACCAGGGACACGTCCACGAGCACAGTCTACATGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCGTCT ATTACTGTGCGAGACTCCTAGCTTTTTACTATGATACTAGTGATGCCGAAGGTGCCGAAGGTGACTTCTGGGGCCAGGGAACCCTGGTCACCGT CTCCTCAG
004	p134w117	*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACGTGCGCTGTCTATGGTGGGTCCTTCAATGTT TACTATTGGGCCTGGCTCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATGATAGTGGAAGCACCAATTACAACCCCTCC CTCGAGAATCGAGTCACCATATCAGTAGACACGTCCAAGAATCAGTTCTCTCTGAGAATGAACTCTGTGACCGCCGCGGACACGGCTATGTATTA TTGTGCGAGGTGGGGCTATGACCGGTCATCGCAGAGGCTGGTCTCGTAGAGACGGCTACTACTACTTCGGTATGGACGTGCTGGGGGGCCAAGG GACCACGGTCACCGTCTCCTCAG
004	p134w124	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGGAGCCTTCGGGGACCCTGTCCCTCACCTGCGCTGTCTCTGTTGGCTCCATCAACAGT TATAGTTGGTGGACTTGGGTCCGCCAGTCCCGCGGGAGGCTGGAGTGGATTGGACAAATCTATTATACTGGGACCACCGCCTACAACCCGTCC CTCAAGAGTCGGGTCACCATGTCAGTAGACAGGTCCAACCACCACTTCTCCCTGAAGTTGACCTCTGTGACCGCCGCGGATACGGCCGTGTATT ATTGTGCGAGATTGTCCGACCAGCCCCGAGGGTACGGTCTGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p134w125	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTGTCTGGTGACTCCATCAGCAGT CGTAGTTACTACTGGGCCTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGCAGTATGTTTTATAGTGGGGGCTCCTACTTCAAC CCGTCCCTCAGGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGACGCTGAGCTCTGTGACCGCCGCAGACACGGCT GTGTATTACTGTGCGAGACGTAAGGGAGCAGGAGCTGGTGCTTTCGTGAGCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCC TCAG
004	p134w128	*IGHV*	CAGGTGCAACTGCAGGAGTCGGGCCCAGGACTGGTGGAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTCCCTCTATGTTCGCTT TCAATAACTACTGGAGTTGGGTCCGCCAGTTCCCAGGGAAGGGCCTGGAGTGGATTGGGAACATCTATTCCAATGGGAGAACCCACTACAGTCC GTCCCTCACGAGTCGAATTCGCATGTCAGTTGACACGTCTGCGAACCAGTTCTCCCTGACGCTGAGTTCCGTGACTGCCGCGGACACGGCCGTT TATTACTGTGCGAGAGGAGTTTATTTTAACTGGCCACAGGACTCCGGGGTCTACTTTGACTCCTGGGGCCAGGGAACCCAGGTCACCGTCTCCT CAG
004	p134w131	*IGHV*	GAGAAGCAACTCTTGGAGTCTGGGGGAGGCTTGGTACAGCCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGTCCTTGAAAGT TATACCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCCTCTATTAGGGGGACTGGTACTACCACATACTACGCCGAC TCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAGTTCCGAGAACTCCTTGATTCTGCAAATGAACAGCCTGAGAGTCGAGGACACGGCCCTAT ATTACTGTGCGAAGGCTGGGACTACGGTGACTACCTTACCCCTTTTCGACCCCTGGGGCCAGGGAACCCAGGTCATCGTCTCCTCAG
004	p134w132	*IGHV*	CAACTGCAGTTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGACTCCATCAGCAGT ACTAGTTATTACTGGGGCTGGATACGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAACACCTACTACAACC CGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGTTGAGTTCTGTGACCGCCGCAGACACGGCTGT GTATTACTGTGCGAGACGGGCGGTCCCGGCCTTCTACGGTAGAGCTCCTATTATTTGGTTCGACCCCTGGGGCCAGGGAACCCTGGCCATCGT CTCCTCAG
004	p134w135	*IGHV*	GGGGATTCATTGGTGGAGTCCGGGGGAGGCTTGGTCCAGTCGGGGGGGGTCCCTGAGACTCTCCTGTGCAGTCTATGGATTCAAAATTAGTGAC GTTTGGATGAATTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCAATATAAATATAGATGGAAGTGAGAAGTTCTATGTGGACT CTGTGAGGGGCCGATTCACCGTCTCCAGGGACACCGCCGAGAATTCATTGTTTCTGGAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGT ATTATTGTGTGGCAGGACACTACTCTCTATGGGGTCACGGAACGCTGGTCACCGTCTCGCCAT

004	p134w136		*IGHV*	GAGGTGCAGTTGGTGGAATCTGGGGGGAGGCTTCGTGAAGCCGGGGGGGTCCCTTACACTCTCCTGTGCAGCCTCTGGATTCAAATTCTCTAATGCCTGGTTCACGTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAGCCAAGGATGATGGTACGACAACAGACTACGCCGCACCCGTGAAAGGCAGATTTACCATCTCCAGAGATGATTCAAAAGACACTCTGTATCTGCAAATGGACAGCCTGAAAAGCGAGGACACAGCCGTCTACTATTGCACCACAGATGAGTCCCCTCTTATGCTAGTGTTTGGGGAACGAATTGTTATAAATGGTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w137		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCTCTCACCTGCAGTGTCACTGGCGGCTCCATCAGCAGTAGTAGTTACTACTGGGGCTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGGACTATCTTTTATAGTGGGAACACTTACTACAACCCGTCCCTCAAGAGTCGAGTCACCGTGTCCGCAGACATGTCCCTGAACCAGTTCTCCCTGAAGCTGAACTCTGTGACCGCCGCGGACACGGCTCTTTATTACTGTGTGAGGCACGGACGTTGTAGTAATACCAACTGCCTAGTATACTACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w142		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCTGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCCTTGTCTCTGGTGGCTCCATCAGCACTACTTATTATTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAACTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACATAATACCCGTATAGCTGCAGCTGGTACTGACGAGTTTGACTACTGGGGCCAGGGAACCCCGGTCACCGTCTCCTCAG
004	p134w15		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGTCTCCCTCAGCAATGGTGGTGGCTACTGGAGCTGGCTCCGCCAACACCCAGGGAAGGGCCTGGAGTGGATTGGGTTCATTTATTTCAGTGGGACCACCTACTACAACCCGTCTCTCCAGAGTCGGGTTACCATGTCAGTAGACACGTCTAAGAACCAGTTTTTCCTGAGCCTGACCTCTGTGACTGCCGCGGACACGGCCGTGTACTACTGTGCGCGGGATTTGGGGGTCGTCGATTGTACTGGTTATAGTTGCCGTTCTTCAAACTGGTTCGACCCCTGGGCCAGGGAAGCCTGGTCACCGTCTCCTCAG
004	p134w19		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTACAGCCTCTGGATTCATCTTCAGTAACTTTGTCATGCACTGGGTCCGCCAGGCTCCTGGGAAGGGGCTGGAGTGGGTCTCATCCATTGGTCGTAGTGAAACTTACAGGCATTACACAGACTCAGTGAGGGGCCGGTTCACCATCTCCAGAGACGACGCCCAGAACTCACTGTATCTGGAAATGAACAACCTGAGAGGCGAAGACACGGCGCTTTATTACTGTGCGAGAGGGGCTTTCGATCGATCCTTTGACTGGTTCTATTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCGG
004	p134w21	6	*IGHV*	CCCCAGAACGGCCCTGGAGTGGCTTGCACTCATTTATGGGGATGGTGATAAGCGCTACAGCCCATCTCTGCAGAGCAGGCTCACTATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACATTGACCAACATGGACCCTCTGGACACAGCCACATATTACTGTGCACACAGAGATCTTTTGAGTGGTTATGGGCACTACTACGGTTTGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p134w22		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCTCTGTCTCTGGTGTCTCCCTGAGCGGTGGTAGTTACACCTGGAATTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTTTACCAGTGGGAGCACCAACTACAACCCCTCCCTCAAGGGTCGACTCACCATGTCAATAGACACGTCCAAGAACCAGCTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTATTGTGTCGCCGACTACTACTACTCCGTTCCGGACGTCTGGGGCCAGGGGACCCCGGTCACCGTCTCCTCA
004	p134w23		*IGHV*	GGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGACTCACCTTTAGCAGTTATGCCATGAGCTGGGTCCGTCAGGCTCCAGGGGAGGGGCCGGAGTGGGTCTCGGGCATTGATGAAAGTGGTGATCACACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATTTCCAGAGACAATTCTAAGAACACAGTGAGTCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTATATTACTGTGCGAAAGAAAGGGCAGCAGTTGGTGTTCCCCTCTTTGAC
004	p134w26		*IGHV*	GCGGTGCAATTGTTGGAATCTGGGGGAGGCTTGGTACAGCCGGGGGGATGCCCTGAGACTCTCCTGCGCAGCCTCTGGATTCAGCTTTAATGCCTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCACGTGTCACCAGTAGTGGTCTTGACATAGACTACGCAGACTCCGCGAAGGGCCGGTTCATCGTCTCCAGAGACAATTCCAAGGACACTCTGTATTTACAAATGAACAGTCTGAGAGTCGAGGACACGGCCACATATTACTGTGCGAAAGTTTGGGCCCTCAGTTTCGGGGACGCCGACAGACCATCTTCTATTATGGTATGGACGTCTGGGGCCAGGGGAGCCACGGTCACCGTCTCCTCAG
004	p134w27		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTTCATCAGCAGTGGCGGTTACTACTGGAGCTGGATCCGCCAGCTCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGACCACCTACTACAACCCGTCCCTCAAGAGTCGACTTATTATGTCAGTAGACACGTCTAAGAACCAGTTCTCCCTGAGGCTGAGCTCTATGACTGCCGCGGACACGGCCGTGTACTACTGTGCGAGAGGAAGGGTTAGCAGCAACTGGTATCGCGCTGAATACTTCCAGGAATGGGGCCAGGGCACCCTGGTCAGCGTCTCCTCAG
004	p134w30		*IGHV*	CAAGTTCAGCTGGTGCAGTCTGGAACTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTTCACATTACACAGTTATGGTATCAGTTGGGTGCGACAGGCCCCTGGACAAGGGCTAGAGTGGATGGGATGGATCAGCGCTTACAAGGGTGACACAAACTATGCACAGAACTTCCAGGGCAGAGTCACCATGACCACAGACACATTATTGACCACAGCCTACATGGAATTGAGGAGCCTGAGATCTGACGACACGGCCGTGTATTACTGTGCGAG

004	p134w31		IGHV	CAGGTCCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTGGTTACTTCTGGAGCTGGATCCGCCAGTACCCAGGGAAGGGCCTTGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTTCTACAATCCGTCCCTCAAGAGTCGACTTAGCATAGCACTGGACACGTCTAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACTGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGATCGGGTCTTTGGGCAGTTGGTACCGGACTACTTTGACTACTGGGGCCAGGGAACCCCGGTCACCGTCTCCTCAG
004	p134w33		IGHV	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAACCTCTGGATTCACCTTTGGTGATTATGCAATGAACTGGTTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAAAACCTACCGTTGTGGTGGGGCAACACAATACGCCGCGTCTGTGGAAGGCAGATTCTCCATCTCAAGAGATGATGCCAGAGGTGTCGCCTATCTGGAAATGAACGACCTGAAAACCGAAGACACAGCCTTGTATTACTGTTCAATCGGGAGCGAAGGCTTTTGGGGCCAGGGAACGCTGGTCACCGTCTCCCCAG
004	p134w34		IGHV	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTAAAACCCACAGAGACCCTCACGCTGACCTGCACCGTTTCTGGATTCTCACTCAGCATTCCTAGAATGGGTGTGAGTTGGATCCGTCAGCCCCCAGGGAAGGCCCTGGAGTGGCTTGCACATATTTTTTCCAATGACGAAAAATCTTACAGCACATCTCTGAAGAGCAGACTCACCATCTCTAAGGACGCCTCCAAAAGCCAGGTGGTCCTTACCATGACCAACCTGAACCCTGCGGACACAGCCACATATTTCTGTGCACGGAGAGTCCGCTATGATGGGCGCTACTCGGCTGTTCACTACTTTGACTACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
004	p134w37		IGHV	CAGATCACCTTGAAGGAGTCTGGTCCTACCCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCATCTTCTCTGGGTTCTCACTCACCACTAGTAGAGTGGGTGTGGGCTGGATCCGTCGGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCACTCGTTTATTGGGATGATAGTAAGCGTTACAATCCATCTCTGAAGAGCAGGGTCACCATCACCAGGGACACCTCCAAAGACCAGGTAATCCTTACAATGACCAACATGGACCCTGTGGACACAGCCACATATTTCTGTGCACACATTACGGTGACTACGGTCGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w38		IGHV	CAGATCACCCTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCACCTCTAGTGGAGAGGTTGTGAGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCACTCATTTATGGGGATGGTGATAAGCGCTACAGCCCATCTCTGCAGAGCAGGCTCACTATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACATTGACCAACATGGACCCTCTGGACACAGCCACATATTACTGTGCACACAGAGATCTTTTGAGTGGTTATGGGCACTACTACGGTTTGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p134w46		IGHV	CAGTTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCCTCGGAGACCCTGTCCCTCACCTGCACTGTCTCGGGTGGCTCCATCAGCAGTAGCAACTGTTACTGGGGCTGGATCCGCCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGAGTATCTATTATAGTGGGAGCACCTATTACAACCCGTCCCTCGAGAGTCGAGTCCTGATGGACGCTGACACGTCCAAGAACCAGTTCTCCCTGGACCTGAGCTCTGTGACCGCCGCAGACACGGCTGTCTATTATTGTGCGCGACATGGCACTGTCTACGATCTACAGGGTTTTAATATGTGGGGCCAAGGGAAAATGGTCACCGTCTCTTCAG
004	p134w47	10	IGHV	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTGGTAGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGACTATCTATTATAGTGAGACCACCTACTACAACCCGTCCGTCAAGAGTCGAGTCACCATATCCGTGGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTCTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACAAATAGTAGTGGCTGGTTCAGGGGCTTTCGGAGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCT
004	p134w48		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTTCATCAGCAGTGGCGGTTACTACTGGAGCTGGATCCGCCAGCTCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGACCACCTACTACAACCCGTCCCTCAAGAGTCGACTTATTATGTCAGTAGACACGTCTAAGAACCAGTTCTCCCTGAGGCTGAGCTCTATGACTGCCGCGGACACGGCCGTGTACTACTGTGCGAGAGGAAGGGTTAGCAGCAACTGGTATCGCGCTGAATACTTCCAGGAATGGGGCCAGGGCACCCTGGTCAGCGTCTCCTCAG
004	p134w54		IGHV	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTATAACATGAACTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATCAGTAGTAGTAGTATTTACATATACTACGCAGACTCAGTGAAGGGCCGGTTCACCATCTCCAGAGACAACGCCGAGAACTCACTGTATCTGCAAATGAGCAGCCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCGAGAGACTCCGCACTGGGGAAAGGAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p134w55		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTTCATCAGCAGTGGCGGTTACTACTGGAGCTGGATCCGCCAGCTCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGACCACCTACTACAACCCGTCCCTCAAGAGTCGACTTATTATGTCAGTAGACACGTCTAAGAACCAGTTCTCCCTGAGGCTGAGCTCTATGACTGCCGCGGACACGGCCGTGTACTACTGTGCGAGAGGAAGGGTTAGCAGCAACTGGTATCGCGCTGAATACTTCCAGGAATGGGGCCAGGGCACCCTGGTCAGCGTCTCCTCAG
004	p134w57	11	IGHV	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTTCTGCCGGTGACACATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCC

| 004 | p134w60 | *IGHV* | GAGGTGCAGCTGGTGGACTCTGGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTCAC
TATACCATGAACTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCGTCCATTACTAGTACTAGCAATTTCATATACTACGCAGACT
CGGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTCTATCTGCAGATGAACAGCCTGAGAGTCGACGACACGGCTGTATA
TTACTGTGCGAGAATCTGGGGAGGAGTCTCTTCCACGGCGGGCTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |
| 004 | p134w7 | *IGHV* | CAGATGAAGCTGCAGGAGTCGGGCCCAGGACTGGTGAGGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATAAATACT
CATTACTGGAGTTGGATCCGGCAGGCCCCGGGGGGCGGGCTGGAGTGGATTGGGCAAGTCTCTGGCGGTGGGCGCGCCGAATATAGCCCCTT
CCTCAAGAGTCGCGTCACCATGTCAGTGGACACGTCCAGGAGCCAGTTCTCACTGGAGCTGACCTCTGTGACCACTGCAGACACGGCCGTCTAT
TATTGTGCCGCCATGACATTTTACGATTACTGGAGCGACTTTCGCACTCGTTTTGATGCTTTTGATCTGTGGGGCCGAGGGACCCTGGTCACCGT
CTCTTCAG |
| 004 | p134w8 | *IGHV* | TCTCCTGCGTAGGGTCTGGATTCGACATTGGTGACTCTTGGATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAATGGGTGGCCAACA
TAAAGGCGGATGGAAGTGAGGAATTCTATGTGGACTCTGTGAAGGGCCGATTCACCGTCTCCAGAGACAACACCAAGAACTCACTATTTCTGCAA
ATGAGCAGCCTGAGAGTCGAGGACACGGCTGTCTATTATTGTACGGCTGGACACTATACTCTATGGGGTCAGGGAACCCTGGTCACCGTCTCGT
CAG |
| 004 | p134w9 | *IGHV* | CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT
AGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTGTGTCTTATAGTGGGAGTACCTACTACAACCCG
TCCCTCAACAATCGAGTCACCATTTCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTATGT
ATTACTGTGCGAGACATAAATTCGATCACAACAGCTGGTACGTTGGCTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCA
G |
| 004 | p134w90 | *IGHV* | GATGTGCAGTTGGTGGAGTCTGGGGGAGGCCTGGTCCAGCCGGGGGGGTCCTCGAGACTCTCTTGTTCAGCCTCTGGATTCATCTTCAGCACCC
ATTCTATGTACTGGGTCCGCCAGGCTCCAGGGCGGGGACTGGAATATGTTGCAGGTCTCAATTACGATGGGACAGTCCCTAATTACGGAGACTC
CATGCGGGGCAGATTCACCATCTCCAGAGACAATTCCAGGAGTATCCTATATCTTCAAATGAACGGTCTGAGAGTTGAGGACACGGCTCTATATC
ACTGTGTGAAAATTCAGATGGAGGTGAATACCATGGTATACTTTGGCTCTTGGGGGCAGGGAGCCCTGGTCACCGTCTCCGCAG |
| 004 | p134w93 | *IGHV* | GAGGCGCAGCTGGTGGAATCTGGGGGGAAGCCTGGTCCAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAGTTTCAGTGAC
CACTACATGGACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTGGCCGGATTAGAAATAAAGCTAACAGTTACATTACAGATTATG
TCGCGCTTGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAGAATTCATTGTACCTGCAAATGAACGGCCTGAAAACCGAGGACACGGCC
GTGTATTATTGTGCTAGAGTCCGTAAGGGAGATGTCGATTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCGCAG |
| 004 | p135w107 | *IGHV* | CAGGCGCAGTTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCGGGGGAGGTCCCTGAGACTCTCCTGTGCAGTGTCTGGAATCAGTTTCAGTGA
CTATGGCATGCACTGGGTCCGCCAGGCTCCTGGCAAGGGGCTGGAGTGGGTGGCAGTTGTGTGGCATGATGGAAGTACTAAATATTATGTAGA
CTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAATACGCTGTATCTGCAAATGAACGGCGTGAGAGCCGAGGACACGGCTGTG
TATTACTGTGCGAGAGGATCTACGGTGGCGCTTGAGTACTGGGGCCAGGGAACTCTGGTCACCGTCTCCTCAG |
| 004 | p135w111 | *IGHV* | AATTACAACCCGTCCCTCGGGAGTCGACTCACCATGTCCCTAGACAAGTCCAAGAACGAGTTCTCCCTGAACCTGAGGTCTGTGACCGCCGCGG
ACACGGCCGTCTATTATTGTGTGAGGGGGCTTCAGAAGGCAGTGTATAGTACTGGGTGGTACTCGAGCAGGAGACACGAATTTCGTTACTACTA
CTACGGTATGGACGTCTGGGGCCAAGGGACCGCGGTCATCGTCTCCTCA |
| 004 | p135w113 | *IGHV* | CAGGTGGACTTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGTAGCGTCGGGATTCACCTTCAGAGA
CTATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAATGGGTGGCTTTTATCTCTTACAATGGAGCTGTTAAACATTCTGCAGAC
TCCGTGAAGGGCCGATTCACCGTCTCCCGAGACAATTCCAAGAACACAATCTATCTAGAAATGAGCAGTCTGACAACTGACGACACGGCTTTTTA
CTACTGTGCGAAGGTCCGTTTTCAATATTACAGCAACTCCTTATACTACTCTGACTACTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCTG |
| 004 | p135w114 | *IGHV* | CAAGTGCAGCTGCAGGAGTCGGGCCCAGGCCTGGTGAAGGCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCATCAGCAGT
GGTAGTTATTCCTGGAGCTGGGTCCGGCGGCCCGCCGGGAAGGGACTTGAGTGGATTGGGCGTATCTCTGCCAGTGGGTACACCAACTACAAC
CCCTCCCTCAGCAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAACTTGAGCTCTGTGACCGCCGCAGACACGGCCG
TATATTACTGTGCGACTACATATTGGTATGATATCGTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |
| 004 | p135w118 | *IGHV* | CAGGTACAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGGAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGC
AACAGTGCTGCTTGGATCTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCAAGTGGTATAATGATT
ATGCAGTGTCTGTTAAAAGTCGAATAATCATCAACCCAGACACATCCAACAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTCCCGAGGACACG
GCTGTCTATTACTGTGCAAGAGATCGCTCCGGGTATACCGGCAGTTTTTTTCCGACCTTACTTCTACTACGGTATGGACGTCTGGGGCCAAGGGA
CCACGGTCACCGTCTCTTCA |

004	p135w12		*IGHV*	TGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGTGTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w122		*IGHV*	CAGGTTCAGTTGGTGCAGTCAGGAGGTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTATCCCTTTTCCAATTATGCTATCACCTGGGTGCGACAGGCCCCTGGACAAGGACTTGAGTGGATGGGATGGGTCAGCGGTTACAATGGTGACACAAAATATGCACAGAAACTTCAGGGCAGAGTCACCATGACCAAAGACACATCCACGAACACAGCCTACATGGACTTGAGGAGCCTGACATCTGACGACACGGCCGTCTATTACTGTGCGAGAGTCGCCTATGCCCAGATTGGGTGGGACTACTGGGGCCAGGGAAGCCTGGTCACCGTCTCCTCAG
004	p135w125		*IGHV*	CAAGTGCAGCTGCAGGAGTCGGGGCCCAGGCCTGGTGAAGGCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGTCTCCATCAGCAGTGGTAGTTACTCCTGGACCTGGATCCGGCGGCCCGCCGGGAAGGGGCTGGAGTGGATTGGGCGTATCTCTGCCAGTGGATACACCAACTACAACCCCTCCCTCATGAGTCGAGTCACCATTTCAGTGGACACGTCCAAGAACCAGTTCTCCCTGAGCTTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTACTACTGTGGGAGTTCGTATTGGTATGACATCGTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w126		*IGHV*	TGAGGTGAGGAAGCCTGGGTCTTCGGTTAAGGTCTCCTGCAAGGCCTCTGGAGGCGCCTCCAGCACCTATGCTGTCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCATTCCTAGATTTGGTACACCTACCTACGCCCGGAAGTTCCAGGGCAGAATCATGATTGCCGCGGACCAATTGACGAGCACTGTGTTTATGGAGCTGCGCAGCCTGAGATCTGAGGACTCGGCCGTATATTATTGTGCGAGCGCAGGATATAGTGGCTACGACTTGGCCACTGACTACTGGAGTCAGGGAACCCAGGTCACCGTCTCCTCAG
004	p135w128		*IGHV*	GAAGTGCAGTTGGTGGAGTCTGGGGGAGCCGTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGATTATACCATGCACTGGGTCCGTCAAGCTCCGGGGAAGGGTCTGGAGTGGGTCTCTCTTATTAGTTGGGATGGTTATACCACATACTATGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACTACAGCAAAAACTCCCTGTATCTGCAAATGAACAGTCTGACAACTGAGGACACCGCCTTGTATTACTGTGCAAAAGATATGACCAGGGGCCTGCGATTGGGGATTTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w131		*IGHV*	GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGCGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGGTTCTGGATACGACTTCAATAACTACTGGATCGGCTGGGTGCGACAGATGTCCGGGAAAGGCCTGGAGTGGGTGGGTTTCATCTATCCCCATGACTCTGACGTCAGATACAGCCCGTCCTTCAGAGGCCAGGTCACCATCTCAGCCGACCAGTCCACCACCACCGCCTCCCTGCAGTGGAGCAGCCTGAGGGCCTCGGACAGCGGCGTGTATTACTGTGCGACAGCGATCGGGTCCCCTTTTTTTGTGTTGATGCAAGTTGCTACTCGGCCTTTGACTACTGGGGCCTGGGAACCCAGGTCACCGTCTCCTCAG
004	p135w15		*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGGAAAAGGTCTGGAGTGGGTCGCAATTATTGGTTCTGCCGGTGACACATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAACTCCTTATATCTTCACATGAACAGCCTGACAGCCGGGGACACGGCTGTGTATTACTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
004	p135w19		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGTTTCACCTTCAGTAACTATGACATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAATGGGTGGCAGTTATTTCATTTGATGGAACTAATAAGTACTATGCAGGGTCCGTGCAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAGATGAACAGCCTGAGCGCTGAGGACACGGCTGTCTATTACTGTGCGAAAGATCGTAAGGTCCCGAACCCCTATAAGTGGAACCCCGGGATATTTGGAAATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w20		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGGCTTCGGAGACCCTGTCCCTCACCTGCATTGTCTCTGGTGGCTTCGTCAGTAGTTATTATTGGAGTTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTATACCTCCTTCAGTGGGATGACCAACTACAACCCCTCCTTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAGGAACCACTTCGCCCTGAAGCTGAGTTCTGTGACCGCTGCGGACACGGCCGTGTATTATTGTGCGAGAGTTAGTATGATTCGGGGGACCTATCAAGTATGGAATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p135w22		*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTTCTGCCGGTGACACATACTATTCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAACTCCTTATATCTTCACATGAACAGCCTGACAGCCGGGGACACGGCTGTGTATTACTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
004	p135w23	26	*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTTCTGCCGGTGACACATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAACTCCTTATATCTTCACATGAACAGCCTGACAGCCGGGGACACGGCTGTGTATTACTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG

004	p135w26		*IGHV*	CAGGTGCAACTGGTGGAGTCTGGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCCGGATTCAGTTTCAGTAGTTATGGCATGCATTGGGTCCGCCAGGCTCCAGGCAAGGGCCTGGAGTGGGTGGCAGGTATCTCAAATGATAAGTATACCACAAACTATGCAGACTCTGTGATGGGCCGATTCACCGTCTCCAGAGACAATTCCAGGAAGACGCTTTATCTGCAAATGGATAGCCTAAGACGAGAGGACACGGCTATGTATTATTGTACGAAAGAGATTTCAAGGCCCACCCTCGGAAGAAGGGCGGGTAACGAAGACTACGGAATGGACATCTGGGGCCAAGGGACCACAGTCACCGTCTCCTCA
004	p135w27	9	*IGHV*	GGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCTCTGTCTCTGGTGTCTCCCTGAGCGGTGGTAGTTACACCTGGAATTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTTTACCAGTGGGAGCACCAACTACAACCCCTCCCTCAAGGGTCGACTCACCATGTCAATAGACACGTCCAAGAACCAGCTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTATTGTGTCGCCGACTACTACTACTCCGTTCCGGACGTCTGGGGGCCAGGGGACCCCGGTCACCGTCTCCTCA
004	p135w28		*IGHV*	GAGGTGCAACTGTTGGAGTCTGGGGGGAGGCTTGGTACAGCCTGGGGAGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGCGGCTATGCCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCGACTATTAGTACTGGTGGTGGTACCACATACTACGCAGACTCCGTGAAGGGCCGGTTCGCCATCTCCAGAGACAATTCCAAGAACACTCTGTATCTACAAATGTACAGCCTGAGAGCCGAGGACTCGGCCGTATATTACTGTGTGACAGATCCCTACTGGGGATGGGTCCCTAACTACCTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w31		*IGHV*	CAAGTCCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACACCATCAGTAGTAGTGGTTACTTCTGGAGCTGGATCCGCCAGTTCCCAGGGAAGGGCCTTGAGTGGATTGGTTTCATCTATTACAGTGGGTACACTTTCTACAATCCGTCCCTCAAGAGTCGACTCAGCATAGCCCTGGACACGTCTAAGAACCAATTCTCCCTGAGGCTGACCTCTGTGACTGCCGCGGACACGGCCATTTATTACTGTGCGAGAGATCGGGTCTTTGGGCAGTTGGTGCCGGACTACTTTGACTACTGGGGCCAGGGAGCCCCGGTCACCGTCTCCTCAG
004	p135w34		*IGHV*	ACAGCAGTGGGGCGCAGGAATGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTGTATAGTGGGTCCTTCGAGGGCTACTACTGGACCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAAAATCAATCATAGTGGAAGCACCAGCTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGTCACGTCCAAGGCCCAGTTCTCCCTGAACCTGAACTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGCTATGACTATAGTCCAAACTGGCTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTGC
004	p135w36		*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCATCGGAGACCCTGTCCCTCACCTGCGCTGTGTATAGAGGGTCCTTCGAGGGCTACTACTGGAGCTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGAAAAATCAATCATAGTGGAAGCACCAGCTACAACCCGTCCCTCAAGAGTCGTGTCACCATATCAGTGGTCACGTCCAAGGCCCAGTTCTCCCTGAACCTGAGGTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGTATGACTATAGTCCACATTGGCTCGACCCCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
004	p135w38		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCATCAGCAGTACTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGACTGGATTGGGAGTATCTCTTATAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAGGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGTTTATTACTGTGCGAGACATAACAGCCGTATAGCTGCAGCTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w46		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGATCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGAATTCAGCGTCAGTAACAACTACATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCACTTTTTTATAGCGATGGTGACACCTACTCCGCAGACTCCGTGAAGGGCCGATTCACCATTTCCAGAGACGATTCCAAGAACACCCTGTATCTCCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTATTACTGTGCGAGAGTCCGCGTTGAGATGGGTACAATTTATTCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
004	p135w47		*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCATCGGAGACCCTGTCCCTCACCTGCGCTGTGTATAGAGGGTCCTTCGAGGGCTACTACTGGAGCTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGAAAAATCAATCATAGTGGAAGCACCAGCTACAACCCGTCCCTCAAGAGTCGTGTCACCATATCAGTGGTCACGTCCAAGGCCCAGTTCTCCCTGAACCTGAGGTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGGTATGACTATAGTCCACATTGGCTCGACCCCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
004	p135w48		*IGHV*	GAGGCGCAACTGGTGGAGTCTGGAGGAGGCTTGATCCAGCCTGGGGGTCCGTCGAGACTCTCCTGTGCAGCCTCTGGATTCTCCGTCAGCAGTGCCTATTTGGGCTGGGTCCGCCAGCCTCTAGGGAAGGGGCTGGAGTGGCTCTCAGTTACTTATAGCGGCGGCAGCACATTCTACGCAGAGTCCGTGAAGGGCCGATTCACCGTCTCTAGAGACAATTCGAAGAACACGCTGTCTCTTCAAATGAACGGCCTGAGAGTCGAGGACACGGCCGTGTATTTCTGTGCGAGAGTGGGACAGTATTACGAATATTGGAGGGGGTTCTTATTCGGACCCGTACTTTGACACCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p135w52		*IGHV*	CAGGTGCAACTGGTGGAGTCGGGGGGGAGGCGTGGTCCAGCCTGGGGGGGTCCCTGAGACTCTCTTGCACAGCGTCTGGGTTCACCTTCATTGACTATGGCTTCCACTGGGTCCGCCAGGCTCCGGGCAAGGGGCTGGAGTGGGTGGCAACTATTTGGTATGATGGAAGAAGTAAATTCTATGCAGACTCCGTGACGGGCCGATTCACCATCTCCAGAGACAATTCCCAGAACACACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTTTATTTCTGTGCGGGAGGGCCCAACTGGGGATCTTGGTCCAAACTCCTCGGCATTGACTTCTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG

| 004 | p135w55 | 8 | *IGHV* | GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAATTCCTTATATCTTCACATGAACAGCCTCATAGCCGGGGACACGGCTGTGTATTACTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCGCCCTGGTCACTGTCTCCTCAG |

| 004 | p135w58 | | *IGHV* | CAGGTTCAACTGGTGCAGTCTGGAGGTGAGGTGAAGAAGCCTGGGGCCTCAGTGAGGGTCTCCTGTAAGACTTCTGGTTACGACATCAGCAAGCCTGGGATCAGTTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCCTATACAATGGCGACACAAACTATGCACAGAAGTTCCAAGACAGAGTCACCATGACCGCAGACACATCCACGAGGACAGTCTACATGGAGCTGAGGAGCCTGAGATCTGACGACGCGGCCATGTATTACTGTGCGAGAGATCCGGCCTATAGCACCACCGAGTTTACCTACTCGTACTCCGGCATGGACGTCTGGGGCCAAGGGACCGCGGTCACCGTCTCCTCA |

| 004 | p135w60 | | *IGHV* | GAGGTGCAGATGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGGAGCCTCTGGATTCACCTTTAGTGACTATGCCATGTCCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGCTATTGCTCCTACTAATGGTAGGACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTACAGGAATACGCTGTTTCTGCAGATGAACAGCCTGAGAGCCGAGGACACGGCCATATATTACTGTGCGAAAATGTCTGCATACAATTCTGCTTATTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 004 | p135w7 | | *IGHV* | CAGGTGCAGCTGCGGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGCCTCCATCGCCAGCGGTCGTAACTACTGGAACTGGATCCGCCAGCACCCAGGGGAGGGCCTGGAGTGGATTGGGTATATTTATAATAGTGGCAGCACCTACTACAACCCGTCCCTCAAGAGTCGACTTTCCATATCAGTGGACACGTCTAAGAACCAATTCTCCCTGAAGCTGAGCTCTGTGACTGCCGCGGACACGGCCGTGTACTATTGTGCGAGAATGACTACGCTGACCCCCTTTCGACTTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 004 | p135w72 | | *IGHV* | GAGGTGCAGATGTTGGAGTCTGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGGAGCCTCTGGATTCACCTTTAGTGACTATGCCATGTCCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGCTATTGCTCCTACTAATGGTAGGACATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTACAGGAATACGCTGTTTCTGCAGATGAACAGCCTGAGAGCCGAGGACACGGCCATATATTACTGTGCGAAAATGTCTGCATACAATTCTGCTTATTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 004 | p135w8 | | *IGHV* | CAGCTGCAGCTGCAGGAGTCGGGCCCAGGAGTGGTGAAGCCTTCGGAGACCCTGTCCCTCATTTGCAGTGTCTCTGGTGGCTCCATCACCAGTAGTAGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATGAATGATGGTGGGAACCACTACCACAACCCGTCCCTCAAGAGTCGAGTCACCATGTCCGTAGACACGTCCAAGAATCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACATAAGTTGCGAGATTGGAGCACCTGGACACCTAACAACTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG |

| 004 | p135w9 | | *IGHV* | CAGGTCCAACTGCAGGAGTCGGGCCCAGGCCTGGTGGAGCCGTCGGAGACCCTGTCCCTCAGCTGCAGTGTCTCTGGTAGTTCCATCACAAATAGTAACTATTATTGGGCCTGGATTCGCCAGGTCCCAGGGAAGGGTCTGGAATGGATTGGCAGTGTCTATTATAGTGGCTCCTACTACAACCCGTCTCTCGAGAGTCGTCTCAGCCTGTCGAAAGACACGTCCAAGAATGAATTCTCCCTGAAGTTGCTCTCTGTGACCGCCGCAGACTCGGCTATTTATTACTGCGCGAGGACCCTCTACACTTATGGCCGTCACTATTTTGACTTCTGGGGCCAGGGCACCCTGGTCACCGTCGCCTCAG |

| 004 | p135w90 | | *IGHV* | GAGGTGCACCTAGTGCAGTCTGGAGCAGAGCTGAGAGAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGCTTCTGGATACATCTTTTCCAACTACTGGGTCGGCTGGGTGCGCCAGGTGCCCGGGGGTGGCCTGGAGTGGATGGGGAACATCCACCCCGAGGACTCTAGAACCTTCTACAGCCCGTCCTTCGAGGGCCACGTTACCATCTCAGCCGACGGGTCCACCAGCACCGCCTACCTCCAGTGGAGTAGCCTGAAGGCCTCGGACACCGCCATGTATTACTGTGCGACTTGGAATAAAAGCAACTGGTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCGTCTCAG |

| 004 | p135w91 | | *IGHV* | GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAACTCCCTGTATCTTCACATGAGCAGCCTAACAGCCGGGGACACGGCTGTGTATTACTGTACAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGAGGCACCCTGGTCACTGTCTCCTCAG |

| 004 | p135w92 | | *IGHV* | CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTATGACATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAAGTAATAAGTACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGCGCTGAGGACACGGCTGTCTATTACTGTGCGAAAGA |

| 004 | p135w93 | | *IGHV* | CAGGTGCAGTTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTTACTCCATCGACAGAGGTAGTTACTCCTGGGACTGGATCCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTATCTCTGCCAGTGGGTACAGCAATTACAATCCCTCCCTCAAGAGTCGCGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAACTCTGTGACCGCCGCAGACACGGCCGTCTACTACTGCTCGGGGGGCCTACTTCTACTCCGTTGTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA |

004	p136w10	*IGHV*	CAGGTGCACCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCCACCAC TATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTACAACATATGATGGCAGTAAGAAATACTATGCAGAC TCCGTGAGGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAGCAGCCTGACAGCTGAGGACACGGCTGTGT ATTATTGTGCGAATTATTATTTGGATGGTAGTGGTTCTCCGACCCTTCAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w101	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTGGT AGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGACTATCTATTATAGTGAGACCACCTACTACAACCCGT CCGTCAAGAGTCGAGTCACCATATCCGTGGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTCTGACCGCCGCAGACACGGCTGTGTA TTACTGTGCGAGACAAATAGTAGTGGCTGGTTCAGGGGCTTTCGGAGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCT
004	p136w106	*IGHV*	CAACTGCAGCTGCAAGAGTCGGGCCCAGGACAGGTGGAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT ACTAGGAGCTATTGGGGCTGGATCCGCCAGCCCCCCGGCAAGGGGCTGGAGTGGCTTGGCAGTATATATTATCTTGGGGGGACGTACCAGAAC CCGTCCCTCAGGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGGTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCAGACACGGCT GTGTATTACTGTGCGAGAGGCCCGGGTGATTTTTGGAGTGGCGTCACCTACTTTCACGACTGGGGCCTGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w107	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTA GTGGAGTGGGTGTGGGCTGGATCCGTCAGCCCCAGAACGGCCCTGGAGTGGCTTGCAGTCATTTATTGGGATGATGATAAGCGCTACAGCCCA TCTCTGAAGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGGCACAT ATTACTGTGCACACA
004	p136w108	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGATTTCCTGCAAGACATCTGGATACAGCTTCGCCAGT TATTATATTCACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAATAATCAACCCTAGCAATGGTCGCACAAGTTACGCACAGA AGTTCCAGGGCAGAGTCACCATGACCTGCGACACGTCCACGAGCGCAGTCTACATGGAAGTCAATAGTCTGAGATCCGAGGACGTGGCCGTCT ATTACTGTGCGAGAGTTCCGGGTAGCGGCGACTGGTGGTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w11	*IGHV*	CAACTGCAGCTGCACGAGTCGGGCCCAGGACTGATGAAACCTTCGGAAACCCTGTCTCTCACCTGCTCTGTGTCTGGTGGCTCCATCGGCAATA GTGGTTATCATTGGGGCTGGATCCGCCAGGCCCCAGGGAGGGGACTGGAATGGATTGGGACTGTCTATTATAGTGGGACCACCTACTACAATC CGTCTCTCAGGAGTCGAGTCACCATATCCGTTGACGCGTCCAAGAACCAGTTCGCCCTGGAGCTGACCTCTGTGACCGCCGCAGACACGGCTG TCTATTACTGTGCGAGACATGTCTGTTGTTCGTGGTTCTACTTTAACGTCTGGGGCCTGGGAACCCTGGTCACTGTCTCCTCAG
004	p136w110	*IGHV*	CAGATCACCCTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCACCTCTA GTGGAGAGGTTGTGAGCTGGATCCGTCAGCCCCCAGAACGGCCGCTGGAGTGGCTTGCACTCATTTATGGGGATGGTGATAAGCGCTTCAGTC CATCTCTGCAGAGCAGGCTCACTGTCACCAAGGACACCTCCAAAAACCAGGTGGTCCTCACATTGACCAACATGGACCCTCTGGACACAGCCAC ATATTACTGTGCACACAGAGATCTTTTGACTGGTTATGGTCACTACTACGGTTTGGACGTCTGGGGCCAGGGGACCTCGGTCACCGTCTCCTCA
004	p136w111	*IGHV*	CAAGTACAGTTGCAGCAGTCAGGTCCAGGACTGGTGAGACCCTCGCAGACCCTCTCACTCACCTGTGACATCTCCGGGGACAGTATCTCTAACA TCAATGCTGGTTGGAGCTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGATAAACTACAGGTCCAAGTGGTATAATGATTA TGCAGAATCTGTGAAGAGTCGAATAACCATCAAGGCAGAAACATCCAAGAACCAATTCTCCCTGCACCTGAGAAATGTGACTCCCGAGGACACG GCTGTGTATTACTGTCTAGAGATCGTCCCGCAACTGGGGATCGATGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCTTCAG
004	p136w113	*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAC TACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTATGCAGGCTCCG TGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAATTCCTTATATCTTCACATGAACAGCCTCATAGCCGGGGACACGGCTGTGTATTAC TGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCGCCCTGGTCACTGTCTCC TCAG
004	p136w119	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGACCTGAGGTGAAGAAGTCTGGGGCCTCAGTGAAGGTCTCCTGCAAGACTTCCGGTTACACCTTTGTCAACT ATGGTATCAGTTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCATCCCTTACAATGGTAATGCAGACTATGCACAGAA GTTCCAGGGCAGAGTCACGCTGACCAGAGACACATCCACGAGCACAGCCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTCTA TTATTGTGCGGCAGAGGGCTACACTAGCAATTGGTCCTACTCTCTTGGAAACTATTGGGGCCAGGGAACCTTGGTCAGCGTCTCCTCAG
004	p136w124	*IGHV*	CAGGTGCAGCTTCAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCGTTCAGTGGT CACTCCTGGAACTGGCTCCGCCAGCCCCCAGGCAAGGGGCTGGAGTGGATTGGGGAAGTCAATCCTCGTGGAATCACCAGCTCCAGCCCGTC CCTCAAGAGTCGGGTCACCATATCGCTGGACACATCCAAGAACCAGATCTCCCTGAGGCTGACCTCTCTCAACGCCGCGGACACGGCTGTATAT TACTGTGCGAGACCTTATTGCCATGGTAGTGGTTGCTACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p136w126	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGATCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCGGT AGTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACC CGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGT GTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
004	p136w128	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAACCTGGGGCCTCTGTGGAAATTTCCTGCAAGGCATCTGGATACACCTTCAGCGAG TATTATATGCACTGGGTGCGACAGGCCCCCGGACAAGGGCTGGAGTGGATGGGAATAATCGACCCAAAGAATGGTTACACACGCTTCGCACAG AAGTTTCAGGGCAGGGTCACCGTGACCAGGGACACGTCTACGACCACAGTTTACATGCATCTGGGCAGCCTGAGATCTGAGGACACGGCCATG TATTATTGCGCGAGAGGGTACAGTTATGGTTGGGCCGACGTTTGGGGCCAGGGAACCCTGATAACCGTCTCCTCAG
004	p136w131	*IGHV*	GCGGTGCAACTGGTGGAATCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCAGGCA CAACTACATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTGTTTATAGCGCTGGTCCCACATACTACGCAGACTC CGTGAAGGGCCGATTCACCATCTCCAGAGACGATTCCACGAACACCCTGTCTCTTCAAATGAACGGCCTGAGATTTGAGGACACGGCTGTCTAT TACTGTGCGAGAGGCTATCTCGATGTCACAAATTCCCCCTTCCTTATTGACTATCTGGGCCGGGGAACCCAGGTCACCGTCTCCTCAG
004	p136w132	*IGHV*	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTAAAACCCACAGAGACCCTCACGCTGACCTGCACCGTTTCTGGATTCTCACTCAGCATTC CTAGAATGGGTGTGAGTTGGATCCGTCAGCCCCCAGGGAAGGCCCTGGAGTGGCTTGCACATATTTTTTCCAATGACGAAAAATCTTACAGCAC ATCTCTGAAGAGCAGACTCACCATCTCTAAGGACGCCTCCAAAAGCCAGGTGGTCCTTACCATGACCAACCTGAACCCTGCGGACACAGCCACA TATTTCTGTGCACGGAGAGTCCGCTATGATGGGCGCTACTCGGCTGTTCACTACTTTGACTACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCT CAG
004	p136w133	*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAC TACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTTCTGCCGGTGACACATACTATGCAGGCTCCG TGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAACTCCTTATATCTTCACATGAACAGCCTGACAGCCGGGGACACGGCTGTGTATTA CTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTC CTCAG
004	p136w135	*IGHV*	CAGGTACAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCCAGGCCTCTGGGTACTCCTTCACCGG CTACTATATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGCATGGATCAACCCTAACAGTGGTGGCACAAACTATGCACA GAAGTTTCAGGGCCGGGTCACCGTGACCAGGGACACGTCCATCACCACTGCCCACATGGAACTGACCAGGCTGAGATCTGACGACACGGCCGT ATATTACTGTGCGAGGGACGCACATTACTTTGAAAGTAGTCATTATTCCTTTTCTCATATGGACTACAAGGGAATGGACGTCTGGGGCCAAGGGA CCACGGTCACCGTCTCCTCA
004	p136w136	*IGHV*	CAGGTGCAGTTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGAC CACTACATGAGCTGGATCCGCCAGGCTCCAGGGGAGGGGCTGGAGTGGGTCTCTTACATTAGTGGTAGTAGTGGTTACACAGACTACGCAGAC TCTGTGAAGGGCCAATTCACCATCTCCAGAGACAACGCCCGGAACTTACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTCT ATTACTGTGCGAGAGTAGCAAGGCTACGGTTCGGGGAATTCTTTCCAAACTACTTTGACGTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTC AG
004	p136w137	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCCACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCATTCAGCACTA GTGCAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCACTCATTTATTGGAATGATGATAAGACCTACAGCC CATCTCTGAAGAGCAGACTCACCATCACCAAGGACGCCTCCAAAAACCAGGTGGTCCTTAAAGTGACAAACATGGACCCTGTAGACACAGCCAC ATATTACTGTGCACACAGCCCTTATTGTCGTGGTGGTAGCTGCCATCGATACTACTTTGACTTCTGGGGCCAGGGAGCCCTGGTCACCGTCTCCT CAC
004	p136w142	*IGHV*	CAGGTTCAGTTGGTGCAGTCTGGACCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGACCTCCGGATACAGCTTTACAAATT ACGGTTTTAGTTGGGTGCGACAGGCCCCCGGGACAAGGTCTTGAGTGGATAGGATGGATCAGCGCTTATAATGGTAATCGAAATAATGCAAAGAG TGTCGAGGGCAGAGTCACCATGACCACAGAGACCTCCACCAAGACAGCCTACTTAGAACTGAGGAGCCTCAGATCTGACGACACGGGCGTCTA TTATTGTGCGAGGGATCCCGACACCAGTGGTTGGTATGGCCCAAGAGGGGGCTTGACCACTGGGGCCAGGGAACCCTGATCACCGTCTCCTCT G
004	p136w19	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCGTGAGACTCTCCTGTGCAGCCTCTGGAGTCACCGTCAGTAAC GACTACATCAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAATTATTTATAGTGGTGGTAGCACATACTACGCAGACCCC GTGAAGAGCCGATTCACCATCTCCAGAGACGGTTCCAAGAACACGGTGTATCTTCAATTGAACACCTTGAGACCTGAGGACACGGCTGTGTATTA CTGTGCGAGAGCCGACCGGGGGGACTGGAGATGGGGGGTACTTCTTTGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p136w21		*IGHV*	GAAGTGCGTCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGACTCTCTGAGGATCTCCTGTCAGGGTTCTGGATACACCTTTACCGACT ACTACATCACCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGAGGATTGATCCTAGTGACTCTTATATCAACTACAACCCGTC CTTCCAAGGCCACGTCACCATCTCACTTGACAAGTCCATCAATACTGCCTTCCTTCAGTGGGGCAGCCTGAAGGACTCGGACACCGCCGTGTAT TACTGTGCGAAGGAAGGCACTAACTGGCAGCGGTTTATCGATCTCTGGGGCCGTGGCACCCTCGTCACTGTCTCCTCAG
004	p136w26		*IGHV*	CTGACGATCTCCTGCAAGGGTTCTGGATACACCTTCTCCAGTTATTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATG GCAATCATCCATCCGAGTGACTCTGATACCAGATACAGCCCGGCCTTCCAGGGCCAGGTCACCATCTCAGTCGACAAGTCCGTCAGCACCGCCT ACCTGCAGTGGAACAGCCTGAAGGCCTCGGACACCGCCATTTATTATTGTGCGAGACATGTATATTTTGGGAGTCACTTGGCCGAGCCGGTTTG GCTTGACTACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
004	p136w27	7	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGATCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGGTTCACCGTCACTAGC AACTACATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTTATAGCGGTGGTGGCACATACTACGCAGACTCC GTAAAGGGCCGATTCACCATCTCCAGAGACAATTCCAGGACCACGCTGTATCTTCAGATGAACAGCCTGAGAGACGAAGACACGGCCGTGTATT ATTGTGCGAGGGCAAAGTATAACACTGGCTGGTGGGATGCGTTTGATATCTGGGGCCCAGGGACAATGGTCACCGTCTCCTCAG
004	p136w28		*IGHV*	GAGGTGCAGCTGGTAGAGTCTGGAGGAGGCTTGATCCAGACTGGGGGGTCCCTGAGACTCTCCTGTGCAGACTCCGGATTCATCGTCAGTACC AACTGCATGGCCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAATTATTTATAGCGATGGTCGCACATATTACGCAGACTCC GTGAAGGGCCGATTCACCATCTCCAGAGACACTTACAAGAACAGACTTTATCTTCAAATGAACAGCCTGAGAGCCGACGAAACGGCCGTGTATTA CTGTGTGAGAGTTGGATATAATAGGGGCCCAATTCCCTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p136w30		*IGHV*	CAGATAACCTTGAAGGAGTCCGGTCCTACGCTGGTGAGACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGATTCTCATTCACCACTAT TGGAATGGGTGTGGGCTGGATTCGGCAGCCCCCAGGGAAAGGCCCTGGAGTGGCTTGCACTGATTTATTGGAATGATGATAAGCGCTACAGTCC ATCTCTACAAAGCAGGCTCGCCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTCACAATGACCAACATGGACCCTGTGGACACAGCCCGA TATTATTGTGTACACCCACGGGATGATCCACGGGCACGTGACTACGTTGACTATTGGGGCCAGGGAACCCTGGTCGCCGTCTCCTCAG
004	p136w32		*IGHV*	CAGGTGCATCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT AAGAATTACTACTGGAGTTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATAGGGAGTATGCATTATAGTGGGAACGGCTACGACAAC CCGTCCCTCAAGAGTCGAGCCACCATATACGTGGACACGTCGAAGAACCAGTTCTCACTGATTCTGAACTCTGTGACTGCCGCAGACACGGCTG TCTACTTCTGTGCGAGACAGGACTATGGTGATTACGTTTCCGTCAATTGGTTCGACACCTGGGGCCAGGGAACCCTGGTCCTCGTCTCCTCAG
004	p136w33		*IGHV*	CCTTCAGTAACTACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTAT GCAGGCTCCGTGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAATTCCTTATATCTTCACATGAACAGCCTCATAGCCGGGGACACGG CTGTGTATTACTGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCGCCCTGG TCACTGTCTCCTCAG
004	p136w34		*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCCTTCAGTGGT TACTACTGGACCTGGATCCGCCAGCCCCCAGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATAGTGGAAGCACCAACTACAACCCGTCCC TCAAGAATCGAGTCACCATGTCAGTTGACACGTCCAAGAACCAGTTCTCCCTGGAGCTGACCTCTGTGACCGCCGCGGACACGGCTGTGTATTA CTGTGCGAGGTGGGGGCCGGGGGATTATTGTGGTGGTGCCTGCTATTCGTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w36		*IGHV*	GAGGAGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGCAGC CATAGCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAACTATTACTGGTGATGGTAGGACATACTACGCAGACTCC GTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTATATT ACTGTGCGAAACTGACTGACTGTTGGGGCCAAGGAACCCTGGTCACCGTCTCCTCAG
004	p136w46		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAG CTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTCTCATCCATTAGTGGTGGTGGTAGTTACATATACTACGCAGAC TCAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTCTCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGT ATTACTGTGCGAGAGTCTGGGGGGGGGAGTTATTATTTTGCTTGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w48		*IGHV*	GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCGGGATTCACCTTTAGCGG CTATGTCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGCTATTAGGGGTAGTGGTGATAACACATACTACGCAGA CTCCGTGGAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATTTGCAAATGAACAGTTTGAGAGTCGAGGACACGGCCGTA TATTACTGTGCGAAAGTTCACTCAATGGGGCGAACGGCTTTGAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p136w51	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCCTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGCGACTCCATCAGCAGTGGTGCTTTCTACTGGAACTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGTACATTTATTACAGTGGGGACTACCGACTACAACCCGTCCCTGACGAGTCGAGTAAGCATCTCAGTAGACACGTCTAAGAACCAATTCTCCCTGAAACTGACCTCTGTGACTGCCGCGGACACGGCCGTCTATTACTGTGCGAGCCTCAACGCTTATCGTAGTGGTGAAGCCCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w52	*IGHV*	CAGGTGCGGATACAGCAATGGGGCGCCGGGCTCTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGTGCAGTCTATTCTGAATCATTCAGTGGTTACTCGTGGACCTGGATCCGCCAGCCCCCAGGGCAGGGACTGGAGTGGGGACATCAATTTTTATGGAAAAACCAACTACAATTCGGCCCTCAAGAGCCGAATCACCATATCGGTAGACATCGTGAAGAACCAGTTCTCCCTGAAGTTGAGCTCTGTGACCGCCGCGGACACGGCAATGTATTACTGTGCGGGGGACGCCGAGGACAGAGGGGAACCAGTGGCTGGAATTGAGTTCTGGGGCCAGGGAGGCATGGTCATCGTCTCCTCAG
004	p136w54	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGATCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCGGTAGTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGTGTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w55	*IGHV*	GAGGTGCAGTTGTTGGAATCTGGGGGAGGCTTGGTACAGCCGGGGGGGATCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCCCCTTTAGTACCTATGACATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTATTATTGGCAGTGATGGAAGCACATACTACCCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAAGACTCTTTATTTGCAAATGAGCAGCCTGAGGGCCGAAGACACGGCCGTATATTTCTGTGTGAAAGGGGGTTGGCTTGACGACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
004	p136w58	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCATTGTCTCTGGTGACTCCATCAGCAGTACTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGCATCTCTTATAGTGGGACCACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATTCGTTGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCCATGACCGCCGCAGACACGGCTCTGTATTACTGTGCGAGACATAACACCCGTTTACTTGCATTTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w60	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCGCTTTTAATAGTTATGACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTATTAGTGCTACTTACATATATTACGCAGACTCAGTGAAGGGCCGATTCACCACCTCCAGAGACAACGCCAAGAACTCACTTTATCTGCAAATGAACGGCCTGAGAGTCGAGGACACGGCTGTGTATTACTGTGCGGCATCCTCGTATAGCAGCAGCACGTCAAACCCGTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w7	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACTTGCACTGTCTCTGGTGGGTCCATCAGCAGTGGTAGTTACTACTGGAGCTGGATTCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCATATCTATACCAGTGGGAGCACCAATTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCGGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTACTGTGCGAGACAAAGGTATGACTCTTCCATGGACGTCTGGGGCCGAGGGACCACGGTCACCGTCTCCTCA
004	p136w8	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAACCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTGGTTACTATTGGAGTTGGATCCGCCAGCACCCAGGGAAAGGGCCTGGAGTGGATTGCATTGATGTATTACAGTCGGAGCACGTACTACAACCCGTCCCTCGAGAGTCGAGTTTCCATATCAGAAGACACGTCTAAGAACCAGTTCTCCCTGAAATTGAGGTCTGTGACTGCCGCGGACACGGCCGTGTATTATTGTGCCAGAAATCGGGTCGTTGGGCAGCTGATACCGGACTACTTTGACCTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w90	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCTCCTTCAGTAACTATGACATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAACTAATAAGTACTATACAGGCTCCGTGCAGGGCCGATTCTCCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGACCGCTGAGGACACGGCTGTCTATTACTGTGCGAAAGATCGTAAGGTCCCGAACCCTATAAGTGGAACCCGGGATATTTGAAAATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p136w94	*IGHV*	TCTGGATTCATCCTCAGCAGCTATGCCATGCATTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAATTATATGGTATGATGGAACTGAAAAATATTATGCAGACGCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAGGAACACGCTGTATCTGCAAATGAATAGCCTGGGAGCCGAGGACACGGCTGTGTATTATTGTGCGAGAGATGCGGATATTGTTGTAAGACCAGTCGAGCCAGCGCCCAATTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p137w10	*IGHV*	GAAGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGACGATCTCCTGTAGGGGTTCTGGATACACCTTTTCCAACTACTGGATCACCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGATGGGGAGGATTGATCCTAGTGACTCCTATACCAACTACAACCCGTCCTTCCAAGGCCACGTCTCCATCTCAACTGACAAATCTATCAGCACTGCCTACCTGCACTGGAGCAGCCTGAAGGCCTCGGACACCGCCACCTATTACTGTGTGAGACATGAAGGGAAAGATGGCTACAATTACCAGACTTGGTTCGACCCCTGGGCAGGGGCAAGCCCTGGTCA

004	p137w101	*IGHV*	GAAGTGCAGCTCGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAGGATCTCCTGTCAGGGTTCTGGATACACCTTCACCAGC TACTGGATCAGCTGGGTGCGCCAGGTGCCCGGCAAGGGCCTGGAGTGGATGGGGAGGATTGATCCTGGCGACTCTTATATCAACTACAGTCCG TCCTTCCAAGGCCACGTCACCATCTCAGTTGACAAGTCCATCAACACTGCCTACTTACAGTGGAGCAGCCTGGAGGCCTCGGACACCGCCATGT ATTACTGTGCGAGACTCGGCCGTGTAGCAGCCTCTGTCTGGTTCGACCCCTGGGCCAGGGACCCAGGTCACCGTCTCCTCAG
004	p137w108	*IGHV*	CAGGTGCAGCTGGTGCAGTCAGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGGC TTCTATATGCACTGGGTGCGACAGGCCCCTGGACAAGGATTTGAGTGGATGGGACGGATCAACCCTAACAGTGGTGGCACAAACTATGCACAGA AGTTTCAGGGCAGGGTCACCATGACCAGGGACACGTCCATCAGCACAGCCTATATGGAACTGAGAGGCCTCAGATCTGACGACACGGTCGTTTA TTACTGTGCGAGAGGGTCATATAAGTATGATCGCGGCATGGACGTGTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p137w11	*IGHV*	GAGGTGCTACTGGTGGAGTCGGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAACTTCAGTTCC TATAGCATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCGTCCATTAGTACTAGTAGTAATTCCATATATTACGCAGGCT CAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGACCTCACTGTTTCTGCAAATGAACAGCCTGACAGTCGAAGACACGTCTTTTTAT TTCTGTGCGAGGGGGTCCAAGCCGACTAGATCCGTGGCTGGCCTCTTTGACCTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w113	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAACCCTTCACAGACCCTGTCCCTCACCTGCAGTGTCTCTGGAGACTCCATCACCAGT GGTGGTTACTACTGGAGTTGGGTCCGCCAGCTCCCAGGGGGGGGGCCTGGAGTGGATTGCATTGATGTCTTACAGCCGGAGCACCCACTACAAT CCGTCCCTCGCGAGTCGATCTTTCATATCAGAAGACACGTCCAAGAACCAGTTTTCCCTGAAATTGAGGTCTGTGACTGCCGCGGACACGGCCG TGTATTATTGTGCCAGAAATCGGGTCGTTGGGCAGCTGATACCGGACTACTTTGACCTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w114	*IGHV*	CAGATTCAGCTGATGCAGTCTGGAGCTGAAATGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTACACCTTTGCCAGCT TTGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCACATATAATGGTAACACAAACTATGCACAGAA GCTCCAGGGCAGAGTCACCATGAGCACAGACGCTTCCACGAGTACAGCCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCCTGTA TTACTGTGCGAGAGCATCTCAAGGGGGTTCGGGGAGTTATTATAGTGTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p137w118	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTTAGTTAC GCCTGGATGAATTGGGTCCGCCAGTCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAGAGGTAATGGTGAGACAACAGACTAC GCTGCACCCGTGAAAGGCAGATTCACCATCTCCAGAGATGATTCAAAGAACACACTTTATCTACAAATGAACGCCCTGACAACCGAGGACACAGC CCTATATTACTGTTCCACAGTCCCGTCAAGTGCCAACTGGTACGGCTGGGGTGCGACATTTCACTACTGGGGGCCAGGGATCCCTGGTCACCGT CTCCTCAG
004	p137w119	*IGHV*	CAGGTACAGTTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTACC AACAATGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCAAGTGGTGGAACGAT TATGCAGATTCTGTGGAAAGTCGCATAATCATCAATCCAGACACATCAAGAAACCAGTTCTCCCTGCATCTGAGCTCTGTGACTCCCGAGGACAC CGCAATTTATTACTGTGCAAGGGCAAATGTACTGGTTCGGGGAATTATTAATCCCTTTGACTGCTGGGGCCAGGGAACCCTGGTCACCGTCTCCT CAG
004	p137w122	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGGCTCCATGAAAAGT TATTTTTGGACCTGGGTCCGGCAGCCCCCGGGAAGGGACTGGAGTGGATTGGGTACATCCATCACAGTGGGAACACCAAGTACAACCCGTCCC TCAAGAGTCGAGTCGCCATTTCAGTAGACACGTCCAAGAACCAGTTTTCCCTGAAGTTGAGTTCTGTGACCGCAGCGGACACGGCCGTGTATTAT TGTGCGAGAGATTTAGGATACTCTGATGGTAGTGGTCCAGGGGGGGTTCGACTACTACGGAATGGACGTCTGGGGCCAAGGGACCACGGTCACC GTCTCCTCA
004	p137w124	*IGHV*	CAGCTGCACCTGCAGGAGTCGGGCCCAGGACTGGTGAAGTCTTCGGAGACCCTTTCCCTCACCTGCACTGTCTCTGGAGGCTCCATCACCAGT AACAATTACTACTGGGGCTGGATCCGCCAGTCCCAGGACGGGCGTGGAGTGGATTGGAAGTGTCCATTATACTGGGAACGGCTACTATAACCTG TCCCTCAAGAGTCGACTCACCATATCCGTTGACTCGTCCAAGAATCAGTTCTCCCTGAGGCTGAACTTTGTGACCGCCGCAGACACGGCTGTCTA TTATTGTGTGAGACAGTTGATGGACACAGATATGGGTATGAATTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w125	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGGC TACTTTATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACCCTAACAGTGGTGGCACAAACTATGCACAGA AATTTCAGGACTGGGTCACCATGACCAGGGACACGTCCATCAGCACAGCCTATATGGAGCTGAGCAGGCTGAGATCTGACGACACGGCCGTTTA TTACTGTGCGAGGGACGCATATTACTATGGTACTAGCGGCTATTATTTTTCTCATCAGTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCA CGGTCACCGTCTCCTCA

004	p137w126	*IGHV*	CAGGTGGAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATGGTGGGTCGTTCAGTGAT TTCATCTGGAGCTGGATCCGCCAGTCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATTAATTATAGTGGAAATACCAACTACAACCCGTCCC TCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAATCAGTTCTCCCTGAAGATGAACTCTGTGACCGCCGCGGACACGGCTGTGTATTA CTGTGCGAGAGCCTCATATTGCAGTAGTACCAGATGCTATAACCGATCCTGGTTCGGCCCCTGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w128	*IGHV*	CAGGTCCGCCTTGTGCAGTCTGGGACTGAGGTGAAGAAGCCTGGGACCTCAGTGAGGGTCTCCTGCAAGGCTGATGGACACAGTTTCAGTAGT TATGCTATGCATTGGGTGCGCCAGGCCCCCGGACGAAGGTATGAGTACATGGGACGGGTCAGCCCCGGCAATGGTAAGACAGAGTATTCACAG ACGTTCCAGGACAGAATCACCATTACGAGAGACATATCCGCGCGAACAGTCTACATGGAGTTGAGCGGCCTGAGATCTGAAGACACGGCTGTTT ATTACTGTGCGAGGCAGGGGGAAGCCCGTTTGACGATGTCTGGAGTCCTTATCGAATCCGGTCTGGAACTCTGGGGCCAAGGGACCACGGTCG CCGTCTCCTCA
004	p137w130	*IGHV*	GAAGTGCAACTGGTGGAGTCTGGGGGAGTCGTGATACAGCCTGGGGGGTCCCTGAGACTCTCGTGTACAGCCTCTGGATTCACCTTTAATGATT ATGGCATGCACTGGGTCCGTCAAGCTCCGGGGAAGGGTCTGGAGTGGGTCTCCTTTATTAGCTGGGATGGACGTAGGACAGATTATGTAGACTC TGTGAAGGGCCGCTTCACCATCTCCAGAGACAACGGCAAAAACTCCCTGCATCTGCAAATGAACAGTCTGAGAACTGAGGACACCGCCCTCTAT TATTGTACAAGAACCTGGGGTGGGGGAAGAAGTACTTTGAGTATTGGGGCCAAGGAACCCTGGTCACCGTCTCCTCAG
004	p137w131	*IGHV*	CAGGTGCAGTTGGTGCAGTCTGAGAATGAGGTGCGGACGCCTGGGGCCTCAATAAGGATTGCCTGCAAGGCATCTGGATATGCCTTCACCAGT TATTCTCTCCACTGGGTGCGGCAGGCCCCTGGGCAAGGCCTTGAGTGGCTGGGAATGATCGACCCCCGTGGTGGCAGCACAAGTTCGGCTCAG GATTTCCAGGGCAGACTCATCTTGACAAGGGACACGTCCACGAGTACGGCATATATGGAATTGAGAAACCTGAGATATGAAGACAGGGCCCTTT GTGCGAGAGGATCGGGCATACAAGTATTACCAGATGACTATTGGGGCCAGGGCACCCTGGTCACCGTCTCTGCCG
004	p137w132	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACGCTGTCCCTCACCTGCACTGTCTCTGGTGGCTTCATCAGTGAT TACTATTGGACCTGGATTCGGCAGTCCCCGGGGAAGGGACTGGAATGGATTGGATATATTCATTCCAGCGGGAGCCCCAACTACAACCCCTCCC TCAGGAGTCGAGTCACCATGTCAGTGGACACGTCCAAGAGCCGGTTCTCCCTGACTCTGAGCTCTGTGACCGCCGCGGACACGGCCTTTTATTA CTGTGCGAGAGTTGGTTTGGTTCGGGGACCTATCCCCTATGCGATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p137w135	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACACCTTCACCGGC TACTTTATACACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACCCTAACAGTGGTGGCACAAACTATGCACAGA AATTTCAGGACAGGGTCACCATGACCAGGGACACGTCCATCACCACAGCCTATATGGAGCTGAGCAGGCTGAGATCTGACGACACGGCCGTTTA TTACTGTGCGAGGGACGCATATTACTATGGTACTAGCGGCTATTATTTTTCTCATCAGTACTATTACGGTATGGACGTCTGGGGCCAAGGGACCA CGGTCACCGTCTCCTCA
004	p137w137	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCGACCTATGGATTCACCTTCACTGAC TACTACATGAACTGGATTCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATCCATTAGTAGTGATAGTTATTACACAAACTACGCAGACTC TGTGAAGGGCCGATTCACCATCTCCAGAGACAACGGCAGGAGCTCACTGTTTCTACAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTCTA CTACTGTGCGACAGTATCAAGGCTACGGTTCGGGGAATTCTTTCCAAAATACTTTGATTTCTGGGGTCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w142	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCGGAGACCCTGTCCCTCACCTGCATTGTCTCTGGTGGATTCGTCAGTAGT TACTATTGGACCTGGATCCGGCAGTCCCCAGGGAAGGGACTGGAGTGGATCGGGTATACCTCCTTCAGTGGGATGACCAACTACAACCCCTCC CTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCACTTCGCCCTGAGGCTGAGTTCTGTGACCGCTGCGGACACGGCCGTATATT ACTGTGCGAGAGTTGGTATGATTCGGGGACCCATCATATATGGTTTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTTTTCAG
004	p137w15	*IGHV*	GACATTCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCGGGGGGGTCCCTGATTCTCTCCTGTGCAGGCTCGGGATTTAGTTTCAGTGAT TATTGGATGAGCTGGGTCCGCCAGTCTCCAGGGAGGGGGCTGGAGTGGGTGGCCAACATCAACCAAGATGGAAGTGAGAGACACTATGTGGAC TCTCTGAGGGGCCGTTTCACCATCTCCAGAGACAACGCCAAGAACTTATTATATCTCCACATGAACAGCCTGGGAGCCGAGGACACGGCTGTAT ATTACTGTGCGAGAGGGGAATATAACTGGAACGACGGAGACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w20	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT AGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTGTGTCTTATAGTGGGAGTACCTACTACAACCCG TCCCTCAACAATCGAGTCACCATTTCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTATGT ATTACTGTGCGAGACATAAATTCGATCACAACAGCTGGTACGTTGGCTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCA G
004	p137w21	*IGHV*	TGCTGCTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGTGACTACTA CATGACCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATATATTACTGGTGGTGGTACTACAATATATTATGCAGACTCTGTG AAGGGCCGGTTCACCATCTCCAGGGACAACGCCAAGGCCTCACTGTATCTGCAAATGAGCAATCTAAGAGTCGAAGACACGGCCGTATATTATT GTGCGAGAGGGAACTATGGGTTAGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

004	p137w22	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATGACTGGT TCCTACTGGAACTGGATCCGGCAGCCCCGGGACGGCACTGGAGTGGATTGGGTATATCTTTTACAGTGGGAGCACCAACTACAACCCCTCCCTC AAGAGTCGAGTCACCATGTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCGGACACGGCCGTCTATTACT GTGCGAGAGACGGTATAGTGATGGCTGGACGCTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
004	p137w23	*IGHV*	GCGGTGCAACTGGTGGAATCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCAGGCA CAACTACATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGTTGTTTATAGCGCTGGTCCCACATACTACGCAGACTC CGTGAAGGGCCGATTCACCATCTCCAGAGACGATTCCACGAACACCCTGTCTCTTCAAATGAACGGCCTGAGATTTGAGGACACGGCTGTCTAT TACTGTGCGAGA
004	p137w26	*IGHV*	CAGATCACCCTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCATTCACCTCTA GTGGAGAGGTTGTGAGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGCAGTGGCTTGCACTCATTTATGGGGATGCTGATAAGCGCTACAGCC CATCTCTGCAGGGCAGGCTCACCATCACCAAGGACACCTCCAAAAAGCAGGTGGTCCTTACATTGACCAACATGGACCCTCTGGACACAGCCAC ATATTATTGTGCACACAGAGATCTTTTGAGTGGTTATGGGCACTACTACGGTTTGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
004	p137w27	*IGHV*	GAAGTGCAGCTGGTGCAGTCTGGAGCAGAGGAGAAAAAGCCCGGGGAGTCTCTGAGGATCTCCTGTAAGGCTTCTGGATACACCTTTACCAATA ACTGGATCACCTGGGTGCGCCAGATGCCCGGGAAAGGCACGGAGTGGATGGGAAGGATTAATCCTAGTGACTCTTCTACCGACTACAGCCCGT CCTTCCAAGGCCACATCACCATCTCAACTGACAAGTCCATCGGCACTGCCTACCTGCAGTGGAGCAGCCTGCAGGCCTCGGACAGCGCCATGT ATTACTGTGCGAGGGGTCACGGCTGGTGCGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w28	*IGHV*	CAGGTGTCCCTGCAGGAGTCGGGCCCAGGACTGGTGCAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGTCTCCATCGGCAGG GGTGGTTACCACTGGAACCTAATTCGCCATCGCCCTGGGAAGGGCCTGGAGTGGATTGGGTACATCTTCTACAGCGGGACTACCGAGTACAAC CCGGCCCTGAGGAGTCGAGTGTCCATGTCGGTAGATCTCTCTAAGAACCAATTCTCCCTCAAGCTGAGCTCTGTGACTGCCGCGGACACGGCCA TGTACTACTGTGCGGGTGGAACAGTTAGCAGCAGTTGGTATCGGCCGGAAGCCCTTTACTACTGGGGCCAGGGAGCCCTGGTCACCGTCTCCT CAC
004	p137w30	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGATCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCGGT AGTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACC CGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGT GTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
004	p137w32	*IGHV*	CAGGTGCAGCTGGTGGAATCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCGCTTGTGCAGCCTCAGGATTCACCTTCAGTAGA AATGCCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGGTATGTCATATGATGGGAGTGATAAATATTACGCAGCC TCCGTGAAGGGCCGATTCACCATCTCCAAAGACACTCCCAAGAGCACGATGTATCTGCAGATGGATAGCCTGAGAGCTGACGACACGGCTATAT ATTACTGTGCGAAAGATATTTTAAATTCAGGGCACTTTGACCACTGGGGCCTGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w34	*IGHV*	GAGGTGCAGTTGGTGGAGTCTGGGGGAGGCTTGGTACAACCGGGCAGGTCCCTCAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGAT TATGCCATGAACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAATGGGTCTCAAGTATTAATTGGAACAGTGGTAGTGTGGGCTATGCGGAC TCTGTGAAGGGCCGATTCATCATCTCCAGAGACAACGCCAGGAATTCCCTGTATTTACAGATGAACACTCTGAGAACTGAGGACACGGCCTTATA TTACTGTGCAAAAGACCGGAGGAGCAGTACTGGCTGGCAAAGGGGGACTGCTCTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCCTC AG
004	p137w36	*IGHV*	CAGGTGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAGGACTTCTGGAGCCACCTTCAACAAC TACATCATCACCTGGGTGCGACAGGCCCCTGGACAAGGCCTTGAGTGGATGGGAGAAATCCTCTTTTCTACACCAGTCTACGCACAGGAGTTCC AGGGCAGAGTCACCATTACCGCGGACGAATCCACGAGCACAGCCTACATGGACCTGACCAGCCTGAGATCTGAGGACACGGCCGTCTATTTCT GTGCGAGCGGGCCCTCGTATTGTGCTGGTGGTAACTGCTACACCGCCCTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
004	p137w47	*IGHV*	GTTATGCTATGCAGTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAAGATGTTTCAGCTATTAGTCTTAGTGGCAGTAGCACATACTACGCAGA CTCCGTGAGGGGCAGATTCACCATCTCCAGAGACAATTCCAGGAACACGCTGTATCTTCAAATGAATAGTCTGAGAGCTGAGGACACGGCTGTG TATTATTGTGTGAAAGATGGGGGCCCTAGGGGTTCGGGGAGTACTTATCGTGGCGAGTCTTACTTTGACTACTGGGGCCAGGGAACCCTGGTCA GCCGGTCTCCTC
004	p137w51	*IGHV*	CAGGTGGAGCTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGGGAC TACTACATGAGCTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAATATGTTTCATATATCAGTGGTAATAATGGTTATACAGACTACGCAGACTC TGTGAAGGCCCGGTTCACCATGTCCAGAGACAACGCCGAGAATTCAGTGTCTCTACAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTAT TACTGTGCGAGAGGTAGATGGGGAGCGCACTTCTACTTCGATCTTTGGGGCCGTGGCACCCTCGTCACTGTCTCCTCAG

004	p137w52	*IGHV*	CAGGTGCAACTGGTGCAGTCTGGGGCTGAGGTGAGGAAGCCTGGTTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCTTCAGCACC TATACTATCCACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCATCCCTATCTCCACCACAACAAGCTACGCACAGA AGTTCCAGGGCAGAGTCACGATCACCGCGGACGAGTCCACTAGGACAGCCTTCATGGAACTGAGCAGCCTGAAATCTGACGACACGGCCGTCT ATTACTGCGCGAGCCGTCTGTGTGGTCTTAATGATGGTGGCTGCTACCTGGGGTCCTTTGACTTCTGGGGCCAGGGAACCCTGGTCGCCGTCTC CTCAG
004	p137w58	*IGHV*	CAGGTCCAACTTGTGCAGTCTGGGGCTGAGGCGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACCTTCCCTATCT ATGCTATACATTGGGTGCGCCAGGCCCCCGGACAAGGCCTTGAGTGGGTGGGATGGATCAACGCTGCCCACTGGTCACACAAAATATTCACAGAA CTTCCAGGGCAGAGTCACCATTACCAGGGACACATCCGCGAGCACAGCCTACATGGAGCTGAGCAGCCTGAGATCTGAAGACACGGCTGTGTA TTTCTGTGCGAGACCCCCTTACTCCCGACTACGGTGGTAACCCCACATATGCCTACTTTGACTACTGGGGCCAGGGAACCCTAGTCACCGTCTC CTCAG
004	p137w60	*IGHV*	CAGGTGGAGCTGGCGGAGTCTGGGGGAGGCTTGGTCAACCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGCTTCAGCTTCAGGGA CTACTACATGAGCTGGATCCGCCAGGCTCCAGGGAGGGGGCTGGAATATGTTTCTTACATCAGTGGTAATAGCGGTTACACAAACTACGGAGAC TCTGTGAAGGCCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCAGTGTATCTGCAAATGGACAGCCTGAGAGCCGAGGACACGGCCATGT ATTACTGTGCGAGAGGAAAATGGGGAGCGCACTTCTACTTCGATCTTTGGGGCCGTGGCGCCCTGGTCACTGTCTCCTCAG
004	p137w7	*IGHV*	CAGGCGCAGCTGGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCATTTGGATACACCTTCACCAGA CACTATATCCACTGGGTGCGACAGGCCCCTGGACAAGGG
004	p137w8	*IGHV*	GAGGTCCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAAC TACGACATGCACTGGGTCCGCCAAACTCCAGGAAAAGGTCTGGAATGGGTCGCAATTATTGGTACTGCCGGTGACACATACTATGCAGGCTCCG TGCAGGGCCGATTCACCATCTCCAGAGAGAATGCCAAGAATTCCTTATATCTTCACATGAACAGCCTCATAGCCGGGGACACGGCTGTGTATTAC TGTGCAAGAGACCGCGGTCGGTTGGGTGCCACTGGCTGGTTCCGTAACTGGTACTTCGATCTCTGGGGCCGTGGCGCCCTGGTCACTGTCTCC TCAG
004	p137w90	*IGHV*	CAGATACACCTGGAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTGGT GACACTGTTGCTTGGAACTGGATCAGGCAGTCCCCGTCGAGAGGCATTGAGTGGCTGGGAAGAACATACTACAGGCACAAGTGGTATTATGATT ATGCAGTCTCTCTGAAAGGTCGAATAAGCATCATCCCAGACACATCCAGGAACCAGGTCTCCTTGCAACTGAACTCTGCAACTCCCGAGGACAC GGCTATTTATTACTGTGCAAGGGCGGGGCATAGCAGTAGAAAGATGGGAAACGCCCCGAATCCCTGACTACTGGGGCCCGGGAACCCGTGGTCA CCGTCTCCTCAG
004	p137w93	*IGHV*	CAGGTGCAGCTCCACCAGTGGGGCGCAGGGCTCATGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGGTGTCCATGATGGGTCCTTGAGTATT TATTATTGGAGTTGGATCCGCCAATCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAATCAATCATGGTGGAAGAACCAACTACAACCCGTCCC TCAAGAGTCGAGTCACCATATCAGTAGACACGTCTAAGAACCAGTTTTCCCTGAAGATGAGTTCTGTGACCGCCGCGGACACGGCTGTGTATTAT TGTGCCTATAGCAGTGGTTATTCTTACTTCTACTACGGTTTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
004	p137w94	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGATCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCGGT AGTTATTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGAACCTACTACAACC CGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGT GTATTATTGTGCGAGACATAATTCCCGTATAGCTGCACGTGGTACTGACGACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCA G
004	p137w95	*IGHV*	CAGGTGCAACTACAGGAGTCGGGCCCAGGACTGGTGATGCCTTCGGGGACCCTGTCCCTCACCTGCGCTGCCTCTGGTGACTCCGTCAGCACT CATAACTGGTGGACTTGGGTCCGCCAGCCCCCAGGGGGGGGACTGGAGTGGATTGGAGAAATATATCCCACTGGGAGCACCAATTACAATCCG TCCCTCAAAAGTCGAGTCACCATTTCCTTCGACACACCCAAGGAGCAGTTCTCCCTGACGTTGCGTTCTGTGACCGCCGCGGACACGGCCATAT ATTATTGTGCCGTGGATCTCAACTCGTCGGGGGGCCGAGGGCTCCTGGGGCCAGGGAATGCTGGTCACCGTCTCCTCAG
004	p132w10	*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCTGTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGACTATTAGAAGTTG GTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAACGTCCTGATCTATGGTTCATCCAGTTTGAAAGGTGGGGTCCCATCAAGGTTCACC GGCAGTGGATCTGGGACAGATTTCACTCTCACTATCACCAGCCTGCAGCCTGAAGATGTTGCGACTTACTATTGTCAACAGGCTAACAGTTTCCC CCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p132w101	*IGLV*	GACATCCAGATGACCCAGTCTCCCTCTTCCCTGTCTGCGTCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAAAACATTTTCAACTA TTTAAATTGGTATCAAAAGAGGCCGGGGAGAGCCCCTAGGGTCCTCATATATGGTGTGTCTACATTGCAAAGTGGGGTCCCATCAAGGTTCAGT GGCGGTGGAGCTGGGACAGAATTCACTCTCACCATAAGCAGTCTCCAACCTGAAGATTCTGCAACTTACTACTGTCAACAGAGTTTCGTTGATTT CACTTTCGGCACTGGGACCAAAGTCGATATCGAAC
004	p132w106	*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCACCT ACTTTGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAACAGGGGCACTGGCATCCCAGCCAGGTTCAG TGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATC

004	p132w107	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGTAGTGACCTTGGTGATT ATAACTATCTCTCTTGGTACCAACACCACCCCGGCAAAGCCCCCAAACTCATCATTTTTGAAGTCATCAATCGGCCCTCAGGAGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGCTTATTATTGCAGTTCATATGTAAG CCGCAGCACTATAATTTTCGGCGGGGGGGACCAAACTGACCGTCCTAG
004	p132w108	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTCGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCTTTAAGCGGCCCTCAGGGGTCCCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCAGCTCATATTCAG GCAACAACCGCGTGATTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p132w113	*IGLV*	CAGTCTGTTTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCGGCTCCAACATTGGGAATA ATGGTGTGGCCTGGTACCAGCATATCCCAGGAACAGCCCCCAAACTCCTCATTTATGACGACATTAGGAGACCCTCAGGGATTCCTTACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGACATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACGTGGGAAAGC AGCCTGAGTATTGCTGTCTTCGGAACTGGGACCACGGTCACCGTCCTAG
004	p132w117	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCCAGTCAGACTGTCTCTATGTG GTTGGCCTGGTATCAGCAGAGACCAGGGAAAGCCCCTAAACTCCTGATCTATAGGGCATCTACTTTAGAAAATGCGGTCCCATCAAGATTCAGC GGCAGTGGATCTGGGACAGAATTCGCTCTGACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAATATACTACTTATCC GTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p132w119	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGTGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCAGTG CCTTCGTGGCCTGGTACCAGCAGAAACGTGGCCAGGCTCCCAGGCTCGTCATTTATGGTACATCCAATAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACGGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATGCTGCAGTGTATTACTGTCAGCAGTATGGAGCC GCAGTCATGTACACTTTTGGCCAGGGGACCAAGTTGGAGATCAAAC
004	p132w125	*IGLV*	GACATCCAGATGACCCAGTCTCCACCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTCGCAGCC ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGCTTCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTATTCTC CGCAGTTTTGGCCAGGGGACCAACCTGGAGATCAAAC
004	p132w126	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCGTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGGATTGGCAGC AGCCTAGCCTGGTACCAGCACAAACCTGGCCAGGCTCCCAGTCTCCTCATCTATGGTGCAACCACCAGGGCCACTGGAATCCCGCCCAGGTTC AGTGGCAGTGGGTCTGGGGCAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTCTATTACTGTCAGCAGTATCAGATCTG GCCACGGACGTTCGGCCAAGGGACCAGGGTGGAAATCAGAC
004	p132w128	*IGLV*	TGCCCTGACTCAGCCTCCCTCCGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCTCTGGAACCAGCAATGATGTTGGTGGTTATACC TATGTCTCCTGGTACCAACATTTCCCGGGCAGAGTCCCCAAAGTCATCCTTTATGATGTCTATCAGCGGCCCTCGGGGGTCCCTGATCGGTTCTC TGGCTCCACGTCAGGCAACACGGCCTCCCTGACCATCTCTGGACTCCGCATTGAGGATGAGGCTCATTATTATTGTTGCTCATATGCGGGCAGC TCGAAGTGGGTCTTCGGCGGAGGGACCAAGGTGACCGTCCTCA
004	p132w130	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCAAA GTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGATCTAATCGGGCCCCCGGGGT CCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATG CAAGCTCTACAAACTCCTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p132w132	*IGLV*	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAAACTATTTTG CAAGCTGGTATCAACAGAAGCCAGGGCAGGCCCCTGTACTTGTCATCTATGGTGAAAACAAGCGGCCCTCAGGAATCCCAGACCGATTCTCTGG CTCCAGCTCAGGAAACACAGCTTCCTTGACCATCACTGGGGCTCAGGCGGAGGATGAGGCTGACTATTACTGTAAGTCCCGGGACAGCAGTGC TTACCGTCTGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p132w133	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGCGTCTGGGTCTCCTGGACAGTCGATCACCGTGGCCTGCACCGGTAGCAGCAGTGATATTGGTGAC TCAAAGCTTGTCTCTTGGTACCAGATTCGTCCCGGCACAGCCCCCGCACTCATTATTTATGAGGTCAATAAGCGGCCCTCAGGGATTTCTTATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGGTCCAGAGTGAGGACGAGGCTGCCTATTATTGCTGCTCATATGTC GATTCTAATCCTTATGTGATTTTCGGCGGAGGGACGCAAGTGACCGTTTTAA
004	p132w134	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATT ATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGGGTCCCACTGAGGTTCAGTG GAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTATTGTCAGCAGTATGAAAATCTCCCG CTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p132w135	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGCT ATAACTTTGTCTCCTGGTACCAACAGTATGCAGGCAAAGCCCCCAAACTCTGATTTATGAGGTCAATAATCGGCCCTCAGGGGTTTCTGATCGCT TCTCTGGCTCCAAGTCTGACAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATAGATC CACCAACACTGTGGTTTTCGGCGGAGGGACCAGGTTGACCGTCCTAG

004	p132w137	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGTCGGCCTCCATGTCCTGCAGGTCTAGTCAGAGCCTCCTGCATA ATAATGGGAACAACTATTTGGATTGGTATGTGCAGAAGCCAGGACAGTCTCCACAACTCCTGATCTACTTGGGTTCTCATCGGGCCTCCGGGGTC CCTGACAGGATCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGC AAGCTCTACAAACTTCCATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
004	p132w142	*IGLV*	CAGTCTGCCCTGACTCAACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTACTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTGTGATGTCAGTCATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTAT
004	p132w15	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCTCTGGAACCAGCAATGATGTTGGTGGTT ATACCTATGTCTCCTGGTACCAACATTTCCCGGGCAGAGTCCCCAAAGTCATCCTTTATGATGTCTATCAGCGGCCCTCGGGGGTCCCTGATCG GTTCTCTGGCTCCACGTCAGGCAACACGGCCTCCCTGACCATCTCTGGACTCCGCATTGAGGATGAGGCTCATTATTATTGTTGCTCATATGCGG GCAGCTCGAAGTGGGTCTTCGGCGGAGGGACCAAGGTGACCGTCCTCA
004	p132w21	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGTAGAGCCCCCAAACTCATTATTTGTGATGTCAGTAGTCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATACAA GCACGAACGGTCTCGAGAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p132w22	*IGLV*	CAGCCTGCCCTGACTCAGCCTGCCTCTGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGGGATATTGGCGGTT TTAATTATGTCTCTTGGTACCAACAGTCCCCAGGCAAAGTCCCCAAACTCATTATTTATGAAGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGCCTCCAAGTCTGGCGACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATTCAAG TGTCGACACCTCTGTGGTTTTCGGCGGCGGGACCAAGCTGACCGTCCTAC
004	p132w26	*IGLV*	CAGTCTGTCCTGACTCAGCCACCCTCAGCGTCCGGGACCCCCGGGCAGAGGGTCGCCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGACGT AATCCTATAAACTGGTACCAGCAAGTCCCAGGAACGGCCCCCAAACTCCTCATCTATAATAATGATCAGCGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTATTGTGCAACATGGGATGAC AACCTGAATGGTGGTGTCTTCGGGACTGGGACCCAGGTCACCGTCCTGG
004	p132w28	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAAGTATGTCTCCTGGTACCAACAACACCCAGGCAAGCCCCCAAACTCATAATTTATGAGGTCGGTCTTCGGCCCTCAGGGGTTTCTGATCGC TTCTCTGGCTCCAAGTCGGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTTATTACTACTGCAGCTCATATGCAA CCTGCACCAGTCACTGTGTGCTATTCGGTGGAGGGACCAAGGTGACCGTCCTAG
004	p132w31	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACGCTGTCTGCATCTGTAGGAGACAGCATCAGCATCACTTGTCGGGCCAGTCAGAACATTGATATTTG GTTGGCCTGGTATCAGCTGAAACCAGGGAAAGCCCCTAGACTCCTGATCTATAAGGCGTCTCGTTTAGAAATGGGGGCCCCTTCAAGGTTCAGC GGCAGTGGATCTGGGACAGAGTTCACTCTCTCCATCAGCAGCCTGCAGCCTGATGACTTCGCAACTTATTACTGCCAACACTATGACAGTTTTCC TCTCACTTTCGGGG
004	p132w32	*IGLV*	GAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCAGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCGCCAACATCGGACGT AAAAATGTAAACTGGTACCAGCATCTCCCAGGAACGGCCCCCAAACTCCTCATCTATGGTAATGATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTTCAACATGGGATGC CAGCCTGACTGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p132w33	*IGLV*	CAGCCTGTACTGACTCAGCCACCGTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGTAGCGGCTACAGTAATTATA AAGTGGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCCGGTTTGTGATGCGGGTGGGCACTGGTGGGATTGTGGGATCCAAGGGGGATGGC ATCCCTGATCGCTTCTCAGTCTTGGGCTCAGGCCTGAATCGGTACTTGACCATAAATAACATCCAGGAAGAGGATGAGAGTGACTACCACTGTGG GGCAGACCATGGCAGTGGGAACAACTTCGTGCGGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAG
004	p132w34	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCTCTGGAACCGCCAGTGGTGCTGCGACTT ATAACTTTGTCTCCTGGTATCAACAACACCCAGGCAAAGTCCCCAAACTCATGATTTATGACGTCAGTCAGCGGCCCTCAGGGGTTTCTAGTCGC TTCTCTGGCTCCAAGTTTGGCGACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGTTTATTACTGTTGCTCATTTTTTGG TAGTGTGAGGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
004	p132w36	*IGLV*	GACATCCCGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAATATTGGTACCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTGACCTCCTGATTTATAAGGCGTCTAGTTTAAAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGACGATTCCGCAACTTATTACTGCCAACAGTATGATAATTATT CGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p132w37	*IGLV*	TCTTCTGAGTTGACTCAGGATCCTACTGTGTCTGTGGCCTTGGGACAGACGGTCAGCATCACATGCCAAGGAGACAGCCTCAGAAAGTATGATG CAACCTGGTACCAGCAGAAGCCAGGACAGGCCCCTATACTTGTCATTTATCGTAAAAACACGCGGCCCTCAGGTATCCCAGACCGATTCTCTGG CTCCAGTTCAGGACAAACAGCTTCCTTGACCATCACTGGGGCTCAGGCGGAGGATGAGGCTGACTATTATTGTAACTCCCGGGACTGGAGCACT CAGCATGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC

004	p132w38	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCGCCGGAGAGGGTCACCATGTCTTGCTCTGGAAGGAGCTTCAACATCGAGAGTAATACTGTTAGCTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAATAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGCCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAAGATGAGGCTGATTATCACTGTGCAGCATGGGATGACAGCCTGAATGGTTGGGTGTTCGGCGGAGGGACCCAGCTGACCGTCCTAA
004	p132w46	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTTTTATTCAGCTCCAACAATAAGAACTACTTAGCTTGGTACCAGCAGAAACTTGGACAGCCTCCTCGGCTGCTCGTTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAATTTATTACTGTCAACAGTATTTTTATACTCCTTTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p132w47	*IGLV*	CAGTCTGTACTGAGTCAGCCACCCTCAGCGTCTGGGTCCCCGGGCAGCGTGTCATTGTCTCTTGTTCTGGAGGCAGCTTCAACATCGGATTTGGTTATGTTTGCTGGTACCAACAACTCCCAGGAGCGGCCCCCAAACTCCTCATTCACAGGACCAATGAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGCCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGTCTCCGGTCCGAGGATGAGGGTGATTATTACTGTGCAACATGGGATGACAGCCTGAAAAGTTACGTCTTCGGATCTGGGACCAGGGTCAACGTCTTCC
004	p132w52	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATCGTTCCTCGACCAGGGCCACTGGTATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCATCATCAGTAGCCTGCAGTCTGAAGACTTTGCAATTTATTACTGTCAGCAGTATAGTAACTGGCCTCTCTCTTTCGGCGGAGGGACCAAGATGGAGACCAAAC
004	p132w55	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGTCTCCTGCATAGTAGTGGATACAACTATTTGAATTGGTACGTGCAGAAGCCAGGGAAGTCTCCACAGGTCCTGATCTATTTGGATTCTAATCGGGCCTCCGGGGTCCCTGACAGATTCAGTGGCAGTGGATCAGGCACAGAGTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGTTCTACAAACTCCGATCAGTTTTGGCCAGGGGACCAAGCTGGAGATCAAGC
004	p132w58	*IGLV*	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCCTGGGACAGACAGTCAGGATCACGTGCCACGGAGACAGCCTCAGAAGTTTTGATGCAAGCTGGTACCAGCAGAAGCCAGGCCAGGCCCCTGTGGTTGTCCTCTACGGTAGAGACAACCGGCCCTCAGGGATCCCAGCCCGATTCTCTGGCTCCACCTCAGGGAGCACAGCTTCCTTGACCATCACTGGGACTCAGGCGGAGGATGAGGCTGACTATTTTTGTTGCTCCCGGGCCAGAAGTGGTGACCATTGGATGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p132w8	*IGLV*	GAAATCCAGATGACCCAGTCTCCATCGTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGTCGGGCAAGTGAGACTATTAGTAGATATTTAAATTGGTATCAACAAAAACCAGGAAAAGCCCCTGCCCTCCTGATCTACGATGCATCCGTTTTAGAAACTGGGGTCCCACCCAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACCTTCACCATTACCAGTCTCCAACCTGAGGATTCTGCAACTTACTACTGTCAAGAGAGTTCCACTAATTTTTGCACTTTTGCCCAGGGGACCAAGGTGGAGATTAAAC
004	p132w89	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGTAATACTGTAAACTGGTACCAGCAACTCCCAGGAACGGCCCCCAAACTCCTCATCTACAGAGATAATCAGCGGCCCTCTGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAATGGACTCCAGTCTGAGGACGAGGCTGATTATTACTGTGGAGCACGGGATAACAGCCTGATTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p132w9	*IGLV*	GACATCGTGCTGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAAATGGCCACCATCAACTGCAAGTCCAGCCAGAGTCTTTTATACAGTTCCAACAATAAGAACTACTTGGCTTGGTACCAGCAGAAGCCAGGACAGCCTCCTAAGTTGCTCATTTACTGGGCATCTACCCCGGAGTCCTGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACTATCAGCAGCCTGCAGGCTGCAGATGTGGCACTTTATTACTGTCACCAATATTATGATCCTCCCTTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p132w90	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGCAATAAACTATGTATCCTGGTACCAGCAACTCCCAGGAACAGCCCCCAAACTCCTCATCTATGAGAACAATAAGCGACCCTCAGGGATCCCTGACCGATTTACTGGCTCCAGGTCTGGCACGTCAGCCACCCTGGGCATCGCCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGACACCAGCCTGAGTGCTGCGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p132w91	*IGLV*	CAGCCTGTACTGACTCAGCCACCTTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGACCAGCGGCTACAGTAATTATAAAGTGGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCCGATTTGTGATGCGAGTGGGCACTGATGGGATTGTGGGATCCAAGGGGGATGGCATCCCTGATCGTTTCTCAGTCTTGGGCTCAGGCCTGAATCGGTATCTGACCATCAAGAACGTCCAGGAAGAGGATGAGGGTGACTACCACTGTGGGGCAGTCCATGGCAGTGGGAGCGACCTCGTGGAAGTGTTCGGCGGAGGCACCAAGTTGACCGTCCTAG
004	p132w92	*IGLV*	GACTTCGTGATGACCCAGTCTCCAGACTCCCTGGCAGTGTCTCTGGGCGAGAGGGCCACCATCAGCTGCAAGTCCAGCCAGAGTGTCTTATCCCGCTCCGACAGGAAGAACTATTTGGCTTGGTTCCAGCAGAAACCAGGACAGCCGCCTAAGTTGCTCATTTTCTGGGCATCTACCCGGGAACCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCTCTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTACGGAAATCCCATCACCTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p132w93	*IGLV*	GAGATAGTGATGACGCAGTCGCCAGCCACCCTCTCTGTGTCTCCAGGGGAAAGAGTCACACTCTCCTGCAGGGCCAGTCAGGATGTTACTAATAAACTTAACCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAAGGCTCCTCATCTACGGTGCAGCCACCAGGGCCCCTGGTGTCCCGGCCAGTTTCAGTGGCAGTGGGTTCGGGACAGAGTTCACTCTCACCATCGGCAGCCTGCAGTCTGAAGATGTTGCAGTTTATTACTGTCAGCAGTATGAAAACTGGCCTCTCACTTTCGGCGGAGGGACCAAGGTGGAGATGAAAC

004	p134w10	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATG ATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTACCC CCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p134w100	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCGGTC ATTTAAATTGGTATCAGCAGAGACCAGGGAAAGCCCCTAAGCTCCTCATCTATGCTGCATTCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGTTCTTGGACAGATTTCAATCTCACCATCAGTAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTACAGTAGCCCT CCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p134w106	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGACTATTGGTATCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGAACCTGATCTATAAGGCGTCTGGTTTGGAAAGTGGGGTCCCATTAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAACAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATACTTTCCC ATACACTTTTGGCCAGGGGACCAAGGTGGAGATCAAAC
004	p134w107	*IGLV*	GATATTGTGTTGACCCAGACTCCACTCTCCCTGTCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCTTCGATA GTGATGATGGAAACACCTATTTAGACTGGTATCTGCAGAAGCCGGGGCAGTCTCCACAGCTCCTGATCTATGCACTTTCCTTTCGGGCCTCTGGA GTCCCAGACAGGTTCAGTGGCAGTGGGTCAGGAACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGAGTTTATTACTGCA TGCAACGTTTGGAGTTCCCCGCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAGC
004	p134w11	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCAAA GTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGATCTAATCGGGCCCCCGGGGGT CCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATG CAAGCTCTACAAACTCCTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p134w110	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGAGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGAATT ATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAAATCATGATTTATGAGGGCAGTAAGCGGCCCTCAGGGGTCTCTAATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGCA GGCAGTAGCACTTATGTCTTCGGAAGTGGGGACCAAGGTCACCGTCCTAG
004	p134w111	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGATCTAGTCAGAGCCTCCTGCATA GTACTGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGAAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGGT CCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAAGATGTTGGGGTCTATTACTGCATG CAAACTCTACAAACTCCGGGATTCACTGTCGGCCCTGGGACCAAAGTCGATATCAAAC
004	p134w113	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAACCAGCTCCAACATTGGCAATA ATTATGTATCCTGGTACCACCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATGATAAGCGACCCTCAGGGATTCCTGACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAGC AGCCTGGGTGCTCCCCTGTTCGGCGGAGGGACCAAGC
004	p134w115	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGGCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATA GTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAACTCCTGATCTATTCGGGTTCTAATCGGGCCTCCGGGGGT CCCTGACAGGTTCAGTGGCAGTGCATCAGGCACACTTTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGCGTTTATTACTGCATG CAATCTCTACAAAGTTTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p134w117	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGTCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCG ACTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGCCTCCCAGACTCCTCATCTATGGTGCATCCAGGAGGGCCACTGGCATCCCAGACAGGTT CAGTGGTAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTAAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTAACT CACCTATGTGCAGTTTTGGCCAGGGGACCAAGCTGGAGATCAATC
004	p134w124	*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCTTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCGGCT ACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATTTATGATTCCTCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAG TGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCACCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGTACCGTAGCGACTGGC CTCGAGCGCTCACTTTCGGCGGGGGGTACCGAAGGTCGGAGATCAA
004	p134w125	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAACTCCAACATCGGGACT AATACTGTAAGCTGGTACCAGCAGTTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGCATTAATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCT
004	p134w128	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAAGTGCAAGTCCAGCCAGAGTGTTTATTATG GGATCAACAGTAAGAACTACTTAGCTTGGTACCAGCAGAAGCCAGGACAGCCTCCTAAGCTGCTCATTTACTGGGCATCCACCCGGGAATCCGG GGTCCCTGACCGATTCAGTGGCAGTGGGTCTGGGACAGATTTCACTCTCACCATTAGCAGCCTGCAGGCTGAAGATGTGGCAGATTATTACTGT CAGCAATATTATAGTTCTCCGTCCACTTTTGGCCAGGGGACCAAGGTGGAGATCAAAC

004	p134w131		*IGLV*

CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAACCAGCTCCAACGTCGGAAGT
AATAATGTGTTCTGGTACCAGCAGCTCCCTGGAACGGCCCCCAAACTCCTCATCTCTAGAACTGAAGAGCGGCCCTCTGGGGTCCCTGACCGAT
TCTCTGGCTCCAAGTCCGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCGTGGGATG
ACAGCCTGACTGGTGTGGTTTTCGGCGGAGGGACTAGGCTGACCGCCCTAG

| 004 | p134w132 | | *IGLV* |

GAAATTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCGGGGCCAGTCAGAGTGTTACCAGCA
ACTACTTAGCCTGGTACCAGCAGAAACCTGGCCTGGCGCCCAGGCTCCTCATCTTTGATGCGTCCAGCAGGGCCACTGGCATCCCAGACAGGT
TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTTCTGTCAGCAGTATGGTAG
CTCACCGATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC

| 004 | p134w135 | | *IGLV* |

GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCCGGGGGAAGAGCCACCCTCTCCTGCAGGGCCAGTGAGAGTGTGGGCAAC
AGATTAGCCTGGTACCAACAGAAACCTGGCCAGACTCCCAGGCTCGTCATCTATGATGCATGGAAGAGGACCACTGCTTTCCCAGCCAGATTCA
CTGGCAGTGGGTCTGAGACAGAATTCACTCTCACCATCAGCAGCCTGCAGTCCGAAGATTTCGCAGTTTATTTCTGTCACCAGTATGCTGACAGG
CCTCCATGGACGTTCGGCCAGGGGACCAAGGTGGAGATCAAGC

| 004 | p134w136 | | *IGLV* |

GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGACATTAGAGATG
ATTTAGGCTGGTATCAGCAAAAACCGGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGGTTACAAACTGGGGTCCCATCAAGGTTCAG
CGGCAGTGGATCTGGGACAGATTTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAACATGATCCTAACTT
TCCGGGGACGTTCGGCCAAGGGACCAAGGTGGATGTCAAAC

| 004 | p134w137 | | *IGLV* |

GAAAATGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCTAGTTATCCTGTTATCAACAA
CTATTTAGCCTGGTACCAGCAGAGGCCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTACATCCACCAGGGCCGCTGGCATCCCTGACAGGTTC
AGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCGGTGTATTACTGTCAGCAGTATGAAACCT
CATCGTGGACGTTCGGCCAGGGGACCACGGTGGAATTCAAAC

| 004 | p134w142 | | *IGLV* |

GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGAAAGAGTCACCATCACTTGCCGGGCAAGTCAGGCCATTAGAAATG
ATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG
CGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATAATTACCC
CCTCACTTTCGGCCCTGGGACCAAGGTGGATATCAAAC

| 004 | p134w15 | | *IGLV* |

TCTTCTGAGCTGACTCAGGAGCCTGCTGTGTCTGTGGCCCTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGCCTCAGAAGGTATGAT
GCAAGTTGGTACCAGCAGAGGCCAGGACAGGCCCCTGTAGTTGTCATCCACGGAAACAAACGGCCCTCAGGAATCCCAGACCGATTCTCTGGC
TCCACTTCAGGAAACACAGCCTCCTTGACCATCACTGGGTCTCAGGCGGAAGATGAGGCTGACTATTACTGTAACTCCCGAGACAGGAACGGAA
TCCATGCGATTTTCGGCGGAGGGACCAGGTTGACCGTCCTAG

| 004 | p134w19 | | *IGLV* |

GACATCCAGATGACCCAGTCTCCATCCACCCTGTCTGCAAATGTAGGAGACAGAGTCACTATCACTTGCCGGGCCAGTGAGATCACTAGTAATC
GGTTGGCCTGGTATCAGCAGAAACCAGGGAAGGCCCCTAAACTCATTATCTATCAGGCATCTTCTTTACCAAGTGATGTCCCATCAAGATTCAGC
GGCACTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTACAGCCTGATGATTCTGCAACTTATTACTGCCAGCAGTATAGGGATTATTC
TCCACTCTCTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC

| 004 | p134w21 | 6 | *IGLV* |

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT
ATAACTATGTCTCCTGGTACCAACAACACCCAGGTAGAGCCCCCAAACTCATTATTTGTGATGTCAGTAGTCGGCCCTCAGGGGTTTCTAATCGC
TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATACAA
GCACGAACGGTCTCGAGAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG

| 004 | p134w22 | | *IGLV* |

CAGCCTGTGCTGACTCAGCCACCCTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGGCTACAGTAATTATA
AAGTGGACTGGTACCAACAGAGACCAGGGAAGGGCCCCCGCTTTGTGATGCGAGTGGGCACTGGTGGGATTGTGGGATCCAAGGGGGATGGC
ATCGCTGATCGCTTCTCAGTCTCGGGCTCAGGCCTGAATCGGAGCCTGACCATCAAGAACATCCAGGAAGAGGATGAGAGTGACTACCACTGTG
GGGCAGACCATGGCAGTGGGGACAACTTCGTGCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA

| 004 | p134w23 | | *IGLV* |

GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAGGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATAAGGAACA
CCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAGCAGGGCCATTGGCATCCCAGACAGGTT
CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGGAGACTGGAGCCTGAAGATTATGCAGTGTATTACTGTCAGCAGTATGGTCAC
TCACCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAG

| 004 | p134w26 | | *IGLV* |

GATATTGTGATGACTCAGTCTCCGCTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATA
GTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCCGGGCAGTCTCCACAACTCCTAATCTATTTGGCTTCTAATCGGGCCTCCGGGGTC
CCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAAGATGTTGGCGTTTATTACTGCATGC
AAGCTCTGCAAAGTCCTGCGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC

| 004 | p134w27 | | *IGLV* |

GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTGTTTTATACA
GCTCCAACAATAAGAATTATTTAGCTTGGTACCAGGTGAAACCAGGACAGCCTCCTAAACTGCTCATTTATTGGGCATCTACCCGGGAATCCGGG
GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAACAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTC
AGCAATACTATAGTACTCTCTTCAGTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC

004	p134w30		*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTATCACTTA CTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCTACAGGGCCTCTGGCATCCCAGCCAGGTTCAGT GGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGCAGCGTAGCAACTGGC CTTGCAGTTTTGGCCAGGGGACCAAGTTGGAGATCAAAC
004	p134w31		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTAATT ATGACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTTTGAGGTCAGTAATCGGCCCTCGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTC
004	p134w33		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTAATT ATGACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTTTGAGGTCAGTAATCGGCCCTCGGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCGTATACAA GCAGCAGCACTATCGTCTTCGGCGAGGGACCAAGGTGACCGTCCTAC
004	p134w34		*IGLV*	CAGTCTGTCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGAAT ATAACTATGTCTCCTGGTACCAACAATACTCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAGGCGACCCTCAGGGGTCCCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACGGAGGATGAGGCCGATTATTACTGCTGCTCATATGCAG GCACGTTGTCCCGTCTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p134w37		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGACAGACGGTCACCATCTCTTGTTCTGGAAGTAACTCCAACATCGGAAGTT ATTATGTGTACTGGTGCCAGCAATTCCCAGGAACGGCCCCCACACTCCTCATCCATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGACTCCGGTCCGAGGATGAGGCTGAGTATTTCTGTGCAGCATGGGATGA CAGCCTGAGTGGTCCGGTCTTCGGGACTGGGACCAAGGTCACCGTCCTCG
004	p134w38		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGTAGAGCCCCCAAACTCATTATTTGTGATGTCAGTAGTCGGCCCTCAGGGATTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATACAA GCACGAACAGTCTCGAGAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p134w46		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTTATCGCCCCTCAGGGGTTTCTGGTCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCTGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATGCAA GCAGTAGTACTCTGGTATTCGGCGGAGGGACCAGGCTGTCCGTCCTAG
004	p134w47	10	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCTCTGGAACCAGCAGTGATGTTGGGGCTT ATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGACGTCACTGAGCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTC
004	p134w48		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTGTTTTATACA GCTCCAACAATAAGAATTATTTAGCTTGGTACCAGGTGAAACCAGGACAGCCTCCTAAACTGCTCATTTATTGGGCATCTACCCGGGAATCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAACAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTC AGCAATACTATAGTACTCTCTTCAGTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p134w54		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAACTCCAACATCAGAAGTA ATTCTGTACACTGGTACCAGCAGCTCCCAAGAACGGCCCCCAAACTCCTCATCTATAGTAATTATCAGCGGCCCTCAGGGGTCCCTGACCGGTT CTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTCAGCATGGGATGAC AGCCTGAATGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p134w55		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTGTTTTATACA GCTCCAACAATAAGAATTATTTAGCTTGGTACCAGGTGAAACCAGGACAGCCTCCTAAACTGCTCATTTATTGGGCATCTACCCGGGAATCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAACAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTC AGCAATACTATAGTACTCTCTTCAGTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p134w57	11	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTGGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATT ATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGAGTCCCATTGAGGTTCAGT GGAAGTGGATCTGGGACAGATTTCACTTTCACTATCAGCAGCCTGCAGCCTGAGGACGTTGCAACATATTACTGTCAGCAGTATGAAAATCTCCC GCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p134w60		*IGLV*	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCGGTCAGGGCATTAGCAGTT ATTTAGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCACTTTACAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCCGGGACAGAATTCACTCTCACAATCAGCAGGCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATACTTACCC TCAAACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

004	p134w7	*IGLV*	GAAGTTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTGGCCCGCACCTCCTTTTCTTGGTACCAACACCGCCATGGCCAGGCTCCCAGGCTCCTCATCTATGGTGTGTCCAACACGGCCACTGGCGTCCCAGGCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACACACTGGAGCCTGAAGATTTTGCGGTTTATTACTGTCAGGCGTTTGATACTTCAGTGACGTTCGGCCAAGGGACCAGGGTGGAGATGAAAC
004	p134w8	*IGLV*	GAAATAGTGATGACGCAGTCTCCCGCCACCCTGTCTGTGTCTCCAGGGGAAGGAGCCACCCTCTCCTGCAGGGCCAGTGAGGATGTTAGTAATAAGTTAGCCTGGTACCAACAGAAACCTGGTCGGACTCCCAGGCTCGTCATGTATGATGCTTCCATCAGCGCCAATGATATCCCAGCCAGATTCAGAGGCAGCGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAGTTTATTACTGTCACCAATATAATGACTTGCCCCCATGGACGTTCGGCCAAGGGACCAGGGTGGAAATCAAAC
004	p134w9	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGGTTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCAGCACTCTCGGACTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p134w90	*IGLV*	CAGTCTGCCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAAGCAGCAACGATGTTGGTCGTCATAATTATGTCTCCTGGTATCGCCAACACCCAGGCAAAGCCCCCGAAGTCATAATTTATAATGTCGATAAGCGGCCCCCAGGGTCTCTGATCGTTTCTCTGGCGCCAAGTCTGGCAGTACGGCCTTCCTGACAATTTCTGGCCTCCAGGCTGAGGATGAGGTTGATTATCACTGCTGTTCATATGTAGGCGGGTTCACCTGGGTGTTCGGCGGAGGGACCAAGATTACCGTCCTAG
004	p134w93	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTGGGAGACAGAGTCAGCATCACTTGCCGGGCCAGTCAGACTATTTATGACTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATAAGGCATCTAGTTTAGAAAGTGGGGTCCCGTCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAGAACTTATTGCAGCTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p135w107	*IGLV*	GACATCCAAATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTGGTAACTGGTTGGCCTGGTATCAGCAGAAACCTGGGAAAGCCCCTAAGGTCCTGATCTATAAGGCATTAGAAAGTGTGGCCCCATCAAGGTTCAGCGCCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAGGTTATTATTGCCAACAGTATAGTAGTTATCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAG
004	p135w111	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGGCTCTGGGCGAGAGGGCCACCCTCAGCTGCAAGTCCAGCCAGAGTATTTTATACAACTCCAACAATAAAGACTACTTGGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTCCTGGGCATCTACCCGAGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTATGAAACTCCTCGAACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p135w113	*IGLV*	CAGCCTGCGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAGCCAGCTCCAATATTGGAAATAATTATGTTTCCTGGTACCAGCACGTCCCAGGAAGAGCCCCCAAAGTCCTCATTTATGCCACTAATCAGCGACCCTCAGGGATTCCAGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCTCCCTGGACATCACCGGACTCCAGACTGGAGACGAGGCCAATTATTACTGCGAATCGTGGGATTTCAGCCTGAGAGCGATGGTTTTCGGCGGAGGGACCAGGCTGACCGTCCTTA
004	p135w114	*IGLV*	CAGCCTGTGCTGAGTCAGCCACCTTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGGCTACGATAATTATAAAGTGGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCCGGTTTGTGATGCGAGTGGGCACTGGTGGGAGTGTGGGATCCAAGGGGGATGGCATCCCTGATCGCTTCTCAGTCTTGGGCTCAGGCCTGAATCGGTACCTGACCATCAAGAACATCCAGGAAGAGGATGAGAGTGACTACCACTGTGGGGCAGACCATGGCAGTGGGAACAACTTCGTTAGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p135w118	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTGTACAACTCCTACAATAAGAACTTCTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCGGCAGCCTGCAGGCTGAGGATGTGGCAGTTTATTACTGTCAACAATATTATAATACTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p135w12	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATGATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTA
004	p135w122	*IGLV*	GAAATTGTGATGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCGCCTGCAGGGCCAGTCAGAGCGTGAATGCCAATTACATAGCCTGGTACCAGCAGAAACCTGGCCAGCCTCCCAGGCTCATCATCTCTGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGCGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTCCCTCACCCACTTTCGGCCCTGGGACCAAAGTGCATATCAAAC
004	p135w125	*IGLV*	CAGCCTGTGCTGAGTCAGCCACCTTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGGCTACGATAATTATAAAGTGGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCCGGTTTGTGATGCGAGTGGCCACTGGTGGGAGTATGGGATCCAAGGGGGATGGCATCCCTGATCGCTTCTCAGTCTTGGGCTCAGGCCTGAATCGGTACCTGACCATCAAGAACATCCAGGAAGAGGATGAGAGTGACTACCACTGTGGGGCAGACCATGGCAGCGGGAGCAACTTCGTTAGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA

004	p135w126		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACGGTCCATCACCTTCTCCTGCACTGGAACCAGCAGTGACATTGGTGCTTATAACTTTGTCTCCTGGTACCAACAGCACCCAGACGAAGCCCCAACACTCATCATTATGATGTCATTAATCGGCCCTCAGGGGTTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGTTTATTATTGCAGTTCATACACAAGGAGTCATGTCATATTTGGCGGAGGGACCAAGCTGACCGTCCTCG
004	p135w128		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTGTTTTATCCACCTTCCGACAATAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTACTGGGCATCTATCCGGCAATATGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGAACAGATTTCACTCTCACCATCAGCCGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTATAGTAGTCCCCTGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p135w131		*IGLV*	GGAGTTGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGGGTCTTAGAGGTATTTACCTCGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTATGGCGGATCCAGCAGGGCCACTGGCGTCCCAGATAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTCTATTACTGTCACCAGTATGGTGGCTCACCTCCGAACACTTTTGGCCAGGGGACCAACCTGGAGATGAAAC
004	p135w15		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTGGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGAGTCCCATTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACTATCAGCAGCCTGCAGCCTGAGGACGTTGCAACATATTACTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p135w19		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCGGCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTACGATGCATCCAATTTGGAAGCGGGGGTCCCATTAAGGTTCAGTGGAAGTGGATCTGGCACAGATTTTACTTTAACCATCAGCAGCCTGCAGCCTGAAGATATTGCAACATATTCCTGTCAACAATATGAGAATCTCCCGGTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p135w20		*IGLV*	GATATTGTCATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCAATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCAAAGTAACGGATTCAACTATTTGGAGTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATGTGGGATTTAAACGGGCCTCCGGGGGTCCTGACAGGTTCAGTGGCAGCGGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGTTTTATTACTGCATGCAAAGTCTACAACCTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p135w22		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTCGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGAGTCCCATTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACTATCAGCAGCCTGCAGCCTGAGGACGTTGCAACATATTACTGTCAGCAGTATGAGAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p135w23	26	*IGLV*	CTGACTCAGCCACCCTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAACAGCGGGTACAGTAATTATAAAGTGGACTGGTACCAACAGCGACCAGGGCAGGGCCCCCGCTTTGTGATGCGAGTGGGCACTGGTGGGATTGTGGGATCCAAGGGGAGTGGCATCGCTGATCGCTTCTCAGTCTCGGGCTCAGGCCTGAATCGGAGCCTGACCATCGACAACATCCGGGAAGAGGATGAGAGTGACTACCACTGTGGGGCAGACCATGGCAGTGGGGACAACTTCGTGCGGGTGTTCGGCGGAGGGACCAAGGTGACCGTACTAG
004	p135w26		*IGLV*	TCCTATGAGCTGGCTCAGCCACCCTCAGTGTCCGTGTCCCCGGGACAGGCAGCCAGCATCAGCTGCTCTGGAGACAGATTGCAATATAAATCTGTTTGCTGGTATCAACAGAGGCCAGGCCAGTCCCCTGTACTGCTCATCTATGAAGACTTTAAGCGGCCCTTAGGGATCCCTGAGCGATTCTCTGCCTACAATTTTGGGAACACAGCCACTCTGACCATCAGCGGGACCCACACTATGGATGAGGCTGACTATTACTGTCAGGCGTGGGACAGTAGCGGTCTAGTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p135w27	9	*IGLV*	CAGCCTGTGCTGACTCAGCCACCCTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGGCTACAGTAATTATAAAGTGGACTGGTACCAACAGAGACCAGGGAAGGGCCCCCGCTTTGTGATGCGAGTGGGCACTGGTGGGATTGTGGGATCCAAGGGGGGATGGCATCGCTGATCGCTTCTCAGTCTCGGGCTCAGGCCTGAATCGGAGCCTGACCATCAAGAACATCCAGGAAGAGGATGAGAGTGACTACCACTGTGGGGCAGACCATGGCAGTGGGGACAACTTCGTGCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p135w28		*IGLV*	CAGTCTGTGCTGACTCAACCACCCTCAGCGTCTGGGACCCCCGGGCAGTGGGTCAGCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAGTAATACTGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAGTAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGCCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGCCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAAGTTGAATGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p135w31		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTAATTATGACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCAACATCATGATTTTTGAGGTCAGTAATCGGCCCTCGGGGTTTCTAGTCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGGTCATATTCAACCACCGACACTCCCGTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTGG
004	p135w34		*IGLV*	CAGTCTGTACTGACTCAGCCGCCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAGCAAATACTGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCCTCTATAGTAATTATCAGCGGCCCTCGGGGGTCCCTGACCGATTCTCTGTCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGGTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATGGTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG

004	p135w36		*IGLV*	CAGTCTGTGCTGACTCAGCCGCCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAGCACATACTGTAAACTGGTACCAGCAACTCCCAGGAACGGCCCCCAAGCTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGTCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGGTGCTTATTACTGTGCAGCATGGGATGACAGCCTCAATGGTGTGCTATTCGGCGGAGGGACCAAGCTGATCGTCCTAG
004	p135w38		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGCCAGGGCATTAGAAATGATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAACATAATAGTTACCCCCTCACTTCGGCCTGGGCAGCCGAAGTGGATGTCAAAC
004	p135w46		*IGLV*	TCTTCTGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGTCTCAGAAGTTATTATGCAAGCTGGTACCAGCAGAAGCCAGGACAGGCCCCTGTACTTGTCATCTATGGTAAAAACAGCCGGCCCTCAGGGATCCCAGACCGATTCTCTGGCTCCAGCTCAGGAAACACAGCTTCCTTGACCATCACTGGGGCTCAGGCGGAAGATGAGGCTGACTATTACTGTAAGTCCCGGGCTGGCAGTGGTAACCTTGGTAACCATGTGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p135w47		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACGGTCCATCACCTTCTCCTGCACTGGAACCAGCAGTGACATTGGTGCTTATAACTTTGTCTCCTGGTACCAACAGCACCCAGACGAAGCCCCCAACATCATCATTTATGATGTCATTAATCGGCCCTCAGGGGTTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGTTTATTATTGCAGTTCATACACAAGGAGTCATGTCATATTTGGCGGAGGGACCAAGCTGACCGTCCTCG
004	p135w48		*IGLV*	GGAATTGTGTTGACGCAGTCTCCAGGCACGCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGACAGCACCTACTTAGCCTGGTATCAGCAAAAACCTGGCCAGGCTCCCAGACTCCTCATCTATGGTGCGTCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTCTGCAGTGTATTACTGTCAGCACTATGATAGGTCACCTATGTTCACTTTTGGCCAGGGGACCAAGCTGGAGATCGAAC
004	p135w52		*IGLV*	GACATTGTGATGACTCAGTCTCCACTGTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATTTCCTGCAGGTCTAGTCAGAGCCTCCTACAGAGTAATGGAAAGAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCCATTTGGGTTCTGATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTAGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGCTCTACAAACTCCGTACACCTTGGCCAAGGGCACACGACGTGGAGATCAAA
004	p135w55	8	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGGGTCCCACTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTATTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p135w58		*IGLV*	GAGGTTGTTTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCGGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCACAGTGTTGCCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGGTTCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGTCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCACTATGGAAGTTCACGGACGTTCGGCCAAGGGACCAAGGTGGAGATCAAAC
004	p135w60		*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCATTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAGCAATGATTTAGCCTGGTTTCAGCAGAGACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCGAAGTTCAGCGGCAGTAGATATGGGACAGATTTCACTCTCACCATCAGCAACCTGCAGCCTGAAGATTTTGCAACTTATTATTGCCAACAGTATTATAATTTCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p135w7		*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTAACTACCTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATAGGACATCTACTTTAGAAGGTTGGGTTCCATCAACATTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCCGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATACTAGTTATCCATATACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p135w72		*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCATTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAGCAATGATTTAGCCTGGTTTCAGCAGAGACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCGAAGTTCAGCGGCAGTAGATATGGGACAGATTTCACTCTCACCATCAGCAACCTGCAGCCTGAAGATTTTGCAACTTATTATTGTCAACAGTATTATAATTTCCCGTACACTTCGGCCAGGGACCAAGCTGGAGATCAAAC
004	p135w8		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAGCCAACACTGACGTTGGTTATTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATACAACCAGTGACTCTCTCGTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p135w9		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCTCTGGAACCAGCAATGATGTTGGTGGTTATACCTATGTCTCCTGGTACCAACATTTCCCGGGCAAAGTCCCCAAAGTCATCCTTTACGATGTCTATCAGCGGCCGTCGGGGGTCCCTGATCGGTTCTCTGGCTCCACATCAGGCAACACGGCCTCCCTGACCATCTCTGGACTCCGCATTGAGGATGAGGCTGATTATTATTGTTGCTCATATGCGGGCAGTTCCAAGTGGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTCA

004	p135w90	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGACGTGTCACCAGTAGTCATTATTGTTACTGGTTGCAGCAGAGGTCTGGCCAAGCCCCCGGACGCTGATTTATGATACAAGTAACAAGAACCCCTGGACACCTGCCCGGTTTTCAGGCTCCCTCCTTGGGGACAAAGCTGCCCTGACTCTTTCGGGTGCGCAGCCTGAAGATGAGGCTGACTATTATTGCCTGCTCTCCTATGCTGGTGCTCGCGGTGTTCGGGTGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTGC
004	p135w91	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGAGTCCCATTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTACTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p135w92	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCGGCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTACGATGCATCCAATTTG
004	p135w93	*IGLV*	CAGCCTGTACTGACTCAGCCACCTTCTGCATCAGCCTCCCTGGGAGCCTCGGTCACACTCACCTGCACCCTGAGCAGCGGCTACAGTAATTATAAAGTAGACTGGTACCAGCAGAGACCAGGGAAGGGCCCCGCTTTGTGATGCGAGTGGGCACTGGTGGGATTGTGGGATCCAAAGGGGATGGCATCCCTGATCGCTTCTCAGTCTTGGGCTCAGGCCTGAATCGCTACCTGACCATCAAGGACATCCAGGAAGAGGATGAGAGTGACTACCACTGTGGGGCAGACCATGGCAGTGGGAGCAATTTCGTGAGGGTGTTCGGCGCAGGGACCAAACTGACCGTCCTAA
004	p136w10	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCCCTTGTTCTGGAAGCACCTCCAACATCGGAAGTAATAGTGTAAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTGCAGTCTGAGGATGAGGCTGACTATTATTGTGCAGCATGGGATGACAGATTGAATGGTGTGGCCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p136w101	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCTCTGGAACCAGCAGTGATGTTGGGGCTTATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGACGTCACTGAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACAGCGGCCTCCCTGACAATCTCTGGGCTCCAGACTGAGGACGAGGCTGCTTATTACTGCTGCTCATTTGCAGGTCTTAGCAATGTGCTATTCGGCGGAGGGACGAAGGTGACCGTCCTAG
004	p136w106	*IGLV*	CAGTCTGCCCTGGCTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCGACAGCGACATTGGTGCTAATAACTATGTCTCCTGGTATCAACACCACCCAGGCAAAGCCCCCAAAGTCATGATTTATGAAGTCAATAATCGGCCCTCAGGGGCTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGAC
004	p136w107	*IGLV*	GACATCCAGATGGCCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTGTCTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTATACTCCTGATCTATGAGGCGTCCAGTTTAGAAACTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTATCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCGAAC
004	p136w108	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGAGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCAGTGGAACCAGCAGTGATGTTGGGAGTTATAACCTTGTCTCCTGGTATCAACATCACCCAGGCAAAGGTCCCAAACTCATCATTTATGAGGTCACTAAGCGGCCCTCAGGGATTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGCAGATAGTGACACTTTTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p136w11	*IGLV*	AGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCACCTACTTAGCCTGGTACCAACAAAAACCTGGCCAGGCTCCCAGGCTCCTCGTCTATGATGCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTCTGCAGTTTATTACTGTCAGCAGCGTGACAACTGGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAGAC
004	p136w110	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAGAGCCCCCAAACTCATTATTTGTGATGTCAGTAGTCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCGGCTCATATACAAGCACTAACTCTCTCGAGAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p136w111	*IGLV*	CCAGGACATTAGCAATCATTTAAATTGGTATCAGCAGAAACCAGGGAAAGTCCCTAAGCTCCTGATCTACGATGTTTTCAATTTGGAAACGGGGGTCCCATCAAGGTTCAGTGGAAGTGGATCTGGGACAGACTTTAGTTTCACCATCAGCAGCCTGCAGCCTGAAGATATTGCGACATATTACTGTCAGCAATATGATAATCTCCCTCCGACTTTCGGCGGAGGGACCAAGGTAGAGTTCAAAC
004	p136w113	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGGGTCCCACTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTATTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p136w119	*IGLV*	CGCCACCCTCTCCTGCAGGGCCAGTCAGGGTATTAGCAGCAGCTCCTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATCGCGCATCTAGTAGGGCCACTGGCTTCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCGTCAGCAGACTGGAGCCTGAAGATTTTGCAGTTTATCACTGTCAACACTATGGTGGCCCACCCACCACCTTCGGCCAAGGGACACGCCTGGAGATTAAAC

004	p136w124	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCGGGCGAGAGGGTCACCATCTCCTGCACTGGGTTCAGCTCCAACTTCGGGGC AGATTATGATGTACACTGGTACCAGCAACTTCCAGGAACAGCCCCCAAACTGCTCATCTATGTTAACAACAATCGGCCCTCAGGGGTCCCTGACC GATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGACTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGA CAGGAGACTGAGTGCTGTGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p136w126	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATG ATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTACCC CCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p136w128	*IGLV*	GAAGTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGACTATTGACACCA ACTACTTAGCCTGGTACCAGCACAAGCCTGGCCAGCCTCCCAAATTCCTCATCTATAGAACATCCAGCAGGGCCACTGGCATCGCAGACAGGTT CAGCGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACAGACTGGAGCCTGAAGATTTTGCAGTGTATTATTGTCAGCACTATGGTAGC GTGTGGACGTTCGGCCAGGGGACCAAGGTGGAAATCAAAC
004	p136w131	*IGLV*	CAGTCTGTGCTGATTCAGCCTCCCTCAGCGTCTGGGACACCCGGGCAGAGGATCACCATCTCTTGTTCTGGAAGTAGGTCCAACATCGGATTTT ATTCTGTAAGTTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAGTAATCATCAGAGGCCCTCAGGGGTCCCTGACCGATT CTCTGGCTCCAAGTCTGGCACCTCCACCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTATTGTCAGCATGGGAAGAC AGCCTGCATGGTTGGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAG
004	p136w132	*IGLV*	CAGTCTGTCCTGACTCAGCCTCGCTCAGTGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGTGAAT ATAACTATGTCTCCTGGTACCAACAATACTCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAGGCGACCCTCAGGGGTCCCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACGGAGGATGAGGCCGATTATTACTGCTGCTCATATGCAG GCACGTTGTCCCGTCTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p136w133	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTGGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATT ATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGAGTCCCATTGAGGTTCAGT GGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAGGACGTTGCAACATATTACTGTCAGCAGTATGAAAATCTCCC GCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p136w135	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGCAATA ATTATGTATCCTGGTACCACCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAGC AGCCTGGGTGCTCCCCTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p136w136	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTTGGT GGTTGGCCTGGCATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGAGGCGTCTAGTTTACAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGACGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTATT CTCCCTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p136w137	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGGC AGGTTATGATGTACACTGGTACCAGCAGATTCCAGGAACAGCCCCCAAACTCCTCATCTATGAAAACAACAATCGGCCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATG ACAGCAGCCTGACCCCGGGGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
004	p136w142	*IGLV*	AATGTTGTGTTGACGCAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGCGAAACAGCCACCCTCTCCTGCGAGGCCAGTCAGACCATTGGCAATA AGTTCTTAGCCTGGTACCAACAGAGGCCTGGCCTGGCGCCCAAACTCCTCATCTCCGATACGTCCATCAGGGCCACTGACATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCACCAGCCTGGAGCCTGAAGATTTTGCGGTCTACTATTGTCACCACTATGGCGAC TCACCTCGGACGTTCGGCCCAGGCACCAGGGTGGATGTCAAAC
004	p136w19	*IGLV*	CCCTATGTGCTGACTCAGGCACCCTCGGTGTCAGTGGCCCCAGGACAGACGGCCAGGATTACCTGTGGGGGGAACAACATTGGAGGTAAAGGT GTGCACTGGTACCAGCAGAAGCCAGGCCAGGCCCCTGTGCTGGTCGTCCATGATGATAGCGACCGGCCCTCAGGGATCCCTGAGCGATTCTCT GGCTCCAGCTCTGGGAACACGGCCACCCTGACCATCAGCAGGGTCGAAGCCGGGGATGAGGCCGACTATTACTGTCAGGTGTGGGATACTTAT ACTGATCATCCAGGGGTCTTCGGAACTGGGACCACGGTCACCGTCCTAG
004	p136w21	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCACCAGTGATGTTGGGAATT ATAACCTTGTCTCCTGGTACCAACAACAACCAGGCAACGCCCCCACTCATGATTTATGACGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTT CTCTGGCTCCAAGTCTGGCACCACGGCCTCCCTGACGATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGCAGGT GGTAGTACTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCGTGG
004	p136w26	*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCACTGTCTGCATCTGTGGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATAAGTAGAA GATTAGCCTGGTATCAGCAGAAGCCACACAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAATTTGCAGAGTGGAGTCCCATCACGGTTCAG CGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTACTGCCTGAGGACTCTGCAACTTATTACTGCCAACAATATGAAAATTATC CCTCACTTTCGGGGGG

004	p136w27	7	IGLV	CAATCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTCGTTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGCCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCAGCTCATATGAAGTCACCAACCGCGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTGG
004	p136w28		IGLV	GAAATTGTGATGACTCAGTCTCCGCTCGCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATGATAATGGATTCAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAACTCCTGATCTATTTGGGTTCTATTCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAACCTCTACAAATCTCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p136w30		IGLV	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCAGTTACTTAGACTGGTACCAACAGAAACCTGGCCAGGCTCCCAGACTCGTCATCTATAATACATCCAGGAGGGCCGCTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGCGACAGACTTCACTCTCACCATCAACAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGCAGCGTGGCAGCTGGCCTCGGACTTTTGGCCAGGGGACCAAGCTGGAGCTCAAAC
004	p136w32		IGLV	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTATTCACCTCCAACAATAAGAACTACTTAGCTTGGTACCAGCTAAAACCAGGGCGGCCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTATTTTACTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p136w33		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGGGTCCCACTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTATTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p136w34		IGLV	GATATTGTGATGACCCAGACTCCACTCTCCTCACCTGTCACCCTCGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCCCGTACACAGTGATGGAAACACCTACTTGAGTTGGCTTCAGCAGAGGCCAGGCCAGCCTCCAAGACTCCTAATTTATAAGATTTCTAACCGGTTCTCTGGGGTCCCAGACAGATTCAGTGGCAGTGGGGCAGGGACAGATTTCACACTGAAAATCAGCAGGGTGGAAGCTGAGGATGTCGGGGTTTATTACTGCATGCAAACTTCACAATTTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p136w36		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGACATTAACAATTATTTAGCCTGGTTTCAGCAGAAACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGCCAACACTATAATAGTTACCCATTCACTTTCGGCCCTGGGACCAAAGTGGACATCAAAC
004	p136w46		IGLV	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGTAGTTATTTAGGCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCACTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATAGTTACCCTCTCACTTTCGGCGGAGGGACCAAGGTTGAGATCAAGC
004	p136w48		IGLV	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGTATTAGTACGTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATAAGGCGTCCAGTTTAGAAAGTGGGAGTCCCATCAAGGTTCAGCGCCAGCTGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTCTGCAACTTATTACTGCCAACAGTATAATAGTTATCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p136w51		IGLV	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCAGCCTCTCCTGCAGGACCAGTCAGAGTATTAGCAGCGGCTACTTAGCCTGGTACCAGCAGAAACGTGGCCAGGCTCCCAGGCCCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCGGCGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTTTGCTGGCTTACCTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p136w52		IGLV	GAAGTTGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGCGCCACCCTCTCTTGCAGGGCCAGTCACAGTATTAGCAGCAGTTCATTAGCCTGGTACCAGCAAAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTACATTCGGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCACTGGGTCTGGGACAGACTTCACTCTCACAATTAGGAGACTGGAGCCTGAAGATTTTGCCGTGTATTACTGTCAGCACTATGGGAGGTCATCCTTGTGCAGTTTTGGCCAGGGGACCAGGCTGGATGTCAAAC
004	p136w54		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATGATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTACCCCCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p136w55		IGLV	GACATCCAGGTGACCCAGTCTCCATCTGCCATGTCTGCATCTGTAGGAGACACTGTCACCATCACTTGTCGGGCGAGTCATTACATTAACATTCATTTAGCCTGGTTTCAGCAGAAACCAGGGAAAGGCCCTAAGCGCCTGATCTATGCTGCATCCACTTTGCAAATTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCAGTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAACATTACACTTACCCGTACAGTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

004	p136w58	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTAGAAATG ATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATAGTTACC CCTCTCTTCGGCCTGGAACCAAAGTGGATATCAAAC
004	p136w60	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCGTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGGATTGGCAGC AGCCTAGCCTGGTACCAGCACAAACCTGGCCAGGCTCCCAGTCTCCTCATCTATGGTGCAACCACCAGGGCCACTGGAATCCCGCCCAGGTTC AGTGGCAGTGGGTCTGGGGCAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTCTATTACTGTCAGCAGTATCAGATCTG GCCACGGACGTTCGGCCAAGGGACCAGGGTGGAAATCAGAC
004	p136w7	*IGLV*	GACATCCAGATGACGCAGTCTCCAACTTCTGTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGCGTATTAACAGTTG GTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCGCTTTGCAAAGTGGGGTCCCATCACGGCTCAGC GGCAGTGGATCAGGGACAGATTTCACTCTCACTATCAGCAGCCTGGAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGGTAACAGTTTTCC GATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
004	p136w8	*IGLV*	TGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTACTTATAACTATGTCTCCTGGTACC AACAGCACCCAGGCAAAGCCCCCAACGTCATAATTTATGAGGTCAGTAATCGGCCCTCAGGGATTTCTAATCGCTTCTCTGGCTCCAAGTCTGGC AACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCAGCACTCTCGTGCTAT TTGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p136w90	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCGGCT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTACGATGCATCCAACTTGGAAGCAGGGGTCCCATCAAGGTTCAGT GGAAGTGGATCAGGCACAGATTTTACTTTCACCATCAGCAGCCTGCAGCCTGAAGATATTGCAACATATTTCTGTCAACAATATGAGAATCTCCCG GTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p136w94	*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCTGTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGCACCT GGTTAGCCTGGTATCGGCAGCAACCAGGGAAAGCCCCTAACCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGATTTCACTCTCACTATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTAACAGTTTCC CTTTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p137w10	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATATTGGGAGTT ATGACCTTGTCTCCTGGTTCCAGCAGCACCCAGGCAAAGCCCCCAAACTCATCATTTTTGACGTCAGTAGCCGGCCCTCAGGGGTTTCTAATCAG TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCA
004	p137w101	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGATCCAGCAGTGACGTTGGTGGTT ATAACTATGTCTCCTGGTACCAACAGCACCCCGGCAAAGCCCCCAAACCTCATGATTTATGATGTCAGTGATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGCCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAG ACAGCAACACTCGTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p137w108	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCACA GTGATGGATACATCTATTTGGATTGGTACCTGCAGAAACCAGGGCAGTCTCCACAGCTGCTGATCTATTTGACTTCTAGTCGGGCCTCCGGGGTC CCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTAACCTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGAATCTATTACTGCATGC AAGCTTTTCAAACTCCCCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p137w11	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTCTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAAAATATTAATACCTG GTTGGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAACTCCTGATCCAAAGGGCGTCTAGTTTAGAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCGACATATTACTGCCAACAGTATAATAATTATTG GACGTTTGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w113	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACCGGAACCAGCAGTGACGTTGGTACTT ATAACTATGTCTCCTGGTACCAACAGAACCCAGGCAAAGCCCCCAAAGTCATAATTTATGAGGTCAATAATCGGCCCTCAGGGGTTTCGAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGGGGACGAGGCTGATTATTACTGCAGCTCATATACAA CCAGGAGCACTCTCGTGCTATTTGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p137w114	*IGLV*	GATGTTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCACAGCCTCGTACACA GTGATGGAAACACCTATTTGCATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTC CCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGCGATTTATTACTGCATGC AAGGTACACACTGGTCGATGTGCAGTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p137w118	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGTAGAT ATTTAAATTGGTATCAGGAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTATAGTGTATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCACT GGCAGTGGCTCCGGGGCAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCGACTTATTATTGTCAACAGAGTTACAGTTCCCC GTACACTTTTGGCCAGGGGACCAACCTGGAGATGAGAC

004	p137w119	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGACTGTTAGCGGCAACTACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGTTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCGTCCCAGACAGGTTCATTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAACAGACTGGAACCTGAAGATTTTGCGGTGTATTATTGTCAGCAGTATGGCACCTCACGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w122	*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGTAGCTACTTAGTCTGGTACCAGCAAAAACCTGGGCAGGCTCCCAGGCTCCTCATCTATGATGCAGTCAACAGGGCCACTGGCATCCCAGTCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAGGATTTTGCAGTTTATTACTGTCAACAGCGTAACAACTGGCCTTCCTTCGGCCAAGGGACACGACTGGAAATTAAAC
004	p137w124	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTATTCAGCTCCAACAATAAGAACTACTTAGCATGGTACCAGCAGAAACCAGGACAGCCTCCTAAGGTACTCATTTTCTGGGCATCTACCCGGAAATCAGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCACTTTATTACTGTCAGCAATACTATACTACTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w125	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAATAATTATGTATCCTGGTACCAGCAACTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACGTGGGATAGCAGCCTGGGTGCTCCCCTGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
004	p137w126	*IGLV*	CAGTCTGCCCTGACTCAACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAACTATGTCTCCTGGTACCAACAATACCCAGGCAAAGCCCCCAAAGTCATGATTTATGATGTCAGTAATCGGCCCTCAGGGGTTTCTGTTCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAAGACGAGGCTGATTATTACTGCAGCTCATATACAAGCAGCAGCACTGTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
004	p137w128	*IGLV*	GAAATCGTCTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGTGAAAGAGCCGTCCTCTCCTGCAGGGCCAGTCAGACTGTTGGCAGGAGCTTCTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACAGGCATCCCAGACAGGTTCAGTGGCAGCGGGTCTGGGACAGACTTCAGTCTCACCATCAGCAGACTGGAACCAGAAGATTTTGCAGTGTATTTCTGTCACCAGTATGGTACTTCACAGTGGACGTTCGGCCTAGGGACCAAGGTGGAAATCAAAC
004	p137w130	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAGAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCAGCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCGGGCTCCTCATCTATGATGCATCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCGGCAGACTGGAGCCTGAAGATGTTGCAGTGTATTACTGTCAGCAGTATAGTCCCTCACCTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w131	*IGLV*	CAGGCTGTACTGACTCAGCCGTCCTCCCTCTCTGCATCTCCCGGAACATCTACCAGTCTCACCTGCACCTTGGCCAGTGGCATCGATGTTCTTGCCACCAGAATTTACTGGTACCAACAGAGGCCAGGGAGTCGACCCCACTATCTCCTGAGGTACAAGTCAGACTCAGATTACAGCCAGGGCTCTGGAGTCCCTAGTCGCTTCTCTGGATCCAAAGATGCTTCGGCCAACGCAGGTATTCTAGTCATCTCTGAAGTCCAGTCGGAGGATGAGGCTGATTATTATTGTATGGTCTGGCACAACAGAGCCGTGATCTTCGGCGGAGGGACCAAGCTGACCGTCCTCG
004	p137w132	*IGLV*	GATATTGTGATGACTCAATTTCCCCTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCCAGTCAGACCCTCCTGCATAGTAATGGATTCAACTACTTGGATTGGTATGTGCAGAAGCCAGGGAAGTCTCCACAACTCCTGATCTATTTGGGTTTTAAGCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGTTCAGGCACTGATTTTACACTGGAAATCAGCAGAGTGGAGGCTGAGGATGTGGGGATTTACTACTGCATGCAACCTCTACAAACTCCATTGACTTTCGGCCCTGGGACCAAAGTGGATTTCAAAC
004	p137w135	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCACCTCCAACATTGGGAATAATTATGTATCCTGGTACCAGCAACTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACGTGGGATAGCAGCCTGGGTGCTCCCCTGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
004	p137w137	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCTCCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTACCTTGGTTGGCCTGGTATCAACAAAAACCAGGGAAAGCCCCTAAACTCCTGATCTATGAGGCGTCTAGTTTAGAGATCGGGGTCCCATCAAGGTTCAGCGGCAGTAGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAAAAGTTATTCTCCCTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w142	*IGLV*	GATATTGTCATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCAATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATAGTAATGGATTCAACTACTTGGAGTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATGTGGGATTTAAACGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGCGGGTCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAAGTCTACAATCTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
004	p137w15	*IGLV*	GACGTCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGCGTCTTAATAGTTGGCTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCCACACGGCGTCTGCTTTAAAAAGTTGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGACTTTGCAACTTATTACTGCCAACAGTATAATAGATATCCGTGGACGTTCGGCCAGGGGACCAAGGTGGAAATGAAAA

004	p137w20	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGGTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCAACATCATGATTTATGATGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCTT CTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACC AGCAGCACTCTCGGACTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
004	p137w21	*IGLV*	GAAATTGTGTTGACGCAGTCTCCGGCCACCCTGTCTTTGTCGCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGCCAGACTATTAACAACA ACTACTTAGCCTGGTACCAGCAGCAACCTGGCCAGGCTCCCAGGTTCCTCATCACTGGTGCATCCAACAGGGCCTCTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTTCTGTCAGCAGTATAGTAGCT CATCCTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAGAC
004	p137w22	*IGLV*	GAAATAGTGATGACGCAGTCTCTAGTCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAATGTTGGCGTCA ACTTAGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGACTCCTCATCTATGATGCATCCACCAGGGCCACTGGTATCCCAGCCAGGTTCAG TGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCACTTTATTACTGTCAGCAGTATGATAACTGGC CGGGAACGTTCGGCCAAGGGACCAAGGTGGACTTCAGAC
004	p137w23	*IGLV*	TCCTATGAACTGACTCAGCCACACTCAGTGTCAGTGGCCACAGCACAGATGGCCAGCATCACCTGTGGGGGAAACAACATTGGAAGTAAAGCTG TGCAGTGGTACCACCAAAAGCCAGGCCAGGACCCTGTGCTGGTCATCTATAGCGTTAGCATCCGGCCCTCAGGGATCCCTGAGCGATTCTCTG GCTCCAACCCAGGGAACACCGCCACCCTAACCATCAGCAGGATCGAGGCTGGGGATGAGGCTGACTATTACTGTCAGGTGTGGGACAGTAGTA GTGATCATCAGGTG
004	p137w26	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATTTCCTGCACTGGAACCAGCAGTGACATTGGTACTT ATGACTATGTCTCCTGGTACCAACAACACCCGGGTAGAGCCCCCAAACTCATTATTTCTGCTGTCAGTAGTCGGCCCTCAGGGATTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGTTCATATAGAAA CACGAACAGTCTCGAGAATTATGTCTTCGGGACTGGGACCAAGGTCACCGTCCTAG
004	p137w27	*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAAGA ACTGGTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATTCATACTGCATCCAGCAGGGCCACTGGCATCTCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCGTCACCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGCAGC TCACCCGTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p137w28	*IGLV*	GACATCGTGTTGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCGTCAACTGCAAGTCCAGCCAGAGTGTTTTTTCTGA ACTCCAACAGGAAGAGCTTTTTGTCTTGGTTTCAACTGCGACCAGGGCAGCCTCCTAAATTGCTCTTTTACTGGGCATCTTCCCGGGAAACCGGG GTCCCTGACCGATTCAGTGCCAGCGGGTCTGGGACAGATTTCACGCTCACCATCCACAACATGCAGGCTGAAGATGTGGCAGTTTATTACTGTC AGCAGTATTATACCACTCCTTTCTCTTT
004	p137w30	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATG ATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTACCC CCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p137w32	*IGLV*	CAGTCTGTGTTGGCGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGTTCTGGAAGCAGCTCCAACATTGGAAGG AATGTTGTGTCGTGGTACCAGCAGTTCCCAGGTACAGTCCCCACACTCCTCATTTCTGACACTAACAGACGAGAGTCAGGGACTCCTGACCGATT CTCTGGCTCAAAGTCTGGCACGTCAGCCACCCTGGAAATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTATTGCGGAACATGGGATAG CAGTCTGAGAGTTGTTCTAATCGGCGGAGGGACCAAGCTGACCGTCCTAG
004	p137w34	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCTACAGTGACGTTGGTCGTT ATAACTTGGTCTCCTGGTACCAGCAATACCCAGGGAAAGCCCCCAAACTCCTGATTTATGATGTCAGTGATCGGCCCTCAGGTGTTTCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGACGACGAGGCTGCTTATTACTGTCACTCATATACAAC CACCGTCGGCTGGGGGTGTTCGGCGGCGGGACCAGGCTGACCGTCCTAG
004	p137w36	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGAGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCAGCT ACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCGTCCACCAGGGCCACCGGCATCCCAGACAGGTTCA GTGGCAGTGGTTTTGGGACAGACTTCAGTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTATTGTCAGCAGTATGGTAACTCA CCTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p137w47	*IGLV*	TCCTATGCGCTGACTCAGCCACCCTCGGTGTCAGTGGCCCCAGGACAGACGGCCAGGGTTACCTGTGGGGGATACAACATTGGCACTAAAAGT GTGCAGTGGTACCAGCAGAAGCCAGGCCGGGCCCCTGTGTTGGTCGTCTCTGATGATAGGGACCGGCCCGCAGGGATCCCTGAGCGGTTTTCT GGCTCCAACTCCGGGCAAACCGCCACCCTGACCATCAGCAGGGTCGAGGCCGGGGATGAGGCCGACTACTACTGTCAGGTGTGGGACAGTGA TGGTGATCATCCAGTATTCGGCGGAGGGACCAAGTTGATCGTCCTAG
004	p137w51	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCGGC AACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGACTCCTCATCTATGTTGCATCCACGAGGGCCACTGGTATCCCAGCCAGGTTCA GTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTACTACTGTCAGCAGTATAAACACTGG CCGTACAGTTTTGGCCAGGGGACCAAACTGGAGATCCAAC

004	p137w52	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAGAGAGCCACCCTCTCCTGCAGGACCAGTCAGAGTGTTAGTAGCTACGTCCTTGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCGCTGGCATCCCAGACCGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACTATCAGC
004	p137w58	*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTGAGAGTATTAGCAGCTACTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGCAGCGTAGCAGCTGGCCTCCGTGCAGTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
004	p137w60	*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCGGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGACTCCTCATGTATGTTGCATCCACCAGGGCCACTGATATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTATAAAATCTGGCCGTACACTTTTGGCCAGGGGACCAAACTGGAGATCCAAC
004	p137w7	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTATTAGCAACAACTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAACAGGGCCACTGGCGTCCCAGACAGGTTCAGTGGCAGTGGATCTGGGGCAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCATTATGATAGGTCACCTCAGATCACTTTCGGCCCTGGGACCAAGTGGATTTCAAACG
004	p137w8	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGGGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGGCATTAGCAATTATTTAAATTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAAGTCCTGATCTACGATGCATCCAATTTGGAAACAGGGGTCCCACTGAGGTTCAGTGGAAGTGGATCTGGGACAGATTTCACTTTCACCATCAGCAGCCTGCAGCCTGAAGACGTTGCAACATATTATTGTCAGCAGTATGAAAATCTCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
004	p137w90	*IGLV*	CAATCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGCAGGTTATGGTGTACACTGGCACCAGCATATTCCAGGAACAGCCCCCAAACTCCTCATGTATGATAATAGCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGACACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGACTATTACTGCCACTCGTATGACAGCAGCCTGAGTTCTTGGGTGTTCGGCGGAGGGACCAAGTTGACCGTCCTAG
004	p137w93	*IGLV*	GCCATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTGGGAGACAGAGTCACCATCACTTGCCGGGCCAGTGAGGGCATTGGCAGTTATTTTGCCTGGTATCAACAAAAGCCAGGGACAGCCCCCTAAACTCCTGATCTATGCTGCATCCACTTTGCAAGATGGGGTCCCCTCAAGGTTCAGCGGCTCTGGATCCGGGACAGCATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTGTGCAACTTATTACTGTCAACAACTTGGCAGTTCTCCGTACACTTTTGGCCAGGGGACCAGACTGGAGATCAAAC
004	p137w94	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTGCAAATGATTTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCGCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAGCATAATTCTTACCCCCTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
004	p137w95	*IGLV*	GACATCCAGATGACCCAGTCCCCATCCTCCCTGTCTGCGTCTGTGGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAAACCATCAACAAGTATTTACATTGGTATCAGCAGAAACCTGGGAGAGCCCCTAAACTCCTGATCTCTGTTGCCTCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACCCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACCTACTACTGTCAACAGAGCTATATTACCCCTCAAACTTTCGGCCCTGGGACCAAAGTGGAAATGAAAC
003	p91w108	*IGHV*	CAGGTGCAGCTGGTACAATCTGGGTCTGAGTTGAAGAAGCCAGGGGCCTCAGTGAGGGTTGCCTGCAAGACCTCTGGATACACCTTCACTAGTTATACTATGAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACACCAACACTGGGAAGCCAACATATGCCCAGGGCTTCACAGGACGGTTTTTCTTCTCTTTGGACACCTCTGTCAGTACGGCATATCTGCAGATCAGCAGCCTAAAGGCTGAGGACACTGCCGTGTATTACTGTGCGAGAGAATTACAACCAACATCTGATTACTATTACTACTACGCTCTGGAAGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p91w109	*IGHV*	CAGCTGCAGTTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGAAGACCCTGTCCCTGACCTGCACTGTACTTGGTGGCTCCATCAGCAGCAGTCGCTACTACTGGGGCCTGGATCCGCCAGACCCCAGGAAAGGGGCTGGAATGGATTGGGAGTATGTATTACAGTGGGAGCGCCTACTACAACCCGTCCCTCAAGAATCGAGTCACCATATCCGTAGACACGTCCAAGAGCCAGTTCTCCCTGGTGCTGATGGCTGTGACCGCCGCAGACACGGCTATGTATTACTGTGCGAGACATGTGAGGGATGACGACACCCAACTTTCCCACTTTGACGACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w122	*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAGGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGACTCCATCACCAGTGGTGCTTACTCCTGGAACTGGATCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATCCGAGTGGCACTACTTATTACAACCCGTCCTTGACGGGTCGAGTCACCATCTCAGTTGACAGGTCCAAGAACCAGTTCTCCCTGAACTTGAAGTCTGTGACTGCCGCGGACACGGCCGTGTATTACTGTGCCAGAG

003	p91w135		*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTAAAGCCTTCGCAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCAGCAAT GGTGGTTACTCCTGGAGCTGGATCCGGCAGCAACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATCAGACTGGGGGCGCCTCCTACAAC CCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACAGGTCCAAGAACCAGTTCTCCCTGAAGGTGAACTCTGTGACCGCCGCGGACACGGCC GTGTATTTCTGTGCCAGAGGCAAGGACTTCGATCCTTTGACAGGTTATTTTGAAGCTTTTGATGTCTGGGGCCAAGGGACAATGGTCACCGTCTC TTCAG
003	p91w136		*IGHV*	CAGGTACAGTTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTGGT TACTACTGGAGCTGGATCCGGCAGTCCCCGGGGAAGGGACTGGAGTGGATTGGCTATATCTCTTACAGTGGGAGCACCAACTACAATCCCTCCC TCAAGAGT
003	p91w14		*IGHV*	CAGGTCCAACTTGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACATTTTCACTAGTT ATGCTATGCATTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGGTGGATCACCCCTGGCAATGGTGACACAAATATTCACAGA AGTTCCAGGGCAGAGTCGCCATTACCAGGGACACATCCGCGAGCACAGTCTACATGGAGCTGAGCAGCCTGAGATCTGAAGACACGGCTGTGT ATTACTGTGCGAG
003	p91w159		*IGHV*	GAGGTGCAGTTGGTGGAGTCTGGGGGAGACTTGGTCCAGCCGGGGGGGTCCCTGAGGCTCTCCTGTGAAGCCTCTCAACTCACCTTCAGTTCC TATACTATGCACTGGGTCCGCCAGGCTCCAGGGAAGGGACTGGAATATGTTGCAGCCATTAACGGAGGGGGTGACACATATTATGGCGCTTCTG TGAGGGGCAGAGTCACCATCTCCAGAGACAATTCGAAGAGCATGCTGTTTCTTCAAATGGGCAGCCTGAGACCTGAGGACACGGCTATGTACTA CTGTGCGAGAGCCCGGGGGGCTGGTGGTTCGGGGAACTCTCCACCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
003	p91w162		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGGCCCAGGACTGCTGAAGCCTCCGGAGACCCTGTCCCTCACGTGCAGTGTCTCTGGTGGCTCCATCAGCAGT AGTGGTCACTACTGGGGCTGGATCCGCCGGCCCCCAGGGAAGGGGTTGGAGTGGATTGGGAGTATCTATTATAGTGGGAGCACCCACTACAAC CCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGGACTCTGTGACCGCCGCAGACACGGCTG TGTATTACTGTGCGAGACAAAAGGCCCCTAACTGGTCTCTCTCGGACCTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p91w169		*IGHV*	GACGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAACCTCTGGCTTCACTTTTATTAGTTA TTGGATGGCCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCAGTATAAAGCAAGATGGAAGTGAGGAATTCTATGTGGACTC TGTGAGGGGCCGATTCACCATCTCCAGAGACACCGCCAAGAAGTCACTTTATCTGCAAATGAACAGCCTGAGAGCCGACGACACGGCCATTTAT TTCTGTGCGAGAGATTACTTACTGACCTCTGGCTGGACATTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w17		*IGHV*	GCTGAAGCCTCCGGAGACCCTGTCCCTCACGTGCACTGTCTCTGGTGGCTCCATCAGCAGTACTGGTCACTACTGGGGCTGGATCCGCCGGCC CCCAGGGAAGGGGGTTGGAGTGGATTGGGAGTGTCTATTATAGTGGGAGCACCCACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTA GACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAACTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACAAAAGGCCCCTAACT GGTCTCTCTCGGACCTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCTTCAG
003	p91w174		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT GGTGGTTACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGCACATCTATTACAGTGGGAGCACCTACTACAAC CCGTCCCTCAAGAGT
003	p91w184		*IGHV*	TGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACCAGTCGAAGTACCATAATGAGTATGCT GAATCTGTGAAAAGTCGAATAACCATCAACCCAGACACATCCAAGAACCAGTTCTCCCTGCAGCTCAACTCTGTGACTCCCGAGGACACGGCTAT TTATTACTGTACAAGGGGGTGGCTCCGAACCGGGTTTGACTACTGGGACCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w185	43	*IGHV*	TTATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCTGTTATATCATATCATGGAAGTAGTCAACACTATGCAGAC TCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTCTTTCTGCAAATGAATAGCCTGAGAGGTGACGACACGGCTGTGT ATTACTGTGCGAAAGTGGGAGCTACCCAAAACCACCCTGATTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w2		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCCCCTTCAGTAC CTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTCTCATACATTGATAGTAGTAGTAATTACATATACTACGCAGACT CAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTATGTA TTACTGTGCGAGACAAGTCCCCTATTTGAGTGGTTATCCCAACTGGTTCGACCCCTGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w26		*IGHV*	GAGGTGCAGGTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCGGGGGGGTCCCTAAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTTCC TATGTCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAACACTGATAGTAGATACATATACTACGGAGACT CAGTGAAGAGCCGATTCACCGTCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAGATGAACAGCCTGAGGGCCGAGGACACGGCTGTCT ATTATTGTGTGAGACAGCAGGACGACGAATCTTGTCTTGGTGGTACCTGCTATATTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCC TCAG
003	p91w3		*IGHV*	TTACACCTTTACCAGCTTTGGTATCGCCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGCATCAGCGCTTACAATGGTAAC ACAGACTATGGACAGAAGTTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCTACATGGAGCTGAGGAGCCTGAGATCT GACGACACGGCCGTGTATTACTGTGCGAGAGAGGTTCGGGGAGTTCTTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p91w44	*IGHV*	GCAGCGATAGAATCAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCGACCCTATACTTGGTATATCAAACTACGC
			ACAGAAGTTCCAGGGCAGAGTCACGATTATCGCGGACAAATCTACGAGCACATCCTACATGGAGCTGAGCAGCCTGAGATCTGAGGACACGGC
			CGTGTATTACTGTGCGAGAGAGGCTCGGGGAGTTATTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p91w69	*IGHV*	CAGGTCCAGCTTATGCAGTCTGGGCCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGTCCTCTGGATACAGTTTCACTAACT
			ATGGTATCCATTGGGTGCGCCAGGCCCCCGGACAAGGGCTTGAGTGGATGGGCTGGATCAACCCTGGCACTGGCTACACACAATCTACACAGA
			AATTCCAGGGGCCGAGTCTCCATTTCCAGGGACACACCCGCGACAACAGCCTACATGGACCTGAGGAGCCTGAGATCTGAAGACACGGCTGTGT
			ATTACTGTGCGAGAGGGTTCCTCAGTGGCTGGAATGATGCTTTTGAGATCTGGGGCCAAGGGACAGTGGTCACCGTCTCTTCAG

003	p91w94	*IGHV*	CAGCTGCAGCTACAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT
			AGTGGTCACTACTGGGGCTGGATCCGCCAGCCCCCCGGGAAGGGGCTGGAGTGGATTGGGAGTATCTATTATAGTGGGAGCACCTACTACAAC
			CCGTCCCTCAAGAGTCGAGTCACCATTTCCGTAGACACGTCCAACAACAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGT
			CTATTACTGTGCGAGACAAAAGGCCCCTAATTGGTCTCTCTCGGACTTCGATCTCTGGGGCCGTGGCACCCGGGTCAGTGTCTCCTCAG

003	p92w100	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAAG
			CCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAAAAGTGATGGTGGGACTACAGACTAC
			GCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACCTGTATCTACAAATGAACAGCCTGCAGACCGAGGACACAGC
			CGTATATTATTGT

003	p92w101	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCCTCAGCGAC
			TACTACATGACCTGGATCCGCCGGGCTCCAGGGAAGGGGCTGGAATGGGTTGCATACATTAGTAGTGGTAGTAGTGACAAATATTACGCAGACT
			CTGTGAAGGGCCGATTCACCATCTCCAGGGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGT
			ATTATTGTGCGAGACCGCACGGTGACTACCCGCAATGGCATTACTACCACGGTCTGGACGTCTGGGGCCTAGGGACCACGGTCACCGTCTCTTC
			A

003	p92w104	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAATACT
			TACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGAATATCTACTCCAGTGGGAGCACCAACTACAACCCTCCC
			TCCAGAGTCGAGTCACCATATCAATAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCTGCAGACACGGCCGTGTATTA
			CTGTGCGAG

003	p92w108	*IGHV*	AGAAGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGTAAGGCTTCTGGTTATACCTTTACCCGGTTTGGTATCAGTTGGGTGCGACAG
			GCCCCTGGACAAGGGCTTGAGTGGATGGGGGTTGATCAGCGATTACGACGGTAACACACACTATGCACAGAGACTGCAGGGCAGAGTCACCATG
			ACCACAGACACATCCACGAGTACAGCCTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTGTATTACTGTGCGAGTCTGGTTCGG
			GGAGTTATTGGGGACCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p92w111	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGACTTGGTAAAGCCAGGACGGTCCCTGACAATCTCTTGTACAGGTTCTGGATTCAACTTTGGTGAAT
			ATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGATTCATTAGAAGCAAACCTTACGGTGAGACAACAAAATTCG
			CCGCGCCTGTGCAAGGCAGATTCACCGTCTCAAGAGATGATTCCAAAGGCATCGCCTATCTGCAAATGAACAGCCTGAAAACCGCGGACACTGC
			CGTCTACTTTTGTGCTAGGGAGAGGTTCGAGCAGTGGCAGGAACGGTATTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p92w112	*IGHV*	CAGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACACCTTTAATAAGT
			ATGCTATGAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAATGGATGGGATGGATCAACACCAATACTGGGAACCCAACGTATGCCCAGG
			GCTTCACAGGACGGTTTGTCTTCTCCTTGGACACCTCTGTCAGCACGGCATATCTGCAGATCAGCAGCCTAAAGTCTGAGGACACTGCCGTATAT
			TACTGTGCGAGAGAATTACAACCAACATCTGATTACTATTACTACTACGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

003	p92w113	*IGHV*	GAGGCGCACATGGTGGAGTCTGGGGGAGCCTTGATCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGTAGTCTCTGGGTTCAGCGTCAGTGAC
			ACGTTCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGTCTGGAGTGGGTCTCCGTTATTTATAATACCGGAGAGACATATTACATCGACTCCG
			TCAAGGGCCGATTCATCATCTCCAGAGACAACTCCAAGAACACCCTGTATCTTCAGATGAATAGTCTGAGAGCCGACGACACGGCCGTCTATTAC
			TGTAAGGTGGGACACTATGCCGTGCGACAGCACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p92w114	*IGHV*	CAACTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT
			AGTAGTTACTTCTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTATTATAGTGGATACACCTACTACAACC
			CGTTCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAACAACCAGTTGTCCCTGAACCTGAGGTCTGTGACCGCCGCAGACACGGCTGT
			TTATTACTGTGCGAGACATAAGGGAGACGAATGTCGTAGGAGCACCTGCTATCACGCCGTTGGTGCTTTTGATGTCTGGGGCCAAGGCACAATG
			GTCCCCGTCTCTTTAG

003	p92w119	*IGHV*	GCGTCACTAACGCTGTCATCCACTGGGTCCGCCAGGCTCCAGGCAAGGGCCTGGAATGGGTGGCACTTGTCTCAGTTGATGGATACAATAGAGATTATGGAGACTCCTTGAAGGGCCGATTCACCATCTCCAGAGACACTTCCAAGAATACGATTTATCTGCAAATGGACAGCCTGAGAACTGAGGACACGGCTCTATACTACTGTACGAGAGAGGGTCATAGTAGTGGTCATGCCGGTGCCTTTGACCACTGGGGCCAGGGAACCCTAGTCATCGTCTCCTCAT
003	p92w122	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAGGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTATACCATTAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGG
003	p92w126	*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGGAGCACTGCTGCTTGGAATTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACCAGTCC
003	p92w135	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTAGTGGAGTGGGTGTGGGCTGGATCCGTCAGCCCCAGGAAGGGCCCTGGAGTGGCTTGCACTCATTTATTGGGATGATGATAAGCGCTACAGCCCATCTCTGAAGAGCAGGCTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGCCACATATTACTGTGCCCCCTTTCACGGGGGAGTTATCGTTACAACTGGTTCGACCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w136	*IGHV*	CAGGTTCAACTGATGCAGTCTGGAGCTGAGATGAAGAAGCCTGGGGCCTCAGTGCAGGTCTCCTGCAAGGCCTCTGATTACACCTTTACTAAGTATGGTATCATGTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGATTATAATGGTGACACAAATTATGCACAGAAGGTCCAGGGCAGAGTCACCATGACCACAGATACATCCACGAGCACAGCCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTATATTACTGTGCGAGTCTGATTCGGGGAGTTATTGGGGACTACTGGGGCCAGGGAACCCGGGTCACCGTCTCCTCAG
003	p92w14	*IGHV*	CAGGTTCAGCTGGTGCAGTCTAGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGATATACCTTTACCAGCTATGGTGTCACCTGGGTGCGACAGGCCCCTGGACAAGGGCTAGAGTGGATGGGAGGGATCAGCGGTTACAATGGTGACACAAACTATGCACAGAGGGTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGACTACATGGAGCTGAGGAGCCTCAGATCTGACGACACGGCCGTGTATTTCTGTGCGAGAGAAGTTCGGGGGAGTTATTAGCTACTGGGGCCAGGGAACCCTGGTCAGCGTCTCCTCAG
003	p92w143	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTTCTGATTACACCTTTAGCAGTTATGGAATCAACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGATTACAATGGTAACGCGAACTATGCACAGAAGTTCCAGGGCAGAGTCACCATGACCACAGACACATCCACCGAACAGCCTACATGGAGCTGAGGCGCCTAAGATCTGACGACACGGCCGTGTATTACTGTGCGAGTCTCATTCGGGGAGTTATTGGGGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCCG
003	p92w145	*IGHV*	GAGGTGCAATTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCGGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTTTAGGATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTAGTTTTGACATATACTATGCAGACTCAATGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTCACTGTATCTGCAAATGAGCAGCCTGAGAGCCGAGGACACGGCTGTGTATTACTGCGCGAGAGATTACCTAGAAGGTAGTGGGAGCGACTACATAGGCAAGGGCTACGGTTTGGAACTCTGGGGCCAAGGGACCATGGTCACCGTCTCCTCA
003	p92w15	*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGATTACCCCCTTTACCAGTTATGGTATCAACTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGATTACAATGGTAACACAAACTATGCACAGAAGTTCCAGGGCAGAGTCACCATGACCACGGACACATCCACCAGAACAGCCTACATGGAGATGAGGAGCCTAAAATCTGACGACACGGCCGTGTATTACTGTGCGAGTCTCATTCGGGGAGTTATTGGGGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCCG
003	p92w159	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCGGAGACTCTCCTGTGCAGCCTCTGGATTCCCCTTCAATCTCTATGCCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCTCTTATCTCATATGATGGAAGTAACAAATACTATGGAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACCCTGTATCTGCAAATGAACAGCCTGAGAGCTGAGGACACGGCTGTTTATTACTGT
003	p92w162	*IGHV*	GAAGTGCACCTGGTGGAGTCTGGGGGAGTCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTACTCGGAATGGTGGTCGTACAGGCTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGGAAATGAACAGTCTGAGACCTGAGGACACGGCGTTGTATTATTGTATAAAAGATAGGGGTAGTAGTGACTGGTGGACCTTTGAAGACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w163	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTATATCTATTACAGTGGGAGCACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCCGTGTATTACTGTGCGAGACAAATTGGGTATAGCAGTGGCTGGTACTTTGGAGGGGGATTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p92w167		*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCGCAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCACCAGTGGTAGTTACTCCTGGAACTGGATCCGGCAGTCATCAGGGAAGGGCCTGGAGTGGATTGGATACATCTATCAGAGTGGCAGTACTTATTACAACCCGTCCTTCAAGGGTCGAGTCACCATATCAGTAGACAGGTCGAAGAACCAGTTCTCCCTGAACCTCAAGTCTGTCACCGCCGCGGACACGGCCGTATATTACTGTGCCAGAGGCGGCCCCTTAGCAAACTGTGGTGGTGATTGCAATCGGTGGTTCGACCCCTGGGGCCAGGGAACCCTCGTCACCGTCTCTTCAG
003	p92w168		*IGHV*	GAAGTTCAGCTGGTGGAGTCTGGGGGGAGGCTTAGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAATGGTGGTAAGATAGGCTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTCTTTCTACAAATGAGCGGTCTGAGAGCTGAGGACACGGCCTTGTATTTCTGCACAAAAGATAGGGGTCAGAGTGACTGGTGGACCTTTGAGGATTGGGGCCAGGGAACCCTGGTCAGCGTCTCCTCAG
003	p92w17		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTGATTACTACTGGAGTTGGATCCGCCAGCCCCCAGGGAAGGACCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTGGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTATTGTGCCAGAGA
003	p92w172	14	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGCATATGTCTATTATAGTGGGAGCACCAACTACAACCCCTCCCTCAGGAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCCGTCTATTACTGTGCGAGAGAGTTCGGGGGTTATCGGTTCGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w174		*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGTGGTGGTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAAGTCCAAGTGGTATTATGATTATGCAATATCTGTGAAAGTCGAATAACCATCAACCCAGACACATCCAAGAACCACTTCTCCCTGGAGTTGAACTCTGTGACTCCCGAGGACACGGCTGTGTATTACTGTGCAGCGGGGTGGCTGCAGGGGGGGTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w175		*IGHV*	AGGATTCATTAGAAGCAAACCTTACGGTGAGACAACAAAATTCGCCGCGCCTGTGCAAGGCAGATTCACCGTCTCAAGAGATGATTCCAAAGGCATCGCCTATCTGCAAATGAACAGCCTGAAAACCGCGGACACTGCCGTCTACTTTTGTGCTAGGGAGAGGTTCGAGCAGTGGCAGGAACGGTATTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w176		*IGHV*	GTTTCTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTTCATACATTCATAGTAGTAGTAGTCCCATATACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGACGAGGACACGGCTGTGTATTACTGTGTGAGAGATCTAGGCTGGTACGATAATTACTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG
003	p92w177		*IGHV*	TATAACTGATGGTGGGACAAGAGACTACGTTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTGTATCTGCAAATGAACAGCCTGACACACGAGGACACTGCCGTGTATTACTGTGCCACAGATAGCAGCGGCTGGTCCTCCCCCTATTACTACTACCTAGGTATGAACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCGCA
003	p92w178		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGAGCCTGGATGAACTGGGTCCGCCAGGTTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAAAACTGATGGTGGGACAGCTGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTGTTTCTGCAAATGAACAGCCTGACAATTGAGGACACAGCCGTGTATTACTGTACCACTGGGGGATACTGTAGTACTACCACCTGCTATAAGGGTTACTACTACTACGGTTTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p92w184		*IGHV*	GAGGTGCACCTGGTGGAGTCTGGGGGAGGCTTGGTAATGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCACTAGGGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTTGGGCGTATTAAAAGCAATAATGCTGGTGGGACAACAGACTACGCTGCAGCCGTGAAAGGCAGATTCACCTTCTCAAGAGATGATTCAAAAAACACGATGTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCCGTATATTACTGTACCACCGGTGTTCTAGCGGGCCCTCCTCCCAGCTACTACTACCTCGACATGGACGTCTGGGGCCAAGGGGCCGCGGTCACCGTCTCCTCA
003	p92w185		*IGHV*	CAGGTCCAGCTTGTGCAGTCTGGGGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCGAGGCTTCTGGATACACCTTCACTAACTATGCTATGCATTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGATGGATCAACGCTGGCAATGGTAACACATACTATTCACAGAACTTCCAGGGCCGAGTCACCTTTACCAGGGACACATCCGCGAACACAGCCTACATGGAGCTGAGCAGTCTGAGATCTGAAGACACGGCTGTATATTACTGTGCGAGAGATGGGGAGCATTACTATGTTTCGGGGAGTGGGAAACTGGCTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w187		*IGHV*	AGTATCCATTATAGTGGGAGCACCTACGACAACCCGTCCCTCAAGAGTCGCGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGATAGTGAGCTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACAGAATTACGATGTTTGGAATGGTTCTCTCGATGCTTTTGATATTTGGGGCCGAGGGACAATGGTCACCGTCTCTTCAG

003	p92w191		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAACAAT AGTCCCTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGAGTATCTTTTATAGTGGGACCACCGACTACAAC CCGTCCCTCAAGCGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGACCTCTGTGACCGCCGCAGACACGGCTG TATATTACTGTGCGAGACTTTCTGGTGGCTACAATTACTTGGACTACTTGGTCTACTGGGGCCAGGGAACCCTGCTCACCGTCTCCTCAG
003	p92w20		*IGHV*	GAGGTGCAGTTGGCGGAATCTGGGGGAGGCTTGGTAAAGCCGGGAGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCTGGAAG GCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCCGGAGTGGGTTGGCCTTATTAAAAGCAATGCTGATGGTGGGACGACAGACTA CGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCACAAAACACACTATATCTACAAATGAACAGCCTGCAGACCGAGGACACG GCCGTATATTACTGTATGACAGGAGGCCATTGTAGTAGCACCACCTGCCCTCCCAGTTACTACTACTTCGGTCTGAACGTCTGGGGCCCAGGGA CCACGGTCACCGTCTCCTCA
003	p92w203		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCGGGGGGGTCCCTGAGACTCTCCTGTTCAGCCTCTGGATTCACCGTCAGTAGT TATCACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAATGGGTTGCATATCTTAGTACTAGTAGTACCGTGTACTACGCAGACTCTG TGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAATTCACTGTTTCTGCAAATGAACAGCCTGAGAGACGAGGACACGGCTGTCTATTAC TGTGCGAGAGATCCAGGCTGGTACGAGAACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w21		*IGHV*	CAGGTGCAGCTGGTGCACTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGC TATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGG
003	p92w30		*IGHV*	CAACTGCAGTTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTGACCTGCGCTGTACTTGGTGGCTCCATCAGCAGC AGCCGCTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGGCTGGAATGGATTGGGAGTATGTATTATAGTGGGAGC
003	p92w35		*IGHV*	ACTTCTGGATTCACCTTTGGTGATTATGCTATGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAG CTTATGGTGGGACAACAGAATACGCCGCGTCTGTGCAAGGCAGATTCACCATCTCCAGAGATGATTCCAAAAGCATCGCCTATCTGCAAATGAAC AGCCTGAAAACCGAGGACACAGCCGTGTATTACTGTACGAGAGATCGGCTATTACGTTCGGGGGTCTTATCGACGGCCTTTCTATTTGACTACTG GGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w37		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGGAGT GGTGATAACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGATACATCTATTACAGTGGGAGCACCTACTACAAC CCGTCCCTCAAGAGTCGAGTTACCATATCATTAGACACGTCTAAGAACCAGTTCTCCCTGCACCTGAGCTCTGTGACTGCCGCGGACACGGCCG TCTATTACTGTGCGAGAGTGGGATGGATCCCTATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p92w44	12	*IGHV*	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAACCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGGTTCTCACTCAGCAATG CTAGAATGGGTGTGACCTGGATCCGTCAGCCCCCAGGGAAGGCCCTGGAGTGGCTTGCACACATTTTTTCGAATGACGTGAAATCCTACAGCAC ATCTCTGAAGAGCAGGCTCACCATCTCCAAGGACACCTCCAAAAGCCAGGTGGTCCTTACCATGACCAACATGGACCCTGTGGACACAGCCACA TATTACTGTGCACGGATACCGACTTTGAGTGGTTGGGAGGCTTTTGATTTCTGGGGCCAAGGGACACTGGTCACCGTCTCTTCAG
003	p92w47		*IGHV*	CAAAAGCCATAACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGCTTTCATACATTAGTCCTCTCACTCATACCAAATATTACG CAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGGCAGGAACTCACTCTATCTGCAAATGGACAGCCTGAGAGACGAGGACACGG CTGTGTATTACTGTGCGAGAGGTGGGCTCGACAGTAACTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p92w48	21	*IGHV*	GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAAGCCCGGGGAGTCTCTGAAGATCTCCTGTAAGGCTTCTGGATACAGCTTCACCAGC TACTGGATCGGCTGGGTGCGCCAGATGCCCGGGAAAGGCCTGGAGTGGCTGGGAATCATATATCCTGATGACTCTGATATCACATACAGCCCGT CCCTCCAAGCCCAGGTCACCATCTCAGCCGACAAGTCCATGAACACCGCCTACCTACAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATGT ATTACTGTGCGAGAGTTTATGATTTTTCGAGTGGCTCCCCCTGGGCTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCGCA
003	p92w59		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCGTCTGGATTCACCTTCAGTAGT TATGGCATGAACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCATTTATATGGTCTGCCGGAAGTAATAAATACTATGCAGACT CTGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAGATGAACAGCCTGAGAGGCGAGGACACGGCTGTCTA TTACTGTGCGAGAGATGTGGGAAGTAGTACCTCCTGGGGTTTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCACCTCA
003	p92w6	20	*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTCCACTGGTGAAACCCACACAGACCCTCACCCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTA GTGGAGTCGGTGTGGGCTGGATCCGTCAGCCCCCAGGAACGGCCCTGGAGTGCCTTGCAGTCATTTATTGGGATGATGATGAGGGCTACAGCC CATATCTGAAGAGCAGACTCACCATCACCAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGCCAC ATACTACTGTGCACACAGATTGGCCTATGGACCCGCCATGGGAGATGCGTATGATGTTTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG

003	p92w69		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT GGTGGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATCACAGTGGGAGCACCTACTACAAC CCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCTAAGAACCAGTTCTCCCTGAAGCTGAGTCTGTGACTGCCGCGGACACGGCCGT GTATTACTGTGCGAGGGGAGACACGTACTACTATGGTTCGGGGAGTTATTATCACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTC TCCTCAG
003	p92w7		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGAAGGG CCTGGATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCACATTCAAAGCAATACTGATGGTGGGACAACAGACTACG CTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACACTGTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCC GTGTATTATTGT
003	p92w82		*IGHV*	CAGGTTCAGTTGGTGCAGTCTGGAAATGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTACACCTTTAGTAGAT ATGGAATCACCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGTGGTTACAATGGGGACGCAAACTATGCACAGA ATCTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCTACATGGAACTGAGGAGCCTGAGATCTGACGACACGGCCGTAT ATTACTGTGCGAGGGTTGTCTATAGCTTCAGCTGGCTCCATGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w83		*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCTAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGT GCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACCAG
003	p92w93		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCAAGCCTGGAGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTGAC TACTACATGAGCTGGATCCGCCAGGCTCCAGCGAAGGGGCTGGAGTGGGTTTCATACATTAGTGGTAGTGGTAGTCCCATATACTACGCAGACT CTGTGAAGGGCCGATTCACCATCTCCAGGGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGACGACACGGCCGTCTA TTACTGTGCGAGACATATTAAGGATGTTTTGACTGGTCCATCCTCTGATGCTTTTGATATGTGGGGCCAAGGGGCAGTGGTCACCTTCTCTTCAG
003	p92w97		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGGCTCCATCAGTAGT TACTACTGGAGCTGGATCCGGCAGCCCCCGGGAAGGGCCTGGAATGGATTGCATATGTCTATTATAGTGGGAGCACCAACTACAACCCCTCCCT CAAGAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCCGTCTATTAC TGTGCGAGAGAGTTCGGGGGTTATCGGTTCGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w100		*IGHV*	GAGGTGCAGTTGGTGGAGTCGGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGCAGTC ATTGGATGGCTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCAATATAAACCAACATGAAAGTGAGAAATATTATGTGGACTC TGTGGAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAATTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTCTAT TACTGTGCGAGAGGGTATTGTAGTGGTGGTAGTTGCTACGGAGGGGGGTTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w101		*IGHV*	CAGGTGCACCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCATGTGCAGCCTCTGGATTCACCTTCAGTACC TATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGACGGCGATAATAAATACTATGCGGACT CCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAACCTGGGAACTGAGGACACGGCTGTATA TTACTGTGTGAAAGGGACATATTACTATGGTTCGGGGAGTTATTCGATATCCGGGAAATTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCT CCTCAG
003	p93w104		*IGHV*	CAGCTGCAGCTACAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGGCCCTCACCTGCACTATCTCTGATGGCTCCTTCAGCAGT AGTAGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTCTTATAGTGGGAGCACCTACTACAAC CCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGACCGCCGCAGACACGGCT GTGTATTACTGTGCGAGACGCTCGCCACTAGGATATTGTACTACTGGTGCATGCCCGCACTTTGACTACTGGGGCCAGGGAACCCTGGTCTCCG TCTCCTCAG
003	p93w108	15	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAAA GCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAA
003	p93w109		*IGHV*	ATTATTACTGGAGCTGGATCCGACAGACCGCCGGGAAGGGACTGGAGTGGATTGGGCGTGTCTATAACACTGGGCGCACCAAATATAACCCCTC CCTCGAGGGTCGAGTCACCATATCAATAGACACGTCCAACAACCAGTTCTACCTGAATCTGAATTCTGTGACCGCCGCAGACACGGCCATGTATT ACTGTGCGCGGGGCTATTGTACTATTACCAACTGTTATTCGTTCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w113		*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACTTGCAGTGTCTCTGGTGACTCCATCAGCAGT AGAAGTTTCTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATGGGGAGTATCTCTTATAGTGGGAACTCCTACTACAAC CCGTCCCTCAATAGTCGAGTCACCCTGTCTGCTGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCAGTGACCGCCGCAGACGCGGCT GTATATTACTGTGCGCGACATGTATTTTATACCAGCAGCTCGTACCTAGGAGACTACTTTGACTACTGGGGCCACGGAACCCTGGTCACCGTCTC CTCAG

003	p93w114		*IGHV*	GACGTGCGTCTGATGGAGTCCGGGGGGAGGCTTAGTTCAGCCGGGGGGGTCCCTGAGACTGTCCTGTGCAGCCTCTGCATTCACCTTCAGAAGCTACTGGATGCACTGGGTCCGCCAGACTCCAGGGAAGGGGCTGGCGTGGGTCTCACGTATTAGTAGTGATGGCAGTAGTTCCACCTACGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACACACTGTATCTGCAAATGAATAGTCTGAGCGCCGAGGACTCGGCTGTGTATTACTGTGCAAGAGCGGGGCCTGTACGTTGTAGTGATACCAGGTGTTATTTCGAGGACTACCTCTATTATCGTATGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCA
003	p93w119		*IGHV*	GCAGTGGTGGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGGAGTATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAAAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCGGACACGGCCATATATTACTGTGCGAGAGGTTTAGACCGTCACGACAACTATTTGGACTACTGGGGTCAGGGAACCCTGGTCACCGTCTCCTCGG
003	p93w126	16	*IGHV*	CTTGCAGTGTCTCTGGTGACTCCATCAGCAGTAGAAGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATTTATTATAGTGGGAGCTCCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCCTATCTGCTGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAGCTCAGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACATGTATTTTATACCAGCAGCTCGTACTTAGGAGACTACTTTGACTACTGGGGCCACGGAACCCTGGTCACCGTCTCCTCAG
003	p93w127		*IGHV*	CAGGTCCAACTGGTGCAATCTGGGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGGTCTCCTGCAAGGCTTCTGGAGGCACCTTCAGCAGCTATACTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGCTAGGATCATCCCAAGTCTTGGTATTATAAACACCGCACAGAACTTCCAGGGCAGAGTCACGATTACCGCGGACAGATCCACGAGCACAGCCTACATGGAGCTGAGCGGCCTGAGATATGAGGACACGGCCGTGTATTACTGTGCAATGTCGGTGGCGGTGGCTGGGCAGATCCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p93w14		*IGHV*	GGTGATTATACTATGAGCTGGTTCCGCCAGGCTCCAGGGAGGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGCTTATGGTGGGACAACAGAATACGCCGCGTCTGTGAAACACAGATTCACCATCTCAAGAGATGATTCCAAAAGCATTGCCTATCTTCAAATACACAGCCTGACAACGGAGGACACAGCCGTGTATTACTGTACTAGAGATCTGACTCTGGTTCCGGGAGTAATTAGAGAATACTACTTTGACTACTGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w143		*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAAGTCCCTGAGACTCTCCTGTGCAGGCTCTGGATTCACCTTCAGTAGTTATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAG
003	p93w145		*IGHV*	TATGCTGCCTCTGGATTCACCTTCAGTAGTTTTGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATATGATGGAAGCAATAAGTACTACGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTGCAAATGAATAGTCTGATACCTGAGGACACGGCTGTGTATTACTGTGCGACCCACCGAGGGGGTGGTCTGGAAGTAGCTGCCTTCCCTGACTACTGGGGCCAGGGAACCCTGCTCACCGTCTCCTCAG
003	p93w146		*IGHV*	TCTTGGAATACATTGGGTGCGCCAGGCCCCCGGACAAAGCCTTGAGTGGATGGGATGGTTCAACGCTGGCAATGGCAACACAGAATATTCAGAGAAGTTCCAGGGCAGAGTCACCATTACCAGGGACACATCCGCGAGCACAGCCTACTTGGAGCTGAGCAGCCTGAGATCTGAAGACACGGGTTTTTATTACTGTGCGATTATAGTTCGGGGAGTTACTACCTACTGGGGCCAGGGAACCCTGGTCACCGTCCCCTCAG
003	p93w15		*IGHV*	GAGGTGCAGTTGTTGGAGTCTGGGGGACGTGTGGTCCGGCCGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAAGTTTGACGATTTTGCCATGATCTGGGTCCGCCAAGTTCCAGGGAAGGGGCTGGAGTGGGTCTCTACCATTTACTGGAATGGTGTTGATTCCGGTTATGAAGACTCTGTGAAGGGCCGATTCACCGTCTCGAGAGACAACGCCAGGAACTCCCTGTATCTGCATATGAACAGTCTGAGAGCCGAGGACACGGCCTTCTACTATTGTGCGCGGAGAAGAGGAGGTGGTAATGACTTTGACTTCTGGGGCCAGGGGACCCTGGTCACCGTCTCCTCAG
003	p93w159		*IGHV*	GAGATGCAGTTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGCCAGTCCCTGAGACTCTCCTGTGCAGCCTCCGGATTTACATTTAGTAAATATTGGATGAATTGGATCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGG
003	p93w162		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGCACAGCATCTGGATTCACTTTTGGTGATTATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGGTTATGGTGGGACAACAGAATACGCCGCGTCTGTGCAAGGCAGACTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAAATGAACGGCCTGAGAACCGAGGACACAGCCGTATATTTTTGTACAAGATTTCTGGTCTCGAAGTATGGCCTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p93w163		*IGHV*	CAGGTGCACCTGCAGGAGTCGGGCCCAGGACTGCTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATCAGCAGTGGTGGTTACTACTGGAGTTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGTACATATATTATAGTGGGAGCACTTACTATAACCCGTCCCTCAAGAGCCGAATTAGGATTTCAGTAGACACGTCTAAGAACCAGTTCTCCCTGAACCTGACTTCTGTGATTGCCGCGGACACGGCCGTTTATTATTGTGCGAGAGACAAAGGTTGTACTAGTAACAAATGCGATGAGCGGGGAGCCCATGAAATCTGGGGCCAAGGGGCAGTGGTCACCGTCTCTTCAG
003	p93w168		*IGHV*	CTGGCAGTGATATCATTTGATGGAGGTAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCATCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATGAACAGCCTGACAGCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAGTAGTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTTCAG

003	p93w17		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTATTGGTGATTACTACTGGAGTTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTTACCTTATCATTAGACACGTCCAACAACCAGGTCTCCCTGAAACTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTACTGT
003	p93w174		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAACTTCTGGATTCACCTTTGGTGATTATACTATGAGCTGGTTCCGCCAGGCTCCAGGGAGGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGCTTATGGTGGGACAACAGAATACGCCGCGTCTGTGAAACACAGATTCAGCATCTCAAGAGATGATTCTAAGCGCATTGCCTATCTGCAAATACACAGCCTGACAACCGAGGACACAGGCATGTATTACTGTACTAGAGATCTGACTCTGGTTCCGGGAGTAATTACAGAATACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w175		*IGHV*	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAACCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGCTTCTCACTCAGTAATTCTAGAATGGGTGTGAGCTGGATCCGTCAGCCCCCGGGAAGGCCCTGGAGTGGCTTGCACACATTTTTTCGAATGACAAAAAATCTTACAGCACATCTCTGAAGAGCAGGCTCACCATCTCCAAGGACACCTCCAAAAGCCAGGTGGTCCTTACCTTGACCAACATGGACCGTGTGGACACAGCCACGTATTACTGTGCACGGATCCCGACCTTGAGTGGTTGGGGGGCTTTTGATATCTGGGGCCTAGGGACAATGGTCACCTTCTCTTCAG
003	p93w177		*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAACTTCTGGATTCACCTTTGGTGATTATACTATGAGCTGGTTCCGCCAGGCTCCAGGGAGGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGCTTATGGTGGGACAACAGAATACGCCGCGTCTGTGAAACACAGATTCAGCATCTCAAGAGATGATTCTAAGCGCATTGCCTATCTGCAAATACACAGCCTGACAACCGAGGACACAGGCATGTATTACTGTACTAGAGATCTGACTCTGGTTCCGGGAATAATTAGAGAATACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w178		*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGAAGAGGTGAAGAAGGCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTACACCTTAACCACCTATGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATTGATCAGCGACTACAATGGTAAGACGGACTATGGACAGAAGTTCCAGGGCAGAGTCACCATGACCACAGATACATCCACGAACACAGCCTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTGTATTACTGT
003	p93w185		*IGHV*	GCTTCACTTATTACGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCACTTATCTCATATGAAGGAAATAATAAGCACTATGCAGACTCCGTGAAGGGCCGCTTCACCATCTCCAGAGACAATTCCAAGAACACACTGTATCTGCAAATGAACAGCCTGACAGCTGAGGACACGGCTGTGTATTACTGTGCGAAAGATGCCTACAGTAACTACTCGCCCCACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w187		*IGHV*	GAGGTGCAACTGGTGGCGTCTGGGGGAGGCTTGGTCCAGCGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCAAGAACGCGTACTTGACGTGGTTCCGCCAGACTCGAGGGCTGAGGCTGGAGTGGGTCTCTGCTATGTATAGCGGCGGTTATTCATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAGTTCCAGTAACACACTGTTTCTTCAAATGGACAGCCTGCGACCTGAGGACACGTCTGTCTACTACTGTGCGAGAGGGCTCGTCCTACCAACAGCTGCCCTCTTTGACTACTGGAGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w191		*IGHV*	CGTATTAATAGTGATGGGAGTGATACAACCCACGCGGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAAAACACGCTGTATCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCGAGACCCAGGGGCTGTAGTGGTGGTAGGTGCTCCAACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w193		*IGHV*	CAGATCACCTTGAAGGAATCTGGTCCTATGCTGGTGAAACCCACACAGACCCTCACGCTGACGTGCGCCTTCTCTGGATTCTCACTCAGCACTCGTGGAGAGGGTGTGGCCTGGATCCGTCAGCCCCCAGGAAGGCCACTGGAGTGGCTTGCACTTCTTTCTTCAGATAATATTAAGAGTTACAGCCCATCTCTGAAGAACAGGCTCACCATCTCCAAGGACACCTCCAAAAAGCAGGTGACCCTTTCAATGACCAACATGGACCCTATGGACACAGCCACATATTTCTGTGTCCGGAAGAGTGTCGCGGTATTCGATTATCGGAGTCATTATTATGGAATACGATTCGACCCCTGGGGCCAGGGAACCCTGGTGCACCGTCTCCTCAG
003	p93w2		*IGHV*	AAGTGAAGAAGCCTGGGGGCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGTTATAGTTTCACCAGCTATGGTGTCACCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAGGGATCAGCGGTTACAATGGTAACACAAACTATGCACAGAAGGTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGACTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTGTATTTTTGTGCGAGAGAAGTTCGGGGAGTTATTACCTACTGGGGCCAGGGAACCCTGGTCAGCGTCTCCTCAG
003	p93w21	22	*IGHV*	CAGCTGCAGCTGCAGGAGTCGGGCCCAGGAATGGTGAAGCCTTCGGAGACCCTGTCCCTCACTTGCACTGTCTCTGGTGGCTCCATCACCAGTAGTAGTTATTACTGGGCCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTTTCTATTATAGTGGG
003	p93w26		*IGHV*	GAGGTGCAACTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGTCCCTAAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGCTTTGACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTCGAGTGGGTCGCAAGTATTAGTGGTCGTGGTGCGAACACATACTACGCAGACTCCGTGATGGGCCGGTTCACTATCTCCAGAGACAATTCCAAGAGCACGCTGTTTCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTGTATTATTGTGCGAAAGGAATGTACGATTTTTGGCAGTGGGGCCAGGGAACCCTGGTCACCGTCTCGTCAG

003	p93w3		*IGHV*

AAACTCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTAGTAGTTTCTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCT
GGAGTGGATTGGGAATATCTATTATAGTGGGAGAACCAACTACAGCCCGTCCCTCACGAGTCGAGTCTCCATATCCGTAGACACGTCCAAGAAC
CAGTTCTCCCTGAAGCTGCGCTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACATTCAGATTACAATGTTTTGAGTGATTACCA
CAGGCGAGACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

| 003 | p93w30 | | *IGHV* |

CGACAGTGGTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACAGGTCCAAGTGGTATAATGA
TTATGCAGTATCTGTGAAAAGTCGAATAACCATCAACCCAGACACATCCAAGAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTCCCGAGGACA
CGGCTGTATATTATTGTGCAAGAGGGTGGCTACGATTCGGCTTTGAATACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

| 003 | p93w35 | | *IGHV* |

CAGTGGCTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAATGGGTGGCGCTTATATCATATGATGGAAACCTTAAATACTTC
GCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAGTGAACAGCCTGAGAGCTGAGGACACG
GCTGTGTATTACTGTGCGAGAGATCACTACAGCACCTCGTCCCCCCACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

| 003 | p93w37 | | *IGHV* |

CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGCGGTCCCTGAGAATCTCCTGTGCAGTGTCTGGGCTCCCCTTCAGGAG
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CGCCGTGAAGGGCCGATTCACCATTTCCAGAGACAATTCCCAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCAATG
TATTACTGTGCGAGAAATATTGCAGCCGCTGGAACCCTTGACTATTGGGGCCAGGGAACCCTGGTCACTGTCTCCTCAG

| 003 | p93w47 | | *IGHV* |

CAGGTTCAGCTGGTGCAGTCTAGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCCTCTGGATATACCTTTACCAGCT
ATGGTGTCACCTGGGTGCGACAGGCCCCTGGACAAGGGCTAGAGTGGATGGGAGGGATCAGCGGTTACAATGGTGACACAAACTATGCACAGA
GGGTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGACTACATGGAGCTGAGGAGCCTCAGATCTGACGACACGGCCGTGT
ATTTCTGTGCGAGAGAAGTTCGGGGAGTTATTAGCTACTGGGGCCAGGGAACCCTGGTCAGCGTCTCCTCAG

| 003 | p93w48 | | *IGHV* |

CAGGTGCAGCTCCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGGCTCCATCGCCAGT
GGTGCTTACTACTGGACCTGGATCCGCCAGTACCCAGGGAGGGCCTGGAGTGGATTGGCCACATCTTTTATACTGGGGCCACCAACTACAAC
CCGTCCCTCAAGAGTCGACTTACCATCTCGTTAGACACGTCTAAGAATCACTTCTCCCTGAGCCTGAGCGCTGTGACTGCCGCGGACACGGCCG
TGTATTTCTGTGCGAGAGGAAACAAGTATACCAACACCTATTTATATAGCCCTGAGGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTC
TCTTCAG

| 003 | p93w5 | | *IGHV* |

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGT
TACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGCATATGTCTATTACAGTGGGAGCACCAACTACAACCCCTCC
CTCAAGAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCCGTGTATT
ACTGTGCGAGAGAGTTCGGGGTTATCGGTTCGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

| 003 | p93w51 | | *IGHV* |

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAACAGT
GGTCATTACTACTGGAGTTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACC

| 003 | p93w55 | 23 | *IGHV* |

GCCTCTGGATTCACTTTCAGTAAAGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAAA
ACTGATGGTGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTGTATCTGCAAATGAA
CAGCCTGAAAACCGAGGACACAGCCGTGTATTACTGTACCACAGCGGCTAATTACGATTTTTGGAGTGGTTACTACTACGGTATGGGCGTCTGG
GGCCAAGGGACCACGGTCACCGTCTCCTCA

| 003 | p93w59 | | *IGHV* |

CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAACCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGATTCTCACTCAGTCATG
GTACAATGGGTGTGACCTGGATCCGTCAGACCCCAGGGAAGGCCCTGGAGTGGCTTGCACACATTTTTCCCACTGACGAAGAAGCCTACAGGA
CATCTCTGAGGAGTAGGCTCAGCATCTCCAAGGACAGCTCCAAAAGCCAGGTGGTCCTCTCCATGACCAACATGGAGGCCGCCGACACAGCCA
CATACTACTGTGCACGAGTAGGATTCAATCTTTGGGGTGGCTATTTACCGCATGATTCTTGGGGCCAGGGAATCCTGGTCACCGTCTCCTCAG

| 003 | p93w6 | | *IGHV* |

CGGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGATACAGCTTCACTAACT
ATGTTATCAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAACACCAACACTGGGAATCCAATGTATGCCCAGG
GCTTCACAGGACGGTTTGTCTTCTCCTTGGACACCTCTGTCAGCACGGCATATGTGCAGATCAGCAGCCTAAAGGCTGAGGACACTGCCGTGTA
TTACTGTGTGAGAGTCCACTGTATTAGTATTAGCTGCCATACTACGGAAGTTGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTT
CAG

| 003 | p93w62 | | *IGHV* |

CAAGTCCAGCTTGTGCAGTCTGGGGCTGAGGTGAGGAAGACTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATACAGCTTCACTACCT
ATGGAATGCATTGGGTGCGCCAGGCCCCCGGACAAGGCTTGAGTGGATGGGATGGTTCAACGCTGCCACTGGTTACACAGAATATTCACAGAA
GTTCCAGGGCAGAGTCACCATTACCAGGGACACATCCGCGACTACTGCCTATATGGAACTGAGCGGCCTGAGATCTGAAGATTCGGCTGTGTAT
TATTGCGCCTCTGTGGTTCGGGGAGTTATTACTTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p93w69	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCTCAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCTATCAGCAGT GGTGATTCCTACTGGAGTTGGATCCGCCGGCCCCCAGGGAAGGACCTGGAGTGGATTGGGTACACCTCTTACAGCGGGAGCACCTACTACAAC CCGTCCCTCCAGAGTCGAATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAGATGACCTCTGTGACTGCCGCAGACACGGCCGTGTATT TCTGTGCCAGAGGGACGGATTGTGTGAATGGTGTATGCTCTTATTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCCCAG
003	p93w7	*IGHV*	ACCCGGTATGGTATCGTCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGGTGGGATGGATCAGCGATTACAATGGCGACACAAACTAC GCACAGAACCTCCAGGGCAGAGTCACCTTGACCACAGACACATCCACGAGCACAGCCTATATGGAGCTGCGGAGCCTGAGATCTGACGACACG GCCCTGTATTACTGTTCGAGTCTGGTTCGGGGAGTTATTGGGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w8	*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCCAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGC AACAGTGTTGCCTGGACCTGGTTCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAACGACATACTACACGTCCAAGTGGTATAATGATT ATGCACGATCTGTGAAAAGTCGAATAGCCATCAACCCAGACACATCCAAGAACCAGTTCTCCCTGCAACTGAAGTCTGTGACTCCCGAGGACAC GGCTGTGTATTATTGTGCCAGAGGACTCTATAGTTCGGGGAGCTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p93w81	*IGHV*	CGTGGTCCAGCCTGGGAGGTCCCTGAAAATCTCCTGTGCAGCCTCTGGATTCACCTTCAGTCACTATGGCATGCACTGGGTCCGCCAGGCTCCA GGCAAGGGGCTAGAGTGGGTGGCACTGATGTCATATGATGGAAGCAATAAATACTACGCAGATTCCGTGAGGGGCCGATTCACCATCTCCAGAG ACAATTTCAAGAACACCTTGTATCTTGAAATGAATAGTCTGAGAGTTGAGGACTCGGCTGTGTATTTCTGTTCGAGGGAACAGATGTATTGCAGTA GTACTAGTTGCATCGTTCTGGGGGGTGTCTGGGACGTCTGGGGCCAGGGGACCACGGTCACCGTCTCCTCAG
003	p93w82	*IGHV*	ATCAGCAGTGTAGTTACTACTGGAGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGTACATCTATTATAGTGGGAGCACCT ACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCGGA CACGGCCGTGTATTACTGTGCGAGAGACAAAGGTTGTACTAGTAACAAATGCGATGAGCGGGGAGCCCATGAAATCTGGGGCCAAGGGGCAGT GGTCACCGTCTCTTCAG
003	p93w83	*IGHV*	TTTTCACTAGTTATGCTATGCATTGGGTGCGCCAGGCCCCCGGACAAAGGCTTGAGTGGATGGGGTGGATCACCCCTGGCAATGGTGACACAAA ATATTCACAGAAGTTCCAGGGCAGAGTCGCCATTACCAGGGACACATCCGCGAGCACGCTACATGGAGCTGAGCAGCCTGAGATCTGAAGAC ACGGCTGTGTATTACTGTGCGAGGGATGGGGAGGACTACTATTTTTCGGGAGTGGTAAACTGGTTCGACCCC
003	p93w93	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGT TATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATGAGTACTAGTAGTTACATAAATTATGCAGACTCAG TGAAGGGCCGATTCAGCATCTCCAGAGACAACGCCAAGAACTCTCTGTATCTGCAAATGAACAGTCTGAGAGCCGAGGACACGGCTATATATTA CTGTGCGAGAGTAGGGGGGATTTGGATATTGTAGTGGTGCCAGCTGCCCTGATCTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTC AG
003	p93w97	*IGHV*	ATTCCTACTGGAGTTGGATCCGCCGGCCCCCAGGGAAGGACCTGGAGTGGATTGGGTACACCTCTTACAGCGGGAGCACCTACTACAACCCGT CCCTCCAGAGTCGAATATCAGTAGACACGTCCAAGAACCAGTTCTCTCTGAAGATGACCTCTGTGACTGCCGCAGACACGGCCGTGTATTTCTGT GCCAGAGGGACGGATTGTGTGAATGGTGTATGCTCTTATTTTGACAATGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w100	*IGHV*	GAGATGCAGCTGGTGGAGTCTGGGGGAACCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTAGATTCACTTTCAGTAGG GCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCATATTAAAAGCAAAAGTGATGGTGGGACAACAGATTAC GCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAATATGCTGTATCTGCAAATGAACACCCTGAAAACCGAGGACACAGC CGTTTATTACTGTACCACCGGCCCGTGGTGTAGTAGAACCAGCTGCTTGGGCTACTACTACTTAGGTTTGGACGCCTGGGGCCAAGGGACCACG GTCACCGTCTCCTCA
003	p94w101	*IGHV*	CAGGTTCAGTTGGTGCAGTCTGAAGCTGAGGTGAAGAGGCCTGGGGCCTCAGTGAGGGTCTCCTGCAAGGCTTCTGGTTACACCTTTACCAGCT ATGGTGTCACCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGGTGGATCAGCGCTTACAGTGGTAACACAAATTATGCACAGA AGCTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTCT ATTACTGTGCGAGAGATTTGGGGTATTACGATTTTTGGAGTGGCCCTATACGGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p94w104	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTTAT TATCATATGCACTGGGTCCGCCGGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATCATCTGATGAAAGCATTAAATTTTACTCAGATTC CGTGAAGGGCCGACTCACCATTTCCAGAGACAATTCCAAGAACACGCTCTATCTGCAAATGAACAGCCTTAGACCTGAGGACACGGCTGTCTATT ACTGTGCGAGAGAAGGGGGTAGCAGTGGCCGGGCGGGATACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w108	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGAGGAGGCTTGATCCAACCTGGGGGGTCCCTGAGACTCTCCTGCGCAGCCTCTGGGTTCACCGTCAGTAG CAACTACATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCACTTATTTATAGCGAGGGTGGCACACACTACGCAGACTC CGTGAAGGGCCGATTCACCATCTCCAGAGACACCTCCAAAAACACGGTGTATCTTCAAATCAACAGCCTGAGAGCCGAGGACACGGCCGTCTAT TACTGTGCGAGAAGCCCCCGTGGTTATCCCGGGTACTTTGACCACTGGGGCCAGGGAACCCTGGTCTCCGTCTCCTCAG

003	p94w109	*IGHV*	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAACCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGGTTCTCACTCAGCAATTCTGGAATGGGTGTGAGTTGGATCCGTCAGCCCCAGGGAGGCCCTGGAGTGGCTTGCGCACATTTTTTCGAATGACGAAAAGTCCTACAGAACATCTCTGAAGAGCAGGCTCACCATCTCCAAGGACACCTCCAAAAGCCAGGTGGTCCTTATTATGACCAACATGGACCCTGTGGACACAGCCACATATTACTGTGCACGGATTGCGTTCGGCAGTGGCTGGGGGTCGGTCAGCCACCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w112	*IGHV*	CATGTGTAGGCTCTGGATTCAGTTTCGGTGGCTATCAGATGAACTGGGTCCGCCAGGCTGCAGGGAAGGGACTGGAGTGGATTGCATACATTAGTACTACTACTGGCACCACATACTACGCAGATTCTGTGAAGGGCCGATTCGCCATCTCCAGAGACAATGCCAAGAATTCACTATTTCTGCAAATGAGTAGCCTGAGAGACGAGGACACGGCTATATATTACTGTGCGAGAGATCCCCCGAGCAGGCAGTGGTTCTTTGACCAGTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w114	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGCACAGCATCTGGATTCACTTTTGGTGATTATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGGTTATGGTGGGACAACAGAATACGCCGCGTCTGTGCAAGGCAGACTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAAATGAACGGCCTGAGAACCGAGGACACAGCCGTATATTTTTGTACAAGATTTCTGGTCTCGAAGTATGGCCTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p94w119	*IGHV*	GGCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTGTTTACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCCAGAGTCGAGTTAGCATATCAGTAGACACGTCTAAGAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGAGAACTTACTAGGATATTGTCATGGTGATAACTGCTACGCCCACAAGTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w123	*IGHV*	CAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCCCCCTTCAGTAGCTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCACTTATTTCATATGATGGGAGTGATGAATACTACGCAGACTCCGTGAAGGGCCGATTCTCCATCTCCAGAGACAACTCCAAGAACACGCTGTTTCTGCAAGTCAACGGCCTGAGAGCTGACGACACGGCTGTCTATTACTGTGCGAGAGCCCCACAGGATTATTACCAAGATAATCGTGGTTATTACCTAACCGTGGGGTGGTTCGACCCTGGGGCCAGGGAACCCTGGTCACCGTCGCCTCAG
003	p94w127	*IGHV*	GGGGGGTCCCTCAGACTCTCCTGTGTAGGGTCTGGATTCAATTTCGGTCGCTATGGCATACACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGACATCATTTGATGGAGGTAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCGTCTCCAGGGACAATTTCAGGAACACACTCTATCTGCAAATGAACAGCCTGACAGCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAGTACTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCCTCAG
003	p94w129	*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACACTGTCCCTCACCTGCGCTGTCTATGGTGGGTCGTTCAGTGGTGACAACTGGAGCTGGATCCGCCAGGCCCCAGGGAAGGGGCTGGAGTGGATTGGGGAAGTCAATCATAGTGGAACCATCAATTCCAACCCGTCCCTCAAGAGTCGAGTCACCATGTCAGTAGACACGTCCAGGAATCATTTCTTCTTGAAACTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGAGGAGTGCGGGGAGTTATTTGTGAGGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCAC
003	p94w135	*IGHV*	CGTCTGGATTCAGCTTCAGTAACTATGACATTCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATATGGTATGATGGATATAATAAATACTATGCAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGGCGAGGACACGGCTGTGTATTACTGTGCGAAACAAACTCGTATAACAGTGGCTGGACGGGAGTACTACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w136	*IGHV*	CAGGTTCAGCTGGTCCAGTCTGGAGCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGTTATACCTTTACCAGCTATGGTATCAACTGGGTGCGACAGGCCCCTGGACAAGGACTTGAGTGGCTGGGATGGATCAGTGATTACGATGGTAAGACACACTATACACAGAAACTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCCACCTGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTTTATTACTGCGCGAGTTTGGTTCGGGGAGTTATTGGGGACTACTGGGGCCAGGGAACCCTCGTCACCGTCTCCTCAG
003	p94w14	*IGHV*	CAACTGCAACTGCACGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCACCGGTGGTAGTTACTCCTGGAACTGGATCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATCAGACTGGCGGTACTTATTACAACCCGTCCTTGCAGAGTCGAGTCACCATATCAGTGGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAGGTCTGTGACCGCCGCGGACACGGCCGTGTATTTCTGTGCCAGAGGCGGCCCCTTAGCAAACTGTGGTGGTGATTGCAATCGGTGGTTCGACCCCTGGGGCCAGGGAGCCCTGGTCACCGTCTCCTCAG
003	p94w144	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGTACAGCTTCTGGATTCAGCTTTGGTGATTATGCTATGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAGCCAAACCTTATGGTGGGACAACAGAATACGCCGCGTCTGTGCAAAGGCAGATTCACCATCTCAAGAGATGATTCCAACAGCATCGCCTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCCGTCTATTACTGTACTAGAGATCTGACTATGGTTCGGGGAGTTATTACAGAG

003	p94w146	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACGGACCCTGTCCCTCACCTGCACTGTCTCTGGTGACTCCATGACCACTCATGATAGATTTTGGAGTTGGGTCCGCCAGCCCCCAGGGGAGGACCTGGAATGGATTGGGTACATCTCTTACAGTGGGACCAACTCCTACAACCCGTCCCTCAAGAGTCGAGTTGCCATATCAGCAGACACGGCCATGAACCAGTTCTCCCTGAACCTAAATTCTGTGACTGCCGCAGACACGGCCGTGTATTATTGTGTCAGAGGCCGTGGGTTTTACCATGGTAGAAGTGGTTATTGGCTTGACCAGTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w15	*IGHV*	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGAATTCTTCAGTGATTATAAGTGGACCTGGATCCGCCAGAGCCCAGGGATGGGGCTGGAATTACTTGGCGAAATCAGTCATAGTGGAAGTACCATCTACAACCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTGTCCCTGAAATTGAGGTCCGTGACCGCCGCGGACACGGCTGTATATTACTGTGCGAGAGGTGATGTCTCAGTTGCAGGTGCTATGCCAAACCCGAAATTTGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w159	*IGHV*	AGCAGTTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGCGCAGCGTCTGGGTTCGACTTCAATGGTTATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGTTATCTGGCATGATGGAAGTAATGAGGATTATGGGGACTCCGTGAGGGGCCGATTCACCATCTTCAGAGACAATTCCAAGAACACGTTGTATTTAGAAATGAATAGCCTGAGACCCGAGGACACGGCTGTGTATTACTGTGCGAGAGACTATCATCACAGGAGCTTTGACTTTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w162	*IGHV*	GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGGTACAGCCGGGGGGGTCCCTGAGACTGTCCTGTGCAGCCTCTGGATTCACCTTTAGCAGCTATGCCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCCGGAGTGGGTCTCAGGTATTAGTGGTAGTGGTGGTAGCACATTCTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCCGTATATTACTGTGCGAAGCGCCTTGAGGGGGCGGTAGTACTACCAGCTGCTACACGTGACGGGTACCACTACTTCGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p94w168	*IGHV*	GAGGTGCAGTTGATGGAGTCTGGGGGAGCCTTGGTAGAGCCAGGGCGGTCCCTGAGACTCTCCTGCACATCTTCTGGATTCACCTTTGGTGATTATGCTATGACCTGGTTCCGCCAGGCTCCGGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAATCTTATGGTGGGACAACAGAATACGCCCGCGTCTGTGGAAGGCAGATTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAGATGAACAGCCCGAAAACCGAGGACACAGCCATGTATTTCTGTTCTCGATTCTTGGTCTCGCCGTATGGCGTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p94w17	*IGHV*	GAAGTGCACCTGGTGGAGTCTGGGGGAGGCTTGGTTCAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAATAGTGGTTATATAGGCTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTATTTCTGCAAATGAACAGTCTGAGAGCTGAGGACACGGCCTTCTATTACTGTGCAAGAGATAGGGGTCAAAGTGACTGGTGGACCTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w172	*IGHV*	CTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCAGCAGTGGTGGTTTCTCCTGGAGCTGGGTCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTCTCGTCGTGGGAGCACCCACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCGGTAGACAGGTCCAAGAACCAGTTCTCCGTGAAGCTGACGTCTGTGACCGCCGCAGACACGGCCGTCTATTACTGTGCCAGAGTTAACGATTTTTGGAGTGGCTCCCATTATACGTGGTATTTCGATATCTGGGGCCGTGGCACCCTGGCCACTGTCTCCTCAG
003	p94w174	*IGHV*	GAGGTGCAGTTGGCGGAATCTGGGGGAGGCTTGGTAAAGCCGGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCTGGAAGGCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCCGGAGTGGGTTGGCCTTATTAAAAGCAATGCTGATGGTGGGACGACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTATATCTACAAATGAACAGCCTGCAAACCGAGGACACGGCCGTGTATTATTGTACCACAGGAGGCCATTGTAGTAGTACCACCTGCCCTCCCAGTTACTACTACTTCGGTCTGAACGTCTGGGGCCCAGGGACCACGGTCACCGTCTCCTCA
003	p94w175	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTTCCACCGGGGGGGTCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAGCTTCGGTACCCATAGCATGCACTGGGTCCGCCAGGCTCCGGGGAAGGGGCTGGAGTGGGTTTCATATATTAGTAGTGCTACTGGTACCACATACTACGCAGACTCTGTGAAGGGCCGATTCACCGTCTCCAGAGACAATGCCAAGAACTCACTGTATCTACAAATGAATAGTCTGCGAGACGAGGACACGGCTGTCTATCACTGTGCGAGAGGCGCTTGGGGTCCCCACTGGTACTTCGATCTCTGGGGCCGTGGCACTCTGGTCCCTGTCTCTTCAG
003	p94w176	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGGAGTGGTGATAACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGATACATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTTACCATATCATTAGACACGTCTAAGAACCAGTTCTCCCTGCACCTGAGCTCTGTGACTGCCGCGGACACGGCCGTCTATTACTGTGCGAGAGTGGATGGATCCCTATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p94w177	*IGHV*	CAGGTGCAGCTGGTGGAGTCGGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTCAGACTCTCCTGTGTAGGGTCTGGATTCAGCTTCGGTCGCTATGGCATACATTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGACATCATATGATGGAGGGAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCATCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATGAATAGCCTGACAGCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAGTACTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTTCAG

003	p94w178		*IGHV*	GCAGTAGTAGTTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGGGAGTATCTATTATAATGGTAACACCTACTA CAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGCAGCTGAGGTCTGTGACCGCCGCAGACACG GCTGTGTATTACTGTGCGAGACGGGCGTGGCTACAACTATGGTTTGACTACTGGGGCCAGGGATCCCTGGTCACCGTCTCCTCAG
003	p94w18		*IGHV*	GAGGTGCAGTTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTACC TATGGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTAGTAGTGCTACTTATATAGACTATGCAGACT CAGTGAAGGGCCGATTCACCGTCTCCAGAGACAACGCCAGGAGCTCTCTGTATCTGCAAATGAACAACCTGAGAGCCGAGGACACGGCTGTGT ATTACTGTGCGAGAGATGGCCTAATGGTGTATGCTAGTTATAACTACTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w185		*IGHV*	GGCAGTGATAGTTACTACTGGACGTGGATCCGGCAGCCCGCCGGGAGGGGACTGGAATGGATTGGGCGTGTTTATAGTAGTGACAGCACCAAC TACAACCCTCCTTCAAGGGTCGAGTCACCATATCGACAGACACGTCCAAGAACCAATTCTCCCTGAGGCTGAACTCTGTGACCGCCGCAGACAC GGCCGTATATTACTGTGCGAGAGAAGTTGTCGTGGTGCCAGCTGCTATACGGCCTTACTCCTACTTCTACGGTCTGGACGTCTGGGGCCAAGGG ACCACGGTCACCGTCTTCTCA
003	p94w193		*IGHV*	CAGGCGCAACTGGTGGAGTCGGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTCAGACTCTCCTGTGTAGGGTCTGGATTCACCTTCGGTCGC TATGGCATACACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGATATCTTTTGATGGAGGTAATAAATATTATGCAGAGT CCGTGAAGGGCCGATTCACCATCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATCAACAGCCTGACAGCTGAGGACACGGCTGTGTA TTATTGTGCGAAAGTTACGTCTATTACTATGATAGTAGTGGAGACTATGATGCTCTGGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTT CAG
003	p94w2		*IGHV*	ATCCATTAGTAGTAGTGCTACTTATATAGACTATGCAGACTCAGTGAAGGGCCGATTCACCGTCTCCAGAGACAACGCCAGGAGCTCTCTGTATC TGCAATGAACAACCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCGAGAGA
003	p94w20		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCACTGCTGGCTCCATCACTAGT TACTACTGGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGATATATAAATTACAGTGGGAGCACCAACTACCACCCCTCC CTCAAGAGTCGAGTCACCATATCAGTGGACACGTCCAAGAACCAGCTCTCCCTGAGGCTGAGCTCTGTGACCGCTGCGGACACGGCCATGTATT ACTGTGCGAGAAATAAGGGTCAACCAGGGGGCTACTACTACTACGGTATGGACGCCTGGGGCCAAGGGACCACGGTCACCGTCTCCGCA
003	p94w21		*IGHV*	CCCCTTCAGTAGTTATGCTATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGATGGCTCTTGTCTCATATGATGGAAACAACAAA TACTACACAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGGTGTATCTGCAAATGAACAGCCTGAGAGCTGAGG ACACGGCTATGTATTACTGTGCGAGAGCCCCAAATGATTATTACAATGATAATATAGGTTATTACCTAACCGTGCAGTGGTTCGACCCCTGGGGC CAGGGGACCCTGGTCACCGTCTCCTCAG
003	p94w25		*IGHV*	CAGGTTCAGCTGGTACAGTCTGGACCTGAGGTGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAGGGCTTCTGATTACTCCTTTGCCAGAT ATTCTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATTGATCAGCGATTACAATGGTAACACAGAGTATGCACAGAA GTTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCTACATGGAGCTGAGGAGCCTCAGATCTGACGACACGGCCGTGTA TTATTGTGCGAGTCTGGTTCGGGGAGTCATTGGGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCCCCTCAG
003	p94w26		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTCCAGCCTGGGGGGTCCTCGAGACTCTCCTGTGCAGCCTCTGGATTAACCGTCAGTAG CAACTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCACTTATTTATAGCGGTGGTAGTTCATACTACGCAGACTCC GTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTTCAAATGAACAGCCTGAGAGTTGAGGACACGGCTGTGTATTA CTGTGCGAGACCTGGAGGGGTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w3		*IGHV*	ATTTCACTTACACCTGGATGACCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGATTGGCCAGATTAAAACCAGAAGTGATGGTGGGA CAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAGAAAAAACGCTGTATCTGCAAATGAACACCCTGGAGACC GAGGACACAGCCGTCTATTATTGTACTACAGGGCACCGTTATATCAGACCCCTCCACTGGCGGGTCTACTACTACGGTATGGACGTCTGGGGCC AAGGGACCACGGTCACCGTCTCCTCA
003	p94w30		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGT GGTGGTTACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGGCACATCTATTACAGTGGGAGCACCTACTACAAC CCGTCCCTCAAGAGTCGGGTT
003	p94w35	24	*IGHV*	TGGGGGGTCCCTGAAAGTCTCCTGTGCAGCCTCTGGGTTCACCTTCAGTGGCTCTGCTATGCACTGGGTCCGCCAGGCCTCCGGGAAAGGGCT GGAGTGGGTTGGCCGTATTAGAACCAAAGCTAACAATCACGCGACAGAATATGGTGGGTCGGTGAATGGCAGGTTCACCATCTCCAGAGATGAT TCAAACAACACGACGTATCTGCAAATGCACAGCCTGAAAACCGAGGACACGGCCGTGTATTATTGTACTAGACCCTCTGCTTCGGGGAGTCTCTC GGACTACGCTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p94w44		*IGHV*	CAGGTGCAGGTGGTGCAGTCTGGAGCTGAAGCGAAGAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGTCTTCTGGTTACACCTTTACCACCT ATGGTGTCAACTGGGTGCGACAGGCCCCCGGACAAGGGCTTGAGTGGATGGGAGGGATCAGCGATTATGATGGTACCACAAACTTTGCACAGA AGTTCCAGGGCAGAGTCACCATGACCGCAGACACATCCACGAGCACAGCCTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTCT ATTATTGTGCGAGAGGTGGAACCTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA

003	p94w46	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGCACAGCATCTGGATTCACTTTTGGTGAT TATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGGTTATGGTGGGACAACAGAATAC GCCGCGTCTGTGCAAGGCAGACTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAAATGAACGGCCTGAGAACCGAGGACACAG CCGTATATTTTTGTACAAGATTTCTGGTCTCGAAGTATGGCCTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCC TCAG
003	p94w47	*IGHV*	GACGTGCGGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAGCCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGCATTCACCTTCAGTAG CTATAGCATGAGTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATAAGTCGTACTAGTGATTACGTATACTACGCAGAC TCAGTGAAGGGCCGATTCACCATTTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGCCGAAGACACGGCTGTGT ATTACTGTGCGAGAGAAAAATGGAATAACTGGGGACCCCAGGGGGTTCAGGTCGATGATGCTTTTGATATGTGGGGCCAAGGGACAATGGTCAC CGTCTCCTCAG
003	p94w48	*IGHV*	GAGGTGCAGTTGGCGGAATCTGGGGGAGGCTTGGTAAAGCCGGGAGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCTGGAAG GCCTGGATGAGCTGGGTCCGCCAGGTTCCAGGGAAGGGGCCGGAGTGGGTTGGCCTTATTAAAAGCAATGCTGATGGTGGGACGACAGACTA CGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGCTATATCTACAAATGAACAGCCTGCAGACCGAGGACACG GCCGTGTATTATTGTATGACAGGAGGCCATTGTAGTAGCACCACCTGCCCTCCCAGTTACTACTACTTCGGTCTGAACGTCTGGGGCCCAGGGA CCACGGTCACCGTCTCCTCA
003	p94w5	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCGGCAGT GATAGTTACTACTGGACGTGGATCCGGCAGCCCGCCGGGAGGGGACTGGAATGGATTGGGCGTGTTTATAGTAGTGACAGCACCAACTACAAC CCCTCCTTCAAGGGTCGAGTCACCATATCGACAGACACGTCCAAGAACCAATTCTCCCTGAGGCTGAACTCTGTGACCGCCGCAGACACGGCCG TATATTACTGTGCGAGAGAAGTTGTCGTGGTGCCAGCTGCTATACGGCCTTACTCCTACTTCTACGGTCTGGACGTCTGGGGCCAAGGGACCAC GGTCACCGTCTTCTCA
003	p94w55	*IGHV*	GTATCTATTATAATGGGAACACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGCAG CTGAGGTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGCGAGACGGGCGTGGCTACAACTATGGTTTGACTACTGGGGCCAGGGATCC CTGGTCACCGTCTCCTCAG
003	p94w59	*IGHV*	CAGGTGCAGCTGGTGCAATCTGGGTCTGAGTTGAAGAAGCCTGGGGCCTCAGTGAAGGTTTCCTGCAAGGCTTCTGGATATGCCTTCACTAGTT ATAAGATGAATTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCAACACCAACACTGGGAGACCAACCTATGCCCAGG GCTTCACAGGACGGGTTGTCTTCTCCTTGGACACCTCTGTCAGCACGGCATATCTGCAGATCGGTAGCCTAAAGACTGAGGACACTGCCGTTTA TTTCTGTGCGCGAGAGGGGTCTTATAGCAGCAACTACTACTACTACGATTTGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p94w6	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGACTCACTTTCACAAAC GCCTGGATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGGAAAATTGATGGTGGGACAACAGACTAC ACTGCACCC
003	p94w62	*IGHV*	TAGCCTCAGGATTCACCTTTAGTGGCTATTGGATGAGCTGGGTCCGCCAGGCTCCCGGGAAGGGGCTGGAGTGGGTGGCCAACATAAAGCAAG ATGGAAGTCAGAAACATTATGTGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTCTCTGCAAATGAACAGC CTGAGAGCCGAGGACACGGCTGTGTATTCTTGTGTCAGAGATGCCCCCGGGTCTGTCAGTGGCTGGTACGATAGTGACTACTGGGGCCTGGGA ACCCTGGTCACCGTCTCCTCAG
003	p94w7	*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCACCAGT GGTGGTTACTCCTGGAACTGGATCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTATCAGAGTGGCAGTACTTATTACAACC CGTCCTTGAAGAGTCGAGTCACCATATCAGTAGACAGGTCCAGGAACCAGTTCTCCCTGAACCTGAAGTCTGTGACCGCCGCGGACACGGCCG TGTATTACTGTGCCAGAGGCGGCCCCCTTAGCAAACTGTGGTGGTGATTGCAATCGGTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCG TCTCCTCAG
003	p94w81	*IGHV*	CAGGTCACCTTGAAGGAGTCTGGTCCTGTGCTGGTGAAACCCACAGAGACCCTCACGCTGACCTGCACCGTCTCTGGGTTCTCACTCAGCAATG CTAGAATGGGTGTGACCTGGATCCGTCAGCCCCCAGGGAAGGCCCTGGAGTGGCTTGCACACATTTTTTCGAATGACGTGAAATCCTACAGCAC ATCTCTGAAGAGCAGGCTCACCATCTCCAAGGACACCTCCAAAAGCCAGGTGGTCCTTACCATGACCAACATGGACCCTGTGGACACAGCCACA TATTACTGTGCACGGATACCGACTTTGAGTGGTTGGGAGGCTTTTGATTTCTGGGGCCAAGGGACACTGGTCACCGTCTCTTCAG
003	p94w82	*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCAGCAGT GGTGGTTTCTCCTGGAGCTGGGTCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTCTCGTCGTGGGAGCACCCACTACAAC CCGTCCCTCAAGAGTCGAGTCACCATATCGGTAGACAGGTCCAAGAACCAGTTCTCCGTGAAACTGACGTCTGTGACCGCCGCAGACACGGCC GTCTATTACTGTGCCAGAGTTAACGATTTTTGGAGTGGCTCCCATTATACGTGGTATTTCGATATCTGGGGCCGTGGCACCCTGGCCACTGTCTC CTCAG

003	p94w83		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAAGCCAAACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCGCTGATGAAATGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTTGCACTCATCTATTGGGATGATGATAAGCGCTACAGCCCATCTCTGAGGGGCAGACTCACCATCACGAAGGACACCTCCAAAAACCAGGTGGTCCTTACAATGGCCAACATGGACCCTGTGGACACAGCCACATATTACTGTGCACACAGCCGAATACCAATGACTGGTGCCGGCAGACTTTATTTCGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p94w93		*IGHV*	AGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAAAGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGTAAGACTGATGGTGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCAGCATCTCAAGAGATGATTCAAAAAACACGCTGTTTCTTCAAATGAACAGCCTGAAAATCGAGGACACAGCCGTATATTACTGTGCCACAGGGGTAACAGCTGTTCCCCTACCCGACTATTACTACTACGGTATGGACGTCTGGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p94w94		*IGHV*	CCAGACCCCAGGGAAGGGCCTGGAGTGGATTGGGAATATCTATTATAGTGGAAAACCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATGTCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACCGCCGCAGACACGGCTGTGTATTACTGTGTTTGCGTAAGCTCAGGCACCTGGTACAAGAGGCCTGATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p95w100		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGGCTTCACAGACCCTGTCCCTCACTTGCACTGTCTCTGGTGGCTCCATCAGCAGTGCTGGTTACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGACCTGGAGTCGATTGGGTACATCTATTACAGTGGGACCACCTTCTACAACCCCTCCCTCAAGAGTCGGGCCACCATATCATTAGACACGTCTAACAACCAGTTCTCCCTGAAACTGAGCTCTGTGACTGCCGCGGACACGGCCGTTTATTACTGTGCGAGAGGAGGGGTATTGTACGAACAGCTAATTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w101	17	*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCCAGGAGTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGCAACAGTGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGACATACTACCAGTCCAACTGGTATAATGATTATGCACTGTCTGTGAAAAGTCGAGTAACAATCAGCTCAGACACATCCAGGAACCAGTTCTCCCTGCAGCTGAACTCTGTGAGTCCCGAGGACACGGCTGTGTATTACTGTGCAAGAGGGTGGTTGAAACAAGGTTTCGCATTTTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w104	18	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGGAGTGGTGATAACTACTGGAGCTGGATCCGCCAGCACCCAGGGAAGGGCCTGGAGTGGATTGGATACATCTATTACAGTGGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTTACCATATCATTAGACACGTCTAAGAACCAGTTCTCCCTGCACCTGAGCTCTGTGACTGCCGCGGACACGGCCGTCTATTACTGTGCGAGAGTGGGATGGATCCCTATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p95w108		*IGHV*	AGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCACCACTGGTGGTTACTCCTGGAACTGGATCCGGCAGTCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATTTATTATGGTGGGGGCCCCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATGTCAGTCGACGGGTCCCAGAACCAGTTCTCCCTGAGGCTGACCTCTGTGACCGCCGCGGACACGGCCGTCTATTATTGTGCCCGAGCCTCCGGTGGTAACGACAACTGGATCGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCGCCTCAG
003	p95w109		*IGHV*	GGCGTGGAACTGGTGGAATCTGGGGGAGGCTTGATCCAGCCTGGGGGGTCCCTAAGACTCTCCTGTGCAGCCTCTGGAGTCTACGTCAGAAACACCTATATGAACTGGGTCCGCCAGGCTCAAGGAAAGGGGCTGGAGTGGGTCTCCAGTCTCTATCCCAATGGTGACACACACTACACAGACTCCGTGAGGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAACACGTTGTACCTTCAAATGAATGGTCTCAGGGCCGAGGACACGGCCGTCTTTTATTGTGTGATAGGACACTATGCCACGCGAGATGGCTGGGGCCAGGGAACCCTGGTCACCGTCTCTTCAG
003	p95w111		*IGHV*	GAGGTGCAGCTGGCGGAATCTGGGGGAGGCTTGGTAAAGCCGGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCTGGAAGGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCCGGAGTGGGTTGGCCGTATTAAAAGCAATGCTGATGGCGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCATCTCAAGAGATGATTCAAAAAACACGGTTTATCTGCAAATGAACAGCCTGCAAACCGAGGACACGGCCGTGTATTACTGTACCACAGGAGGCCACTGTAGTAGTAGCACCTGCCCTCCCAGTTACTACTACTTCGGTCTGAACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p95w112		*IGHV*	GAGGTGCAACTGGTGGCGTCTGGGGGAGGCTTGGTCCAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCGTCAAGAACGCGTACTTGACGTGGTTCCGCCAGACTCGAGGGCTGAGGCTGGAGTGGGTCTCTGCTATGTATAGCGGCGGTTATTCATACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAGTTCCAGTAACACACTGTTTCTTCAAATGGACAGCCTGCGACCTGAGGACACGTCTGTCTACTACTGTGCGAGAGGGCTCGTCCTACCAACAGCTGCCCTCTTTGACTACTGGAGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w113		*IGHV*	TTCCTATGGCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCGTTTATATCATATAATGGAGGCAATAAATACTACGCAGACTCCGTGAAGGGCCGATTCACCATTTCCAGAGACAATTCCAAGAACACGCTGTATGTGCAAATGAACAGCCTGAGACCTGAGGACACGGCTGTTTATTATTGTGCGAGAGATCGGGGGGGAAAGCAGCAGCTGGTTTGCTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w126		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGTCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGAGTTGGATCCGGCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGCGTATGTCTATTACAGTGGGAGCACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGTTCTGTAACCGCTGCGGACACGGCCGTCTATTACTGTGCGAGAGAGTTCGGGGTTATCGGTTCGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p95w136		*IGHV*	CGTGTGTAGGGTCTGGATTCAGCTTCGGTCGCTATGGCATCCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGACTTCATTTGATGGAGGTAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCGTCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATGAACAGCCTGACATCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAATACTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTTCAG
003	p95w14		*IGHV*	GAGGTGCAGTTGATGGAGTCTGGGGGAGCCTTGGTAGAGCCAGGGCGGTCCCTGAGACTCTCCTGCACATCTTCTGGATTCACCTTTGGTGATTATGCTATGACCTGGTTCCGCCAGGCTCCGGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAATCTTATGGTGGGACAACAGAATACGCCGCGTCTGTGGAAGGCAGATTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAGATGAACAGCCCGAAAACCGAGGACACAGCCATGTATTTCTGTTCTCGATTCTTGGTCTCGCCGTATGGCGTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p95w145		*IGHV*	CAGGCGCAGCTGGAGGAGTCGGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTCAGACTCTCGTGTGTAGGGTCTGGATTCAGCTTCGGTCGCTATGGCATCCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGACTTCATTTGATGGAGGTAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCGTCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATGAACAGCCTGACATCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAATACTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTTCAG
003	p95w15		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCACCTTCTCTGGGTTCTCACTCAGCACTAGTGCAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTAGCACTCATTTATTGGGATGATGTTCAGCGCTACAGCCCATCTCTGAAGAGCAGGCTCACCATCACCAAGGACACCTCCAGAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACCGCCACATATTACTGTGTACACAGGGCGGGCTATAATTCGGGGAGAAATGTAGCTTTTGATATCTGGGGCCAGGGGACAATGGTCACCGTCTCTTCAG
003	p95w159		*IGHV*	CTCCAGTAGTAGTGACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATTGTGAGTCTCCATTACAGTGGGAGCGCCTACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCCGTTGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCAGTGACCGCCGCAGACACGGCTGTATATTTCTGTGCGAGACAAGTTTACGATCTTTGGAGTCCTAACTGGTTCGATTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCGCAG
003	p95w162		*IGHV*	CAGGTGCAGCTGGAGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAATACCTATGCTATGGACTGGGTCCGCCAGGCCCCAGGCAAGGGGCTGGAGTGGGTGGCAGCAATTGCATATGACGGAAGCAGAAAATTCTACGCAGACTCCGTGAAGGGCCGACTCACCATCTCCAGAGACAATTCCATGAACACGCTGTATCTGCAGATGGACAGCCTGAGAGCTGAGGACACGGCTGTGTATTATTGTGTGAGAGATCGCGGATTCCTAACTGGGGATAGTGCCTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCGTCAG
003	p95w163		*IGHV*	CAGGTTCAGCTGGTGCAGTCTGGAGCTGAGGTGAAGAGGCCTGGGGCCTCAGTGAGGGTCTCCTGCAAGGCTTCTGGTTACACCTTTAGTAGTTGGGGTATCAGCTGGGTGCGACAGGCCCCTGGACAAGGGCTTGAGTGGATGGGATGGATCAGCGCTTCCAATGGTTACACAAACTATGCACAGAAGGTCCAGGGCAGAGTCACCATGACCACAGACACATCCACGAGCACAGCCTACATGGAGCTGAGGAGCCTGAGATCTGACGACACGGCCGTCTATTACTGTGCGAGAGATCCCAATAACTATGATAGATATGGTTACGCGTACTACTTTGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w168		*IGHV*	TTGAGTAGCTATGCCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGGTGGCAGATATATCATATGGTGTAAGGAATAGATACTATGCAGGCTCCGTGCAGGGCCGATTCACCATCTCCACAGACAATCCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGTAGACGACACGGCTGTGTATTACTGTGCGAAGGGCTACGGTGGTAACGATGACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p95w172	19	*IGHV*	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCAGCAGTGGTGGTTTCTCCTGGAGCTGGGTCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTCTCGTCGTGGGAGCACCCACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCGGTAGACAGGTCCAAGAACCAGTTCTCCGTGAAGCTGACGTCTGTGACCGCCGCAGACACGGCCGTCTATTACTGTGCCAGAGTTAACGATTTTTGGAGTGGCTCCCATTATACGTGGTATTTCGATATCTGGGGCCGTGGCACCCTGGCCACTGTCTCCTCAG
003	p95w174		*IGHV*	CAGGCGCAGCTGGAGGAGTCGGGGGGAGGCGTGGTCCAGCCTGGGGGGTCCCTCAGACTCTCGTGTGTAGGGTCTGGATTCAGCTTCGGTCGCTATGGCATCCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGCTGGCAGTGACTTCATTTGATGGAGGTAACAAATATTATGCAGAGTCCGTGAAGGGCCGATTCACCGTCTCCAGGGACAATTTCAGGAACACACTGTATCTACAAATGAACAGCCTGACATCTGAGGACACGGCTGTGTATTATTGTGCGAAAAGTTACGTCTATTACTATGATAATACTGGAGACTATGATGCTCTTGATATCTGGGGCCGAGGGACACCGGTCACCGTCTCTTCAG
003	p95w178		*IGHV*	CAGGTGCAGCTGGTGGAGTCGGGGGGAGGCGTGGTGCAGCCTGGGAGGTCTCTGAGACTCTCCTGTGCAGCGTCTGGATTCACCTTCAGTAATTATGCCATGCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTGGAGTGGATGGCAGTTATTTCGGATGATGGAAGTTCTAAATCCTATGGAGACTCCGTGAAGGGCCGATTCACCATCTCCAGAGATAATTCCAAGAACACATTGTTTCTGCACATGAACAGCCTGAGAAGTGAGGACGCGGCTATATATCACTGTGCGAAAGATCTCTTCTCGTTTCGAAGTGTGTTCTATGACTCCTGGGGCCAGGGAACCCAGGTCACCGTCTCCTCAG

003	p95w184	*IGHV*	GAGGTGCAGTTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAGCTTCGGTAGTTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATACATCAGTAGTAGTGGTAGTCTCATATACTACGCAGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAGGAATTCACTGTTTCTGCAAGTCAACAGCCTAAGAGACGAGGACACGGGTGTGTATTACTGTACGAGAGATTCGGGGGCTTAGCAGCAGCTGGTACAGTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w185	*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGCACAGCATCTGGATTCACTTTTGGTGATTATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGGTTATGGTGGGACAACAGAATACGCCGCGTCTGTG
003	p95w187	*IGHV*	GAGGTGCAACTGGTGGAGTCTGGAGGAGGCTTGATCCACCCGGGGGGGTCCCTGAGACTCTCCTGTGCGGTCTCTGAGTTCATCGTCAATAACAACTACATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCGGTTATTTATAGTACTGGCAGCACATATTACGCAGATGCCGTGAAGGGCCGATTCACCATCTCCAGAGACAATTCCAAGAAAACGCTGTATCTTCAAATGGACAGCCTGAGAGCCGAGGACACGGCCATGTATTACTGTGCGAGAGATCCTAGTCTGCGATACTGGGGCCGGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w191	*IGHV*	GAGGTGCAACTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGGGGGTCCCTGAGGCTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTAGTTATAACGTCAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTTCATACACTACTGGTAGTGGTAGTACCCATATACTACGCAGGCTCTGTGAAGGGCCGATTCACCGTCTCCAGAGACAATGCCAAGAACTCACTGTATCTGCAAATGAACAGCCTGAGAGACGAGGACACGGCTATGTATTACTGTGCGAGAGACTATAGTGGGAGCTACGCGGTGATGAATGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAG
003	p95w193	*IGHV*	AGATGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGAAGTACTTCTTACTTCTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGGCTGGAGTGGATAGGGCGAGTCTATTCCACTGGGAGCACCGCCTACAACCCGTCCCTCAGGAGTCGAGTCACCATGGCCGCAGACATATCCAAGGGCCAGGTCTCCCTGAAGGTGACCTCTGTAACCGCCGCAGACACGGCTGTGTACTACTGTGCGAGGGGCCTTAATTACGATTTTTGGAGGGAAAATTATCCAAACCAACACTCATACTTTGACTACTGGGGCCCGGGAATCCTGGTCACCGTCTCCTCAG
003	p95w2	*IGHV*	CAGGTGCAGCTCCAGCAGTGGGGCGCAGGACTCTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGGTGTCTTTGGTAGGTCCTTCAGTGGTTACTCTTGGAGCTGGATCCGCCAGTCCCCAGGGAAGGGACTGGAGTGGATTGGGGATGTCAATCAGAGTGGGAGCGCGAACTACAACCCGTCCCTCAACGGTCGCGTCAGCATTTCGTTAGACGCGTCCAAGAAACAGTTCTCCCTGAAGTTAAGTTCTGTGACCGCCGCGGACACGGCAGTATATTACTGTGCGAGAAATCCTTTCACGGTTTTTGGACGCGATGTTAACCCATTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTGTCATCAG
003	p95w203	*IGHV*	CAGGTACAGCTGCAGCAGTCAGGTCTAGGACTGGTGAAGCCCTCGCAGACCCTCTCACTCACCTGTGCCATCTCCGGGGACAGTGTCTCTAGTGCTGCTTGGAACTGGATCAGGCAGTCCCCATCGAGAGGCCTTGAGTGG
003	p95w25	*IGHV*	GATACTTACTACTGGACCTGGATTCGGCAGCCCGCCGGGAAGGGACTGGAGTGGATTGGGCGTCTCCATCCCAGTGGGAATACCTACTACAACCCCTCCCTCCAGAGTCGAGTCACCATCTCACATGACACGTCCAGAAACAACTTCTCCCTGAGGTTGACCTCTGTGACCGCCGCAGACACGGCCGTATATTACTGTGCGAGAGATGGGGAAGGTACCAACGCCGCCGCCAACTACAAATACGGCATGGACGTCTGGGGCCAAGGGACCACAGTCACCGTCTCGTCA
003	p95w26	*IGHV*	GACGTGCAGCTGGTGGAGTCCGGGGGAAAATCAGTTCAGCCTGGGGAGTCCCTGAGACTCTCCTGTGCTGCCAGTGGATTCCCCTTCAGTAGCTACTGGATGCACTGGGTCCGCCAGGTCCCAGGGAAGGGGCTGGTGTGGGTCGCACGTATTAAGGCCGATGGGAGTGAAACACACTACGCTGACTCCGCGGAGGGCCGATTCACCATCTCCAGAGACAACGCCGAGAACACATTGTATCTGCAAATGAAGAGTCTGAGACCCGACGACACGGCTGTATATTATTGTCAAGAGCGGGAACTTATTCGGTGTCGTTCGGGGCGATCGGTACTTACGATGTGTGGGGCCAAGGGACTACGGTCACAGTCTCTTCCG
003	p95w3	*IGHV*	CAAGGGGCTGGAGTGGATTGGGGAAATCCATCATACTGGAAGCACCAACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCATTTTTCCCTGAAACTGACCTCTGTGACCGCCGCGGACACGGCTGTTTATTACTGCGCGAGAGGCCAAACTAGTAGTGGCTGGCTCGGGAACTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCGCCGTCTCCTCAG
003	p95w30	*IGHV*	CAGGTCCACCTTGTGCAGTCTGGGACTGAGGTGATGGAGCCTGGGGCCTCAGTGAAAGTTTCCTGCGAGACTTCTGGATACACCTTCACTACTTATGTTATACATTGGGTGCGCCAGGCCCCCGGACAAAGGCATGAGTGGATGGGATGGATCAACACTGGCAATGGTAACACAAAATATTCACAGAAGTTCCAGGGCAGAGTCACCTTTACCACGGACACATCCGCGAGCACAGCCTACATGGAGCTGAACAGCCTGAGATCTGCAGACACGGCTGTCTATTACTGTGCGAGGCAAGAAGAGTTGCGGTATTACGATTTTTGGGATTTATGGTTCGACTCCTGGGGCCAGGGAACCCTGGTCAGCGTCTCCTCAG
003	p95w35	*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCAGTGTCTCTGGTGGCTCCATCAGTAGTTACTACTGGAGCTGGATCCGGCAGCCCCCGGGGCCGAGGCTGGAATGGATTGCATATGTCTATTATAGTGGGAGCACCAACTACAACCCCTCCCTCAAGAGTCGAGTCACCATTTCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAAACTGAGCTCTGTGACCGCTGCGGACACGGCCGTCTATTACTGTGCGAGAGAGTTCGGGGTTATCGGTTCGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p95w36	25	*IGHV*	GAGGTGCAGTTGGTGGAATTTGGGGGGAGGCTTGGTCCAGCCTGGGGGGTTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCAGTTTTGATAGCCATTGGATGAGTTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTGGCCAACATAAAGGAAGATGGAAGTGAGAAATACTATGTGGACTCTGTGAGGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCTCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTATGTATTTCTGTGCGAGAGATACACGATATTTTGACTGGTTATTTGACTATTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w37		*IGHV*	AACTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCTCTCACCTGCGCTGTGTATGGTGGGTCCTTCAGTGGTTATTACTGGACCTGGATCCGTCAGCCCCCAGGGAAGGGGCTGCAGTGGATTGGGGAAATCGATCATAGTGGAAGCACCATCTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCACTAGACACGTCCAAGAATCAGTTCTCCCTGATCCTGAGCTCTGTGACCGCCGCGGACACGGCTGTGTATTACTGTGCGAGGTATGGTCCGGGGAGTTATTCCGGATACTCCTTCGACCCCTGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w44		*IGHV*	GAGGTGCGGCTGTTGGAGTCTGGGGGAGGCTTGATACAGCCGGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTAGCAACTATGCCATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCAGCTATTAGTGGTAGTGGTGGTGGCACACACTACGCAGACTCCGTGAAGGGCCGGTTCACCATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAAATGAACAGCCTGAGAGCCGAGGACTCGGCCGTATATTTCTGTGCGAAA
003	p95w46		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCAGGGCGGTCCCTGAGACTCTCCTGCACAGCATCTGGATTCACTTTTGGTGATTATGCTGTGAGCTGGTTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTAGGTTTCATTAGAAGCAAAGGTTATGGTGGGACAACAGAATACGCCGCGTCTGTGCAAGGCAGACTCACCATCTCAAGAGATGATTCCAAAAGCATCGCCTATCTGCAAATGAACGGCCTGAGAACCGAGGACACAGCCGTATATTTTTGTACAAGATTTCTGGTCTCGAAGTATGGCCTCCCTTACTGGTACTTCGATCTCTGGGGCCGTGGCACCCTGGTCACTGTCTCCTCAG
003	p95w47		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCAGCTTCTCTGGGTTCTCACTCAGCACTAGTGCAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTAGCACTCATTTATTGGGATGATGTTCAGCGCTACAGCCCATCTCTGAAGAGCAGGCTCACCATCTCCAAGGACACCTCCAGAAACCAGGTGGTCCTTACAATGACCAACATGGACCCTGTGGACACAGCCACATATTACTGTGTCCACAGGGCGGGCTATAATTCGGGGAGAAATGTATCTTTTGATGTGTGGGGCCAGGGGGACAATGGTCACCGTCTCTTCAG
003	p95w48		*IGHV*	GAAGTGCAGCTGGTGGAGTCTGGGGGAAACTTGGCACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTGTTAGTTGGAATAGTGGTAAGGTAGGCTATGGGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTCTCTGGAAATGAACAGTCTGAGAGCTGAGGACACGGCCTTCTATTACTGTGTAAGAGATAGGGGTCACAGTGACTGGTGGACCTTTGACTCCTGGGGCCGGGGAACCCTGGTCATCGTCTCCTCAG
003	p95w5		*IGHV*	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTAAAGCCTGGGGGGTCCCTTAGACTGTCCTGTGCAGCCTCTGGATTCACATTCAGTAACGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGCAAAACTGATGGTGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCACCCTCTCAAGAGATGATTCAAAAAACATACTGTATCTGCAAATGCACAGCCTGAAAACCGAGGACACAGCCGTGTATTACTGTACCACAGATCCCGAGTTTACGAGTTTTGGAGTGGCGATAGTTGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w51		*IGHV*	CAGATCACCTTGAAGGAGTCTGGTCCTACGCTGGTGAAACCCACACAGACCCTCACGCTGACCTGCAGCTTCTCTGGGTTCTCACTCAGCACTAGTGCAGTGGGTGTGGGCTGGATCCGTCAGCCCCCAGGAAAGGCCCTGGAGTGGCTAGCACTCATTTATTGGGATGATGTTCAGCGCTACAGACCATCTCTGAAGAACAGGCTCACCATCACCAGGGACACCTCCAATAACCAGGTGGTCCTTACAATGACCAACATG
003	p95w55		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTAAAGTCTTCACAGACCCTGTCCCTCACCTGCTCTGTCTCTGGTGGCTCCGTCAGCAGTGGTAATTACTTCTGGACCTGGATCCGGCAGCCCGCCGGGCAGGGACTGGAGTGGATTGGGCGTGTCCATTCCCGTGGGAGCACCAATTACAACCCCTCCCTCAAGAGTCGAGTCAGCATGTCACTAGACACGTCCAATAACCAGTTCTCCCTGAAGCTGACCTCTGTGACCGCCGCAGACACGGCCGAATATTTCTGTGCGAGGTATCGCCCCCGAACTGGGGATCCTCTCAATTACTTCTTCGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p95w59		*IGHV*	CCTATGGTATCAACTGGGTGCGACAGGCCCCTGGACAGGGGCTTGAGTGGATGGGATGGATCAGCGATTATGATGGTAACACACACTATGCACAGAAGGTCGAGGGCAGAGTCACCATGACCACAGACACATCCACGAACACAGCCTACATGGAGTTGAGGAGCCTGAGATCTGACGACACGGCCGTGTATTACTGTGCGAGTCTGGTTCGGGGAGTTATTGGGGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w6		*IGHV*	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGATGATTACTACTGGGGTTGGATCCGCCAGCCCCCAGGGAAGGGCCTGGAGTGGATTGGGCACATCCATTACAGTGGGAGCACCTACGACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAACCTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTACTGTGCCGGAGTTCGATTTTTGGAGTGGTCACCGAACTGGTTCGACCCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w69		*IGHV*	ATATCTCCGGGGACAGTGTTTCTAGCAAAAGTGTTGCTTGGAACTGGATCAGACAGTCCCCATCGAGAGGCCTTGAGTGGCTGGGAAGGATATATTACGGGTCGATGTGGTATTATGATTATGAAGCATCAGTGAAGAGTCGAATAAGCATCACCCAAACACAGCCAAGAACCAGTTCTCCCTGCAGCTGAACTCTGTGACTCCCGAGGACACGGCTGTGTATTATTGTGCAAGAGGGTGGCTACGGACCGGGTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG

003	p95w7		IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTTCCTCACCTGCACTGTGTCTGGCGGCCCCATCAGCAGTGGTGGTTACCACTGGACCTGGATCCGCCAGCCCGCCGGGAAGGGGCTGGAGTACATTGGGCGTATCTACACCAGTGGGAGCACCGACTACAGCCCCTCCCTCAAGAGCCGAGTCACCATATCAATGGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGTTCTGTGACCGCCGCAGACACGGCCAAGTATTTCTGTGCGAGAGACAGTCCCTATCACAGTAGGGGGCGGCTTTGGTTCCACGGTATGGACGTCTGGGGCCAAGGGACCACGATCACCGTCTCTTCA
003	p95w8		IGHV	CAACAATAGTCCCTACTACTGGGGCTGGATCCGCCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGAGTATCTTTTATAGTGGGACCACCGACTACAACCCGTCCCTCAAGCGTCGAGTCACCATATCCGTAGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGACCTCTGTGACCGCCGCAGACACGGCTGTATATTACTGTGCGAGACTTTCTGGTGGCTACAATTACTTGGACTACTTGGTCTACTGGGGCCAGGGAACCCTGCTCACCGTCTCCTCAG
003	p95w81		IGHV	GGGGGTCCCTGAGACTCTCCTGTGCGGCCTCTGGATTCACGTTCAGTACCTATACCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTCTCATCCATTAGTCCTACTAGTAGTTACAGATATTACGCAGACTCAGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTATATCTGCAAATGAACAGCCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCGACAGTGCAGTGGCCCCCATCATCCTTTGACTACTGGGGCCGGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w82		IGHV	CAGCTGCAGCTGCAGGAGTCCGGCTCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCGCTGTCTCTGGTGGCTCCATCAGCAGTGGTGGTTTCTCCTGGAGCTGGGTCCGGCAGCCACCAGGGAAGGGCCTGGAGTGGATTGGGTACATCTCTCGTCGTGGGAGCACCCACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCGGTAGACAGGTCCAAGAACCAGTTCTCCGTGAAGCTGACGTCTGTGACCGCCGCAGACACGGCCGTCTATTACTGTGCCAGAGTTAACGATTTTTGGAGTGGCTCCCATTATACGTGGTATTTCGATATCTGGGGCCGTGGCACCCTGGCCACTGTCTCCTCAG
003	p95w83		IGHV	GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGTATTAGTTGGAATAGTGGTAGCATAGGCTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGCAAATGAACAGTCTGAGAGCTGAGGACACGGCCTTGTATTACTGTGCAAAAGATATCGGGGCCCATAACTGGAACTTTGACTACTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p95w93		IGHV	GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCTTAGTAAAGCCTGGGGGGTCCCTTAGACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAAAGCCTGGATGAGCTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGGTTGGCCGTATTAAAAGTAAGACTGATGGTGGGACAACAGACTACGCTGCACCCGTGAAAGGCAGATTCAGCATCTCAAGAGATGATTCAAAAAACACGCTGTTTCTTCAAATGAACAGCCTGAAAATCGAGGACACAGCCGTATATTACTGTGCCACAGGGGTAACAGCTGTTCCCCTACCCGACTATTACTACTACGGTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCA
003	p95w94		IGHV	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTTTATGGCGGGTCCTTCGGTAATTTCTACTGGAGTTGGATCCGCCAGCCCCAGCAAGGGCAGTGGAGTGGATTGGGGAAATCCATCATACTGGAAGCACCAACTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCATTTTTCCCTGAAACTGACCTCTGTGACCGCCGCGGACACGGCTGTTTATTACTGCGCGAGAGGCCAAACTAGTAGTGGCTGGCTCGGGAACTGGTTCGACCCCTGGGCCGAGGGAACCTGGTCGCCGTCTCCTCGG
003	p95w97		IGHV	CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGTCCCTCACCTGCGCTGTCTATAATGGGTCCGTCAGTACTTACTACTGGAGCTGGATCCGCCAGGCCCCAGGGACGGGGCTGGAATGGATTGGGGAAATCAATCATCGTGGAAGCACCAATTACAACCCGTCCCTCAAGAGTCGAGTCACCATATCAGTAGACACGTCCAAGAACCAGTTCTCCCTGAGGCTGAGCTCTGTGTCCGCCGCGGACACGGCTGTGTTTATTACTGTGCGAGAGACAATCACTATGGTTCGGGGACTTATTATAAACGCCCTAACTTTGACTCCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p92w55	13	IGHV	CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCACAGACCCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGCAGTGGTGATTACTACTGGAGTTGGATCCGCCAGCCCCCAGGGAAGGACCTGGAGTGGATTGGGTACATCTATTACAGTGGGAGCACCTACTACAACCCGTCCCTCAAGAGTCGAGTTACCATATCAGTGGACACGTCCAAGAACCAGTTCTCCCTGAAGCTGAGCTCTGTGACTGCCGCAGACACGGCCGTGTATTATTGTGCCAGAGACCGCCCCAGCCGGGTTGGGAGGTACTACATGGACTTCTGGGGCCAGGGAACCCTGGTCACCGTCTCCTCAG
003	p91w108		IGLV	CAGACTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGCTTCCAGCACTGGAGCAGTCACCAGTGGTTACTACCCAAACTGGTTCCAGCAGAAACCTGGACAGGCACCCAGGCCACTAATTTATAGTACAGTCAACAAACACTCCTGGACCCCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACACTGTCAGGTGTGCAGCCTGAGGACGAGGCTGAGTATTACTGCCTGCTCTACTATGGTGGTGTTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p91w109		IGLV	TCTTTCATACAGTTCCAGCGATCACAACTACTTAGCTTGGTACCAGCAGAAGCCAGGACAGCCTCCTAAATTGCTCATTTACTGGGCATCTACCCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGACGTGGCAGTTTATTACTGTCAGCATTATCATAGTGCTCCTCGAACTTTCGGCGGAGGGACCAGGGTAGAGATCAAGC

003	p91w122		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAGGCAGCAGGGACGTTGGTACTT ATGACTATGTCTCCTGGTACCAACTGCGCCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAAGCGGCCCTCAGGCATTCCTAGTCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGTACCTCATATTCTAC CAGTAGTACTGTTTTTGTCTTCGGAACTGGAACCAAGGTCACCGTCGTGG
003	p91w135		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAATTGCAAGTCCAGCCAGAGTCTTTTCTTCA GCTCCAACAATAAGAACTACTTAGCTTGGTACCAACAGAAATCAGGACAGCCTCCTAAATTGCTCTTTTACTGGGCATCTACCCGGGAATCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCAGTCTCACCATCAGCAGCCTGCAGGCTGAGGATGTGGCAGTT
003	p91w136		*IGLV*	CAGTCTGCCCTGACTCAACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTAATT ATAACTTTGTCTCCTGGTACCAGCAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTGAGCGGCCCTCAGGGGTTTCTCATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA CCAGCACAACTCTCGTGCTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p91w14		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGGCATTGCCAATC ATTTAGCCTGGTTTCAGCAGAAGCCAGGGAAAGCCCCTAGGTCCCTGATCTATGCTGCATCCAGTTTGCACAGTGGGGTCCCATCAAAGTTCAG CGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGCCAACAGTTTAATACTTACC CGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p91w159		*IGLV*	GGCAAAGCCCCAAACATCATCATTTATGATGTCAGTAGACGGGCCTCAGGAGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGACAGCACGGCCT CCCTGACCATCTCTGGGCTCCGGCCTGAGGATGAGGCTGATTATCACTGCTGCTCATATGCAGGCAGCTACACTTATGTCTTCGGAGGTGGGAC GACGGTCACCGTCCTAG
003	p91w162		*IGLV*	CAGTCCGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAACAGTGACATTGGTGGTT ATTACTATGTCTCCTGGTACCAATTCCACCCAGGCAAAGCCCCCAAACTCATTATTTCTAATGTCAGTGATCGGCCCTCAGGGGTTTCTCATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCGGGGCTCCAGGCAGACGACGAGGCTGATTATTACTGCGGCTCATATACAAA CACCATCACTTATGTCTTCGGGACTGGGACCAAGGTCACCGTCCTAA
003	p91w169		*IGLV*	GAAATAGTTATGACGCAGTCTCCAGCCACCCTTTCTGTGTCTCCAGGTGGAGGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCAGC GACTTAGCCTGGTACCAGCAAAAACCTGGCCAGCCTCCCAGGCTCCTCATCTATGGTGCGTCCACTAGGGCCACTGATATCCCAGCCAGGTTCA GAGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGTAGCCTTCAGTCTGAAGATTTCGCAGTTTATTACTGTCAACAATATTACAAGTGG CCTCGCGAGGGGATCACCTTCGGCCAGGGGACACGACTGGACATTAAAC
003	p91w17		*IGLV*	CAGTCCGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAACAATGACGTTGGTGGTT ATTACTATGTCGCCTGGTACCAATTCCACCCAGGCAAAGCCCCCAAACTCATTATTTCTAATGTCAGTGATCGGCCCTCAGGGGTTTCTCATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCGGGGCTCCAGGCAGACGACGAGGCTGATTATTACTGCGGCTCATATACAA ACACCATCACTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAA
003	p91w174		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGGAGCT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTACAAAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTACCCC GCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p91w184		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCGCTGGAACCACCAGTGACGTTGGTGGTT TATAACTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTTCTGCAGCTCATATGCA GGCAGCTACAATGTGCTATTCGGCGGAGGGACCAAGTTGACCGTCCTAG
003	p91w185	43	*IGLV*	TCCTATGAGCTGACACAGCCACCCTCGGTGTCAGTGTCCCCAGGACAAACGGCCAGGATCACCTGCTCTGGAGATGCATTGCCAAACAAATATG CTTATTGGTACCAACAGAAGTCAGGCCGGGCCCCTGTCCTGGTCATCTATGAAGACAATCAACGACCCTCCGGGATCCCTGAGAGATTCTCTGG CTCCCGCTCAGGGACAATGGCCACCTTGACTATCAGTGGGGCCCAGGTGGAGGATGAGGCTGACTACTACTGTCACTCAACAGACAGCAGTGC TAATCTCCTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAA
003	p91w2		*IGLV*	AGTGTGAGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATGTATGGTGCATCTATTAGGGCCACTGGTATCC CAGGCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTATTGTCAGCA GTATAATAACTGGCCTCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p91w26		*IGLV*	GACATCCAGGTGACCCAGTCTCCATCCTCCCTGTCCGCATCTGTAGGGGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCATCT ATGTCAATTGGTTTCTGCAGAAACCAGGGAGAGCCCCCAAGGTCCTGATCTATGGTGCTTCCAGGTTGCAAAGTGGTGTCCCATCACGATTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTACAATACCCC GTACACTTTTGGCCAGGGGACCAGACTGGAGATGAAAC

003	p91w3	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCGGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGCAACAAACACTCCTGGACACCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTACTA TAGTGGTGCTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p91w44	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGAGAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGCAACAAACACTCTTGGACACCTGCCC GATTCTCAGGCTCCCTCCTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTATTAT GGTGGTGATCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTCC
003	p91w69	*IGLV*	GACATCCAGATGACCCAGTCTCCATCTTCCGTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGGTATTAGTAATTG GTTAGCCTGGTTTCAGCAGAAACCAGGGAAAGCCCCTAAGGTCCTGATCTATCGTGCATCCACTTTACAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTACTATTGTCAACAGGCTTACATTTTCCC GCTCAGTTTCGGCGGAGGGACCAAAGTGGAGATCAAAC
003	p91w94	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAATGACATTGGTGGTT ATTACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACCGATCATTTATAATGTCAGTGATCGGCCCTCAGGGGTTTCTGATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA ACACCATCACTCATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAA
003	p92w100	*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTGCATA GTAATGGATACAACTATTTGGATTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAACTCCTGATCTATCTGGGTTCTACTCGGGCCTCCGGGGT CCCTGACAGGTTCAGTGGCAGTGCATCAGGCACAGATTTCACACTGGAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATG CAAGCTCTACAGACTCCTCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p92w101	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT ATTACTATGTCGCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAACTCATGATTTATGATGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCGACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAAG CAGAAGCACTCTGAAATTCGGCGGAGGGACCAAAGTGACCGTCCTGG
003	p92w104	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTACCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTGAGCTCCTGATCTATAAGGCGTCTACTTTAGAAAGTGGGGTCCCATCAAGGTTCAG CGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATGAGGGTTATG GGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p92w108	*IGLV*	GCGCACTGATTTATGATACAAGCAACAAACACTCCTGGACACCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTC GGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTCTTATAGCGGTGCTCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCT AC
003	p92w111	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTACCCTGGGGGGACAGTCACACTCACTTGTGGCTTGACCTCTGGCTCAGTCTCTAGTA ATCACTACCCCAGCTGGTACCAGCAGACCCCAGGCCAGCCTCCACGCACGCTCATCTACAGCACAAACACTCGCTCTTCTGGGGTCCCTGATCG CTTCTCTGGCTCCATCCTTGAAAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAATCTGATTATTACTGTGTGCTGCATGTGG GTAGTGGCATTTGGGTGTTCGGCGGAGGGACCAAACTGACCGTCCTAG
003	p92w112	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAATGTCTGCGGCCCCAGGACAGAAGGTCTCCATCTCCTGCTCTGGAAGCAGCTCCAACATTGAGAATT ATTCTGTATCCTGGTACCAGCAACTCCCAGGAACCGCCCCCAAACTCCTCATTTATGACGATAATAGGCGACCCTCAGGAATTCCTGACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGAGTCCAGACTGGGGACGAGGCCAATTATTACTGCGCATCATCGGATAGC AGCCTGAGTTCTGTAGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w113	*IGLV*	GACATCCAGCTGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAGCCATC TTTTAGCCTGGTATCAGCAGAAACCAGGGACAGTTCCCGATCTCCTGATCTTTGATGCGTCCAATTTACAGTCAGGGGTCCCTTCTCGGTTCAGT GGCAGTGGCTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGACTGAAGAT
003	p92w114	*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACCTCGGGGCA GGTTTTGATGTACACTGGTACCAGCAGCTTCCAGGAACAGCCCCCCAAGTCCTCATCTATGATAGCACCAATCGGCCCTCAGGGGTCCCTGACC GTTTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGA CAGCAGCCTGAGTGGTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p92w119	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTAACT GGTTGGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGGTCCTCATATTTGCGGCCTCTAAATTACAAACTGGGGTCCCATCGAGGTTCAG CGGCAGTGGATCTGGGACTACATTCTCCCTCACCATCAACAGCCTGCAGCCTGATGATTCTGCAACTTATTACTGCCAACAATATAATAATTATCC TCTCGCTTTCGGCGGGGGGACGGAAGCTGGAGGTCAAAG

003	p92w122	*IGLV*	GCCGTCCGGCTGACCCAGTCTCCATCCTCATTCTCTGCATCTACAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGCATATTAGCAATTCTTTAGCCTGGTATCAGCAGAAACCAGGGAAAGACCCTAAGCTCCTGATCTATCATGCATCCACTTTGCAACGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAACGGCCTGCAGTCTGAAGATTTTGCAATTTACTACTGTCAACATTATAATAGTTATCCTCTCAGTTTCGGCGGAGGGACCAAGGTGGACATCAAAC
003	p92w126	*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCTTCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTATAGCTCTGTCTCCTGGTACCAAAAGCACCCAGGCAAAGCCCCCAAACTCATTATTTATGAAGTCGATAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGATGATGAGGCTGATTATTACTGCAGCTCATATGCAGGCAGCACCCTTTTGGTGTTTGGCGGAGGGACCCAGCTGACCGTCCTAG
003	p92w135	*IGLV*	GGCAGCAACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCACCAGGGCCAGTGGTGTCCCAACCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATGTTGCAGTTTATTACTGTCAGGACTATAGTTACTGGCCTCCGCCGTTCGGCCAAGGGACCAAGGTAGAAATCAAAC
003	p92w136	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCCGTGGTCATTATGCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAACCAACAAACACTCCTGGACACCTGCCCGATTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTATTATTGCTTACTCTACTATAGTGGTCCTCGG
003	p92w14	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGTGGTCATTATTCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTAATTTATGATACAACCAACAGACACTCCTGGACACCTGCCCGCTTCTCAGGGTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGACGATGAGGCTGAGTATTACTGCTTGCTCTACTATGGTGGTACTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p92w143	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAACTGTCACCAGTGGCCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAACCAACAAACAGTCCTGGACACCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTATTACTGCTTGCTCTACTACGGTGGTGCTCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p92w145	*IGLV*	TTCCAACATCGGAAGTAATTATGTGTATTGGCACCAGCAACTCCCAGGAATGGCCCCCACACTCCTCATCTATAGGGATAATCGGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCGGTCCGAGGATGAGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAATTGGGTGTTCGGCGGAGGAACCAAGCTGACCGTCCTGG
003	p92w15	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGTGGCCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTTTGATACAACCAACAAACACTCCTGGACACCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGGCTGCCCTGACTCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTACTACTGCTTGCTCTACTATGGTGGTGATCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p92w159	*IGLV*	TCTTCCGAGCTGACTCAGGACCCTGCTGTGTCTGTGGCCTTGGGACAGACAGTCAGGATCACATGCCAAGGAGACAGCCTCAGACTCTATTATGCAGGCTGGTCCCAGCTGAAGCCAGGACAGGCCCCTATACTTATCATCTATGGTGAAAACACCCGGCCCTCAGGGATCCCAGACCGATTCTCTGGCTCCAGGTCAGAAAACACAGTTTCCTTGACCATCACTGGGGCTCAGGCGGAAGATGAGGCTGACTATTACTGTTACTCCCGGGACAGCAGTGGAAAGCGTCTGGTGTTCGGCGGCGGGACCAAACTGACCGTCCTAG
003	p92w162	*IGLV*	GATGTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATAGTAGCTCAATAACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p92w163	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGAGTTATAACCTTGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAACCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCATATGCAGGTAGTAGCACTTTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w167	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCTTGGACAGTCGATCACCATCTCCTGCACTGGAGCCAGCAGTGACGTTGGTACTTATGACTATGTCTCCTGGTACCAAGTGCACCCAGGCAAAGCCCCCAAACTCATGCTTTATGATGTCAGTAAGCGGCCCTCAGGGGTTTCTAAT
003	p92w168	*IGLV*	GATGTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCACCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGCGTAGCAACTGGCCTCAAACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w17	*IGLV*	ACATTAGCAACTTTTTAAATTGGTATCAACTGAAGCCAGGGAAAGCCCCTAAGCTCCTGATCTACGATGTATTCAATTTGGAAAGAGGGGTCCCATCAAGGTTCAGTGGAAGTGGATCTGGGACACATTTTACTTTCACCATCGGCAGCCTGCAGCCTGAAGATATTGCAACATATTACTGTCACCAGTATGATAATCTCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

003	p92w172	14	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGATCCAGCAGTGACGTTGGTGATT ATGACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAAGTCATTATTTATGCTGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGCCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA GCAGCAGCACTGTGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w174		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGTACTGGAACCAGCAGTGACATTGGTGGTT ATAACTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAAGCGGCCCTCAGGGGTCCCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTGCTGCAGCTCATATGCA GGCAGCAGCAATTTACTAATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w175		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCACCAGTGATGTTGCGACTT ATTACCTTGTCTCCTGGTACCAACATCACCCAGGCGAAGCCCCCAAACTCATAATTTATGATGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGCCTCCAGGCTGAAGACGAGGCTCATTATTACTGCACCTCATATACAAC CAGCACCACCCTTTATGTCTTCGGAAGTGGGACCAAGGTCACCGTCCTAG
003	p92w176		*IGLV*	GCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAG ACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTAT GGTAGCTCGTACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p92w177		*IGLV*	GAAATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTGGCAGC AACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCATCCACCAGGGCCAGTGGTGTCCCAACCAGGTTCA GTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATGTTGCAGTTTATTACTGTCAGGACTATAGTTACTGG CCTCCGCCGTTCGGCCAAGGGACCAAGGTAGAAATCAAAC
003	p92w178		*IGLV*	GATGTTGTTATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGTCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAG TGATGGAGACACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTACCCGGGACTCTGGGGTC CCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGC AAGGTACACACTGGCCTCAGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p92w184		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCGGCGTCTGGGACCCCCGGGCAGAGGGTCATCATCTCTTGTTCTGGGAGCAGCTCCAACATCGGGAGT AATACTGTCAACTGGTACCAGCAGTTCCCAGGAACGGCCCCCAAACGCCTCATGTATAAAAATAATCAGCGACCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTATTGTCAGCATGGGATGA CAGCCTGAATGCTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTTG
003	p92w185		*IGLV*	ACTGTCTGCATCTGTAGGAGACCGAGTCACCATCACTTGTCGGGCGAGTCAGGGCATTGCCAATCATTTAGTCTGGTTTCAGCAGAAACCAGGG AAAGCCCCTAAGTCCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTC TCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTTTAATAGTTACCCGCTCACTTTCGGCGGAGGGACCAAGGTG GAGATCAAAC
003	p92w187		*IGLV*	GACATCATGATGACCCAGTCTCCAGATTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTATTCA GCTCCAACAATAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTAACTGGGCATCTACCCGGCAATCCGG GGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGGCAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGT CAGCAATATTATTTTACTCCTTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w191		*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGTCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTCCATA GTAATGGATACAAGTATTTGGACTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGT CCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATG CAAGCTCTACAAACTCCTCGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p92w20		*IGLV*	GTATACAGTGATGCAAATACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTC TGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTA CTGCATGCAAGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w203		*IGLV*	TGCCACACTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAAAGACCTGGCCAGGCTCCCAGGCTCCTCATC TATGGTGCATCCGGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCGGGGACAGACTTCACTCTCACCATCAGCAGACTGGAA CCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTGTGATATTCCACCGTACACTTTTGGCCAGGGGACCAAACTGGAGATCAAAG
003	p92w21		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCA CCTACTTAGGCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGT TCAGTGGCAGTGGGTCTGAGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAATATGATAGC TCACATTCGATCACCTTCGGCCAAGGGACACGACTAGAGATTAAAC

003	p92w30		*IGLV*	GACATCGTGCTGACCCAGTCTCCAGACTCCCTACCTGTGTCTCTGGGCGAGAGGGCCACCATTCACTGCAAGTCCAGCCAGAGTCTTTTATTCAGTACCAACAATAAGAACTACTTAGCTTGGTACCAGCAGAAACCGGGACAGCCTCCTAAGCTGCTCATTTCCTGGGCCTCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGAGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATCACTGTCAGCAACATTATAGCAGTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w35		*IGLV*	CAGTCTGCCCTGACCCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTACTTATAACCTTGTCTCCTGGTACCAACAGAACGCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCACCTCATACACAACCCGCAGCACTAATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w37		*IGLV*	GAGATTGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCACCTACTTTGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCCGGCTGCTCATCTATGGTGCAACCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTTTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTA
003	p92w44	12	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGACTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTAGCTCACCCACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w47		*IGLV*	CAGTCTGTCTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGATGGTCACCATGTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTCTCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATGGTAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAGCAGCCTGAGGGGTTTTGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAA
003	p92w48	21	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGGCATTAACAATTATTTAGCCTGGTATCAGCAGAAACCAGGGAAAGTTCCTAAGCTCCTGATCTATGCTGCATCCACTTTGCAATCAGGGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTCAAAA
003	p92w59		*IGLV*	TATTAGCAGCACCTACTTATCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCAGGCTCCTCATCCATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTCTGATAGCTCACCATTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
003	p92w6	20	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAACAGTGACATTGGTGGTTATCAATATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGATGTCGGTAATCGGCCCTCAGGTATTTCCAATCGCTTCTCACTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGAATATTTCTGCAGCTCATATGCAAGTAGTAGGAGTCTACTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w69		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCGGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCAACAATTTAAATTGGTATCAGGAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATTCAGTTTGCAAAGCGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCGGTCTGCAACCTGAAGATTTTGCAACTTACCACTGTCAACAGAGTTACAGTACTCCGTGGACGTTCGGCCAAGGGACCAGGGTGGAAATCAAAC
003	p92w7		*IGLV*	GATGTTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTGGTCAAAGCCTCGTACACAGTGATGGAAACACCTACTTGAATTGGTTTCAGCAGAGGCCAGGCCAATCTCCAAGGCGCCTATTTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGGTACACACTGGCCTCCGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p92w82		*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAACTACTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATTCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGCAGCGTAGCAACTGGCCTCCCATGTTCTCTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p92w83		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCGCTGGAACCACCAGTGACGTTGGTGGTTATAACTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTTCTGCAGCTCATATGCAGGCAGCAACAATGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p92w93		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAATCACCATCACTTGCCGGGCAACTCAGACCATTAGCACCTATTTAAATTGGTATCAGCAGATACCAGGGAAAGCCCCTAACCTCCTGATCTATGCTGCATCCAGTTTACAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGACTTACAGTACCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC

003	p92w97		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGATCCAGCAGTGACGTTGGTGATTATGACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAAGTCATTATTTATGCTGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGCCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAAGCAGCAGCACTGTGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w100		IGLV	AGGTCTAGTCAGAGCCTCCTGTATAGTAATGGATACACGTTTTTGGATTGGTACGTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTAACTTCTATTCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAGAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCATGCTCTACAAATCCCGATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
003	p93w101		IGLV	CAGTCTGCCCTGACTCAACCTACTTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGAGTTATGACGTTGTCTCCTGGTTCCAACAGCATCCAGGCAAAGCCCCCAAATTCATAATTTATGAGGTCACTAAGCGGCCCTCAGGGATTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGAATATTACTGCTGTTCATATGCAGGAAGTAATATTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w104		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGACCTATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGAAGTCACTACGCGGCCCTCAGGGGTCTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGGTCATATGCAGGTAGTAGCAGTTTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w108	15	IGLV	GACATCCAGATGACCCAGTCTCCATCCTCACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGATATCAGCAGCTGGTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCACTTTGCAAGGTGGGGTCCCATCAAGGTTCAGCGGCAGTCGATCTGGGATAGATTTCACTCTCACCATCAGCAGCCTCCAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATAAGAGTTACCCTGTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p93w109		IGLV	GACATCGTGGTGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCGACTGCAAGTCCAGCCAGAGTGTTTTGTACAGCTCCAACAATAAGAACTACTTAGCTTGGTACCAACAGAAACCGGGACAGCCTCCAAAGCTGCTCATGCACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCATTGGCAGCGGGTCTGGGACAGATTTCACTCTCATCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTTTTGTCAGCAATATTATGATTTTCCTATCACTTTCGGCGGAGGGACCAAGGTGGAGATCAGAC
003	p93w113		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTCGGTAATTATAACTATGTCTCCTGGTACCAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAATAAGCGGCCCTCAGGGGTCTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCAGCACAATTTCTGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p93w114		IGLV	CAGTCTGTGCTTACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGTACTTCGAACATCGGGGCACATCATGCTGTACACTGGTACCAGCAGGTTCCAGGGACAGCCCCCAAACTCCTCATCTATGATAACAACATTCGCCCCGCAGATGTCCCTGCCCGATTCTCTGGTTCCACGTCTGGCACTTCGGCCTCCCTGGCCATCACTGGGCTCCAGGCTGCGGATGAGGCTGATTATTACTGCCAGTCCTATGACAGCGGCCTGAGTGCTTCGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
003	p93w119		IGLV	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGCAGTTATTTAGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATAGTTACGTCACTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
003	p93w126	16	IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTCGGTAATTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAACCGGCCCTCAGGGGTCTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCAGCTCATATACAACCAGCAGCACCCTTTCTGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p93w127		IGLV	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGTACTGGGAGCAGCTCCAACATCGGGGCAGATTATAATGTTCACTGGTACCAGCAGCTTCCAGGATCAGCCCCCAAACTCCTCATCTATGCTAACACCAATCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAAGATGAGGCTAATTATTACTGCCAGTCCTATGACAGTAGCCTGAGTGGTTCGGTGTTCGGCGGAGGGACCCAGCTGACCGTCCTAG
003	p93w14		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGGGACGTTGGTACTTATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGGCCCCCAAACTCATGATTTATGATGTCAGTCATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAACCAGCACCATTCATTATGTCTTCGGAACGGGGACCAAGGTCACCGTCCTAG
003	p93w143		IGLV	GATGTCAGTGTCCCCAGGACAGACGGCCAGGATCACCTGCTCTGGAGATGCATTGCCAAACCAATTTGCTTTTTGGTACCAACAAAAGCCAGGCCAGGCCCCTGTCCTGATTATGTATCAAGACAGTGAAAGGCCCTCAGGGATCCCTGAGCGATTCTCTGGCTCCCGCTCAGGGACAACAGCCACATTGTCCATCAGTGGGGTCCAGGCAGAAGACGAGGCTGACTATTACTGTCAAGCATCAGACAACAGTGCTACTTATGTGGTCTTCGGCGGAGGGACCCAGCTGACCGTCCTAG

003	p93w145	*IGLV*	GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTCGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTGTTAGTAGCT GGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATAAGGCGTCTAATTTAGAAAGTGGGGTCCCATCAAGGTTC
003	p93w146	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAACAACAAACAATCCTGGACCCCTGCCC GGTTCTCAGCCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTCCTA TAGTGGTGCGTCTTGGGTGTTTGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w15	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCCTGGAGGGACAGTCACACTCACTTGTGGCTTGACCTCTGGCTCAGTCTCTGCTA GTCACTACCCCAGTTGGTACCGGCAGACCCCAGGCCAGGCTCCACGCAGGCTCATCTACAATACAAATATTCGGTCTTCTGGGGTCCCTGATCG CTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAATCTCTTTATTCCTGTCTGCTGTTTATGC GTGGTGACTTTTGGGTGTTCGGCGGAGGGACCCAGCTGACCGTCCTTA
003	p93w159	*IGLV*	CGAGTGAAAGTGTCAGCAATTATGTCCATTGGCTGCAACAGAGACCAGGGAAAGCCCCTAAACTCCTCATCTCGGCTGCATATCGTTTAGAGAGT GGGGTCCCGTCGAGGTTCAGTGGCACTTGGTCTGGGACAGAGTTCACTCTCACCATCACTGGTCTCCAAGCTGAGGACTATGCAACTTACTCCT GTCACCAGACTTACAATATTCCTTACACTTTTGGCCAGGGGGACCTTGTTGGAGATCAAAC
003	p93w162	*IGLV*	GCTAATTATAACTATGTCTCCTGGTACCAAAAACACCCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCACTAATCGGCCCTCAGGGGTTTCC AATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCATCTCAT ATTCCACCACCATTACTCATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w163	*IGLV*	TTGGAGACAGAGTCACCATCACTTGCCGGACAAGTCAGAACATTTACAACTATTTAATTTGGTATCAGCAGAAACCAGGGACAGCCCCTAAAGTC CTCATCTATGGTGCTTCCAATTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCT GCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGGGTTACACTGTCCCTCGGACGTTCGGCCAAGGGACCAAGGTGGACATCAAAC
003	p93w168	*IGLV*	ACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTATCAACAAAAACCAGGGAAAGCCCCTAAACTCCTGATC TATGCTGCGTCCAGTTTGTCAAATGGGGTCCCATCAAGGTTCAGCGGCAGTGGTTCTGGGACAGAATTCACTCTCACCATCAGCAGTCTGCAAC CTGAAGATTTTGCAACTTATTGTTGTCAACAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p93w17	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTACCAACT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTACGATGTGTTCAATTTGGAAGCAGGGGTCCCATCAAGGTTCAGT GGAAGCGGATCTGGGACAGATTTTACTTTCACCATCAGCAGCCTGCAGCCTGAAGACATTGCAACATATTACTGTCAACAGTATGATATTCTCCC ATACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p93w174	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTACTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGGCCCCAAACTCATGATTTATGATGTCAGTCATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA CCAGCACCATTCATTATGTCTTCGGAACGGGGACCAAGGTCACCGTCCTAG
003	p93w175	*IGLV*	AGTGTTACCAGCACCTACTTAGCCTGGTACCAGCAGCAACCTGGCCAGACTCCCAGGCTCCTCATCTATGGTTCATCCAGCAGGGCCACTGGCA TCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCA GTACTATGACGACTCACTGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p93w177	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGGGACGTTGGTACTT ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGGCCCCAAACTCATGATTTATGATGTCAGTCATCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA
003	p93w178	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGGGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT GGTCATTATCCCTATTGGTTCCAGCAGAGGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGCAACAGACACTCCTGGACACCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTATTACTGCTTGCTCTCCTA TAGTGGTGCTCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w185	*IGLV*	CAGTCTCTTTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAGTA ATTATGTATCCTGGTACCAGCAACTCCCAGGAACAGCCCCCAGACTCCTCATTGGTGACAATAATAAGCGCCCCTCAGGGATTCCTGACCGATTC TCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTACTACTGCGGTACATGGGATAAC AGCCTGAGTGCTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w187	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCTCGATCACTTGCCGGGCAAGTCAGAGCGTTAGTACTT GGGTAAATTGGTATCAGCAGAAACCAGGGCAAGCCCCCAAACTCCTGATCTATGCTACATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGACTTCACTTTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAATTTACTTCTGTCAACAGACTTCCAGCAGCCC TTCCGTCACTTTCGGCGCAGGGACCACGGTGGAGATCAAAC

003	p93w191		*IGLV*

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT
ATAACTATGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAGTAATCGGCCCTCAGGGGTTTTTAATCGCT
TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATACACAAG
CAGCAATACTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

003	p93w193		*IGLV*

GAACCTCCTAAATAGTAATGGCTTCAACTATTTGGATTGGTACCTGCAAAAGCCAGGGCAGTCTCCACAGCTCCTGATCTTTTTGGGTTCTAATCG
GGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGT
TTATTACTGCATGCACACTCTACAAACTCCTCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAGC

003	p93w2		*IGLV*

CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT
GGTCATTATTCGTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAACAACAGACAGTCCTGGACACCTGCCC
GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTACTA
TAGTGGTGCTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC

003	p93w21	22	*IGLV*

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGACGCAACTCCAACATTGGGAATA
ATTATGTCTCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTC
TCTGGCTCCAAGTCTGCCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATACC
AGCCTTCGTGTTTGGGTGTTCGGCGGAGGGACCACGCTGACCGTCCTAG

003	p93w26		*IGLV*

GGCCACCCTCTCCTGCAGGGCCAGTCACACTATTAACAACAGGTACTTAGCCTGGTATCAGCAGAAATCTGGCCAGGCTCCCAGGCTCCTCATC
TATGGTGCATCCAGCAGGGCCACTGGCATCCCAGGCAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACAATCAGCAGACTGGAG
CCTGAAGATTTTGCAGTGTATTACTGCCAGCAGTATGGGAACTCACCTCAGACGTTCGGCCAAGGGACCAAGGTGGAAGTCAAAC

003	p93w3		*IGLV*

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAAT
AATTATGTTTCCTGGTACCGGCAACTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATT
CTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGAAACATGGGATAG
CAGCCTGAGAGACGTGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

003	p93w30		*IGLV*

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCATCAGCGACGTTGGTGGTT
ATAAATATGTCTCCTGGTACCAACAATGCCCCGGCAAAGCCCCCAAACATCATGATTTATGAAGTCACTAAGCGGCCCTCAGGCACTTCTAATCGC
TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA
ACAATACCATGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

003	p93w35		*IGLV*

GTTCTGGAAGCAGCTCCAACGTCGGAAATAATTATGTATACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAAGTCCTCATCTATTTGAATAAT
CAGCGGCCCTCAGGGGTCCCTGACCGAATCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGACTCCGGTCCGAGGATGAG
GCTGATTATTACTGTGCAACATGGGATGACGGCCTGAGAGGTCCGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG

003	p93w37		*IGLV*

GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAACATTATTGGTCA
TTTAAATTGGTATCAGCAGACACCAGGGAAAGCCCCTAACCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGAAGTCCCGTCAAGGTTCAGTG
GCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAATCTACAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTCTCCCG
CTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC

003	p93w47		*IGLV*

CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT
GGTCATTATTCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTAATTTATGATACAACCAACAGACACTCCTGGACACCTGCCC
GCTTCTCAGGGTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGACGATGAGGCTGAGTATTACTGCTTGCTCTACTA
TGGTGGTACTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC

003	p93w48		*IGLV*

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGCGTCTCCTGGACAGTCGATCACCCTCTCCTGCACTGGAACCACCAGTGATGTTGGGACTT
ATGACCTTGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCTTGATTTATGAAGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGC
TTCTCTGCCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCTGCTCCTATGTTG
GTAGTGGCAATATGCTATTCGGCGGAGGGACCAAGCTGACCGTCCTAA

003	p93w5		*IGLV*

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT
ATGACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAAGTCATTATTTATGCTGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGC
TTCTCTGGCTCCAAGTCTGCCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA
GCAGCAGCACTGTGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG

003	p93w51		*IGLV*

CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTT
ATGACTTGGTCTCCTGGTACCAACTTTACCCAGGCAAAGCCCCCAACATCATGATTTATGATGTCTATAAGAGGCCCTCAGGGGTTTCTCATCGC
TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGCCTCCAGGCTGAAGACGAGGCTGATTATTACTGCAGCTCATATACAA
GTAGTAGGACTTGGGTGTTCGGCGGCGGGACCAAGGTGACCGTCCTAG

003	p93w55	23	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCCTGGAGGGACAGTCACACTCACTTGTGGCTTGAGCTCTGGCTCAGTCTCTACTA GTTACTACCCCAGCTGGTACCAGCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAGCACAAACACTCGCTCTTCTGGGGTCCCTGATCG CTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCACGGGGGCCCAGGCAGATGATGAATCTGATTATTACTGTGTGCTGTATATGG GTAGTGGCATTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w59		*IGLV*	GACATCCTGATGACCCAGTCTCCTTCCGCCCTGTCTACATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTGAAAGTCTTGATACTTG GCTGGCCTGGTATCAACAGAAACCAGGGAAAGCCCCTAAACTCCTCATCTCTAAGGCGTCTACTTTAGAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCTGAGACCGAATTCACTCTCACCATCACCAGCCTACAGTCTGATGATTTAGCAACTTATTACTGCCAACAGTATCATAGTTATCCG TTCACTTTTGGCCAGGGGACCAAGCTGGAGATCACAC
003	p93w6		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAGT TATTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATT CTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATAG CAGCCTGAGTGCTGTGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p93w62		*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAACTGTCACCAGT GGTCATTATCCCTACTGGTTCCAACAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGCAACAAGCACTCCTGGACCCCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTATTACTGCTTGCTCTACTA TAGTGGTGCTTGGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAC
003	p93w69		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGCTCACCATCTCCTGCACTGGCACCAGCAGTGACGTTGGTACCT ATAACTATGTCTCCTGGTACCAACACCACCCAGGCAAAGCCCCCCAACTCATGATTTTTGATGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGCCTCCAGGCTGAAGACGAGGCTGATTATTTCTGCATCTCATATACAAC CAGACTCACCTTTTATGCCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p93w7		*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGTAACAAATACTCCTGGACACCTGCCCG GTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGACGATGAGGCTGATTATTATTGCTTGCTCTACTAT GGCGGTGCTCGGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAG
003	p93w8		*IGLV*	CAGTCTGTGCTGACGCAGCCGCCCTCACTGTCTGGGGCCCCAGGGCAGAAGGTCACCATCTCCTGCACTGGGAGCAGTTCCAACATCGGGTCA GCTTATGATGTCCACTGGTACCAGCAGTTTCCAGGAACAGCCCCCAAACTCCTCATCTATCGGAACACCGATCGGCCCTCAGGGGTCCCTGACC GATTCTCTGCCTCCAAGTCTGGCACCTCAGCCTCCCTGGTCATCACTGGACTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGTCCTATGA CACCAGCCTGAGTGGTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCAAG
003	p93w81		*IGLV*	GACTATTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGC ATCCCAGACAGGTTCAGTGGCAGTGGGTCTGCGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCA GCACTATGATACCTCACCTCAGACTTTCGGCCCTGGGACCAGAGTGGATATCAAAC
003	p93w82		*IGLV*	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCTTCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGCAGTT ATTTAGCCTGGTATCAGCAAAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGC GGCAGTGGATCTGGGACAGAATTCACTCTCACAATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCAACAGCTTAATAGTTACGT CACTTTCGGCCCTGGGACCACAGTGGATCTCAAAC
003	p93w83		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCAGTT ATTTAAATTGGTATCAGCAGAGACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTGCAAAGTGGGGTCTCATCAAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAGGATTTTGCAACTTACTACTGTCAACAGGGTTACACCCCGCT CACTTTCGGCGGAGGGACCAAGGTGGAAATCAAAC
003	p93w93		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGACTT ATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTCAGCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGACTGAGGACGAGGCTGATTATTACTGCTGCTCATATGCAG GGAGTAACACTTTGATATTTGGCGGAGGGACCAAGTTGACCGTCCTAC
003	p93w97		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAGCCAGCCGTGACGTTGGTACTT ATGACTATGTCTCCTGGTACCAACTGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAGTAAGCGGCCCTCAGGGGTCTCTGATCG CTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTCACCATCTCTGGCCTCCAGGCTGAGGACGAGGCTGATTATTACTGCACCTCATATTCAA CCAGCAGCACTCTTTTTGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p94w100		*IGLV*	ATCGTCCCTGTCTGCATCTGTAGGGGACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTATCAACAAAAAC CAGGGAAAGCCCCCAAACTCCTGATCTATGCTGCGTCCAGTTTGTCAAATGGGGTCCCACCAAGGTTCAGCGGCAGTGGCTCTGGGACAGAATT CACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTATTGTTGTCAACAAGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCA AGGTGGACATGAATC

003	p94w101	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAAT AATTATGTTTCCTGGTACCAGCAACTCCCAGGGACAGCCCCCAGGCTGCTCATTTATGACAATAATAAGCGACCCTCAGATATTCCTGACCGATT CTCTGGCTCCAAGTCTGCCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGAAACATGGGATAG AAGTCTGCATATTGGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w104	*IGLV*	TTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGAGTATTAGTACTTGGTTGGCCTGGCATCAGCAGCAA CCAGGGAAAGCCCCTAAGCTCCTGATCTATAAGGCGTCGAGTTTAGAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAAT TCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTGCCAACAGTATAACAGTTATTCGTGCACTTTTGGCCAGGGGACCA AGCTGGAGATCAAAC
003	p94w108	*IGLV*	GAGATAGTGATGACGCAGTCTCCAGCCACCCTGTCTGTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGGGTGTTGCCAGC AACTTAGCCTGGTACAAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGCTGCATCCACCAGGGCCACTGATATCTCAGGCAGGTTCA GTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAATTTATTACTGTCAGCAATATAATACCTGG CCGTACACTTTTGGCCAGGGGACCAAGCTAGAGATCAAAC
003	p94w109	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCA CCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTTCATCCACCAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGATAGCT CATTGTGGACGTTCGGCCAAGGGACCAAGGTGGACATCAAAC
003	p94w112	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAAT AATGATGTTTCGTGGTATCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATGAGCGACCGTCAGGGATTCCTGACCGAAT CTCTGGCTCCAAGTCTGGCACGTCCGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTATTGCGGAACATGGGATAG CAGCCTGAGAGGTTATGTCTTCGGAAGTGGGACCAAGGTCACCGTCCTCG
003	p94w114	*IGLV*	CAGTCTGCCCTGACTCAACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCACTGACGTTGCTAATT ATAACTATGTCTCCTGGTACCAAAAACACCCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCACTAATCGGCCCTCAGGGGTTTCCAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCATCTCATATTCCAC CACCATTACTCATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w119	*IGLV*	CCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAGTGATGCAAATACCTACTTGAATTGGTTTCACCAGAGGCCA GGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCA CACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAA GCTGGAGATCAAAC
003	p94w123	*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCCTGGAGGGACAGTCACACTCACTTGTGGTTTGAGCTCTGGCTCAGTCTCTAGTA GTCACTACCCCAGTTGGTGCCAGCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAGCACACACATTCGCTCTTCTGGGGTCCCTGCTC GCTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCTCGGGGGCCCAGGCAGATGATGAATCTGATTATTACTGTGTGCTCTATATG GGTAGTGGCATTTCGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w127	*IGLV*	GGGGACAGAGTAACCATGTCTTGCCGGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTATCAACAGAAACCAGGGAAAGCCCCTAAACTCC TGATCTATGCTGCGTCCAGCTTGTCAAATGGGGTCCCATCACGGTTCAGCGGCAGTGGTTCTGGGACAGAATTCACTCTCACCATCAGCAGTCT GCAACCTGAAGATTTTGCAACTTATTGTTGTCAGCAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p94w129	*IGLV*	TCTGTCACCAGTCTTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGGCACTGATTTATGATACAAACAACAAAAACTCCTG GACACCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCTGCCTGAGGATGAGGCTGAGTATTACTG CTTGCTCTACTATGGTGGTGATCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTGG
003	p94w135	*IGLV*	CAGCTTGTGCTGACTCAATCGCCCTCTGCCTCTGCCTCCCTGGGAGCCTCGGTCAAGCTCACCTGCACTCTGAGCAGTGGGCACAGCAGCTAC GCCATCGCATGGCATCAACAGAAGCCAGAGAAGGGCCCTCGATACTTGATGAAGGTTAACAGTGATGGCAGCCACAGCAAGGGGGACGGGATC CCTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCACCATCTCCAGCCTCCAGTCTGAGGATGAGGCTGACTATTACTGTCAGA CCTGGGGCCCTGCCGCTCAAGTGGTCTTCGGCGGAGGGACCAAGGTGACCGTCCTAG
003	p94w136	*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCATTGGAGCTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAACCAACAAACAGTCCTGGACACCTGCCC GGTTCTCAGGCTCCCTCCTTGGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTACTA TAGTGGTGCTCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p94w14	*IGLV*	ATAACTTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCAACCATCATCAATTATGATGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTCATTATTATTGCACTTCATATACAACC CGCATCATTCATTGGGTGTTCGGCGGAGGGACCAAACTGACCGTCGTAG

003	p94w144	*IGLV*	CAGTCTGCCCTGATTCAGCCTGCTTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGCCACTT ATAACTATGTCTCCTGGTACCAAAAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGATGTCACTAGTCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATAT
003	p94w146	*IGLV*	TGTGTTGACGCAGCCGCCCTCAATGTCTGCGGCCCCAGGACAGAGGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAATATTGGAAGCAATTAT GTATCCTGGTACCAGCACCTCCCAGGAACAGCCCCCAGACTCCTCATTTTTGACAGTAATGACCGACCCTCAGGGATTCCTGACCGATTCTCTG GCTCCAAGTCTGGGACGTCAGCCACCCTGGGCATCACCGGAGTCCAGGCTGGGGACGAGGCCCATTATTACTGCGGAGCATGGGATAACAGC CTGAGTGCTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w15	*IGLV*	CCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCACCAGTGACCTTGGTACTTATAATCAT GTCTCCTGGTACCAACAACACCCAGGCAAACCCCCCAAACTCATGATTTATGATGTCAGTAAGCGGCCCTGGGGGGGTTTCTAATCGCTTCTCTGG CTTCAAGTCCGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCACCTCATATACAACCAGCAGC GCTCTCTATGTCTTCGGACCTGGGACCAAGGTCACCGTCCTAG
003	p94w159	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTAGCAACT GTTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTACGATGTATTCAATTTGGAAACAGGGGTCCCATCAAGGTTCAGT GGAAGTGGATCTGGGACAGATTTTACCTTCACCATCAGCAGCCTGCAACCTGAAGACATTGCAACATATTACTGTCAACAGTATGATAATCTCCC GCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w162	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTAATT ATAACTATGTCTCCTGGTACCAGCAATACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAGTAATCGGCCCTCAGGGGTTTCAAATCGC TTCTCTGCCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATTCAA CCAGCGACACTCCCTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w168	*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGTTT ATAACTTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGATGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCT TCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTCATTATTATTGCACTTCATATACAACC CGCATCATTCATTGGGTGTTCGGCGGAGGGACCAAAACTGACCGTCGTAG
003	p94w17	*IGLV*	TTCTGCAGGGCCAGTCAGACTGTTAGCAGCACCTATTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTTTGGTGCAT CCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATT TTGCAGTTTATTACTGTCAGCAGTATACTACCTCAATTACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w172	*IGLV*	AGGCAGCTCCAACGTCGGAAGTCATACTGTGAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAATAATGATCAGCGG CCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGAT TATTATTGTACAGCATGGGATGACAGCCTGAATGGTCCGGTGCTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w174	*IGLV*	AATGTTGTCATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAG TGATGCAAATACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCC CAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCA AGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p94w175	*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAAT AATTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAACAATAAGCGGCCCTCAGGGATTGCTGACCGATT CTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGACTATTACTGCGGAACATATGATAG TAGCCTGAGTGGTTATGTCTTCGGAATTGGGACCAGGGTCACCGTCCTAG
003	p94w176	*IGLV*	GAGATTGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCACCT ACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCA GTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCA
003	p94w177	*IGLV*	ATTAGGAGCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTACAAAGTGGGGTCCCATC AAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTT ACAGTACCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w178	*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGGGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCA CCTACTTAGGCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGT TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAACCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTAGC TCACCATTCACTTTCGGCCCTGGGACCACAGTGGATATCAAAC
003	p94w18	*IGLV*	CGGGGCAGGTTATAATGTACAGTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTGACAACAATCGTCCCTCAGGGGTC CCTGACCGATTCTCTGACTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGT CCTATGACACCAGCCTGAGTGGTTATGTCTTCGGAATTGGGACCAAGGTCACCGTCCTAG

003	p94w185		*IGLV*	GGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGGAGCTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCC TGATCTATGCTGCATCCAGTTTACAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTG CAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTACCCCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w193		*IGLV*	ACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTATCAACAAAAACCAGGGAAAGCCCCTAAACTCCTGATC TATGCTGCGTCCAGTTTGTCAAATGGGGTCCCATCAAGGTTCAGCGGCAGTGGTTCTGGGACAGAATTCACTCTCACCATCAGCAGTCTGCAAC CTGAAGATTTTGCAACTTATTGTTGTCAACAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p94w2		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGACCAGTCAGAGTGTTAGTAGCA CCTACGTAGACTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGT TCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGATAG GTCACGGGCATTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p94w20		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAGGT AATACTGTAAACTGGTACCAGCAACTCCCAGGAACGGCCCCCAAACTCCTCATCTATCGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGAT TCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGCAACATGGGATGT CACCCTGAATGGACATGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w21		*IGLV*	CAGACTGTGGTGACCCAGGAGCCATCGTTCTCAGTGTCCCGTGGAGGGACAGTCACACTCACTTGTGGCTTGACCTCTGGCTCAGTTTCTACTA GTCACTACCCCAGTTGGTACCGCCAGACCCCAGGCCAGGCTCCACGCACGCTCATCTACAACACAAACACTCGGTCTTCTGGGGTCCCTGATCG TTTCTCTGGCTCCATCCTTGGGAACAAAGCTGCCCTCACCATCGCGGGGGGCCCAGGCAGATGATGATTCTAATTATTATTGTGTGTTGTATATGG GTGGAGGCATTTCGGTGTTCGGCGGAGGGACCAAGGTGACCGTCCTAG
003	p94w25		*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTTTGATACGTTCAACAAACAGTCCTGGACACCTGCCC GTTTTTCAGGCTCCCTCCTTGGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCCGACTATTACTGCTTGCTCTACTA TGGTGGTCCTCGGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w26		*IGLV*	GAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCT ACTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGATGCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTCAG TGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAGCAGCGTAGCAACTGG CTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w3		*IGLV*	AATGTTGTCATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAG TGATGCAAATACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCC CAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCA AGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p94w30		*IGLV*	CCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGGAGCTATTTAAATTGGTATCAGCAGAAACCAGG GAAAGCCCCTAAGCTCCTGATCTATGCTGCATCCAGTTTACAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTCACTC TCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTACTACTGTCAACAGAGTTACAGTACCCCGCTCACTTTCGGCGGAGGGACCAAGGTG GAGATCAAAC
003	p94w35	24	*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAATATTTTATACA GCTCCAACAAAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGTCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGAATCCGG GGTCCCTGACCGATTCAGTGGCAGCGGGTCTAGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGT CAGCAATATTATAATACTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p94w44		*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAACTGTCACCAGT GGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCCGGACACTGATTTATGATACAAGCAACAAACAGTCCTGGACACCTGCCC GATTCTCAGGCTCCCTCCTTGGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGACTATTACTGCTTGCTCTACTA TAGTGGTGCTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
003	p94w46		*IGLV*	GCCAGTCGTGACGTTGGTACTTATGACTATGTCTCCTGGTACCAACTGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAAGCG GCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTCACCATCTCTGGCCTCCAGCCTGATGACGAGGCTGAT TATTACTGCACCTCATATTCAACCAGCAGCACTCTTTATGTCTTCGGAACTGGAACCAAGGTCACCGTCCTAG
003	p94w47		*IGLV*	GCCTATGAGCTGACTCAGCCACTCTCAGTGTCAGTGGCCCTGGGACAGACGGCCAGGATTACCTGTGGGGGAAACAACATTGGAAGTAAAAATG TGCACTGGTACCAGCAGAAGCCCGGCCAGGCCCCTGTCCTGGTCATCTATAGGAATACCAACCGGCCCTCTGAGATCCCTGAGCGATTCTCTG GCTCCAACTCGGGGAACACGGCCACCCTTACCATCAGCAGAGCCCAAGCCGGGGATGAGGCTGACTATTACTGTCAGGTGTGGGACAGCAGAA CCTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG

003	p94w48		IGLV	AATGTTGTCATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAGTGATGCAAATACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAATCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p94w5		IGLV	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGGCAGTCAGTCACCATCTCCTGCACTGGAACCAGCAGTGACAATGTTTATTATGACTATATCTCCTGGTACCAACACTTCCCAGGCAAAGCCCCCAACTCATAATTTATGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTATTGCAGCTCATATGCGGGCGCCAACAGGGTCTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w55		IGLV	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAACCAACTCCAACATTGAAAATAATTATGTATCCTGGTACCAGCAGGTCCCAGGAACAGCCCCCAAACTCCTCATTTATGACAATAATAAGCGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGCACATGGGATAACAGCCTGAGTGTTGTGCTTTTCGGCGGAGGGACCAAGCTGACCGTCCTGG
003	p94w59		IGLV	CAGACTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGCTTCCAGCACTGGAGCAGTCACCAGTGGTAACTATCCAAACTGGTTCCAGCAGAAACCTGGACAGGCACCCAGGGCACTGATTTATAAAACAAACAACAGACACTCCTGGACCCCTGCCCGGTTCTCGGGCTCCCTCCTTGGGGCAAAGCTGCCTGACACTGTCAGGTGTGCAGCCTGAGGACGAGGCTGAATATTATTGCCTGCTCTACTATGGTGGTGCTGTGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTTG
003	p94w6		IGLV	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGAGAGTCACTCTCACCTGTGGCTCCCGCACTGGAACTGTCACCAGTGGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGCCCCCAGGACACTGATTTATGATACAAGCAACAAACACTCCTGGACCCCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTATTGCATGCTCTCCTATGGTACTACTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p94w62		IGLV	ACTTAGCCTGGTACCAGCAGAAGCCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCACCAGGGCCACTGGCATCCCAGCCAGGTTCAGTGGCAGTGGGTCTGGGACAGAGTTCACTCTCACCATCAGCAGCCTGCAGTCTGAAGATTTTGCAGTTTATTACTGTCAGCAGTTTAATAACTGGCCTCCGATCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
003	p94w7		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAGCCAGCAGTGACGTTGGTACTTATGACTATGTCTCCTGGTACCAACTGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAAGCGGCCCTCAGGGGTT
003	p94w81		IGLV	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGACTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGT
003	p94w82		IGLV	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCCAACGTCGGAAGTCATACTGTGAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAATAATGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTTTTGTACAGCATGGGATGACAGCCTGAATGGTCCGGTGCTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p94w83		IGLV	TCCTATGTGCTGACTCAGCCACCCTCAGTGTCAGTGGCCCCCGGAAAGACGGCCAGGATTACCTGTGGGGGAATCAACATTGGAATTAAAAGTGTAAACTGGTACCAACAGAAGCCAGGCCAGGCCCCTGTATTGGTCATCTATTATGATAGCGACCGGCCCTCAGGGATCCCTGAGCGATTCTCTGGCTCCAAGTCTGAGAACACGGCCACCCTGACCATCAGCAAGGTCGAAGCCGGGGATGAG
003	p94w93		IGLV	TATTAACAATTGGTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCACTTTGCAAGGTGGGGTCCCATCAAGGTTCAGCGGCAGTCGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCTGTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p94w94		IGLV	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGCGAGGGCCACCATCAACTGCAGGTCCAGCCAGAGTCTTTTATCCAGCTCCAACAATAACAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCACCAATATTTTAGTACCCCTCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p95w100		IGLV	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAAGCAGCTCCAACATCGGAAAAAATGCTGTAAATTGGTACCAGCGGCTCCCAGGAACGGCCCCCAGACTCCTCATCTTTGGTAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGTTTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATTAGTGGGCTCCAGTCTGAAGATGAGGCTGATTTTTACTGTGCAACATGGGATGACAGAGTGAATGGTCCGGTGTTCGGCGGAGGGACCAGACTGACCGTCCTAC
003	p95w101	17	IGLV	CTGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCCTACTCATTCTTTATGAGGTCAATAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAGGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCAGCTCATATGCAGGCAACAACAATGTGATATTCGGCGGAGGGACCAAGGTGACCGTCCTAG

003	p95w104	18	*IGLV*	GAGATTGTGTTGACGCAGTCTCCAGACACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTACCAGCACCTACTTTGCCTGGTACCAGCAGAGACCTGGCCAGGCTCCCCGGCTGCTCATCTATGGTGCAACCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTTTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCAGTATGGTAGCTCACCTCACACTTTCGGCGGAGGGACCAGGGTGGAGATCAAAC
003	p95w108		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGTCAGAGTATTTTATTCAGCTCCAACAATAAGAACTACTTAGCTTGGTACCGGCAGAAACCAGGACAGCCTCCTCAGTTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACACTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTACTTTACTCCCCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p95w109		*IGLV*	GACAGCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCGAGTCAGGACATTGGGCATTTTTTAGCCTGGTATCAGCAGAAACCAGGGACAGTTCCTAAACTCCTGATCTTTGATGCTTCCAGTAGTCAATTAGGGGTCCCATCTCGGTTCAGTGGCAGTGGATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATGTCGCAACTTATTACTGTCAAAAGTATGACAGTGCCCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAGTCAAAC
003	p95w111		*IGLV*	GATGTTGTGATGACTCAGTCTCCACTCTCCCTGCCCGTCACCCTTGGACAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAAAGCCTCGTATACAGTGATGCAAACACCTACTTGAATTGGTTTCACCAGAGGCCAGGCCAGTCTCCAAGGCGCCTAATTTATAAGGTTTCTAACCGGGACTCTGGGGTCCCAGACAGATTCAGCGGCAGTGGGTCAGGCACTGATTTCACACTGAAAATCAGCAGGGTGGAGGCTGAGGATGTTGGGCTTTATTACTGCATGCAAGGTACACACTGGCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p95w112		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCTCGATCACTTGCCGGGCAAGTCAGAGCGTTAGTACTTGGGTAAATTGGTATCAGCAGAAACCAGGGCAAGCCCCAAACTCCTGATCTATGCTACATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGACTTCACTTTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAATTTACTTCTGTCAACAGACTTCCAGCAGCCCTTCCGTCACTTTCGGCGCAGGGACCACGGTGGAGATCAAAC
003	p95w113		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCC
003	p95w126		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTGGTTACGACTATGTCACCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGGTGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAATACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGCGGCTGATTATTACTGTAGCTCATATACAAGCAGCAGCACTGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTTG
003	p95w136		*IGLV*	GGGGACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTACCAACAAAAACCTGGGAAAGCCCCTAAACTCCTGATCTATGCTGCGTCCAGTTTGTCCGCTGGGGTCCCATCAAGATTCAGCGGCAGTGGTTCTGGGACAGAGTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTATTGTTGTCAACAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p95w14		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTGTTTATAACTTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGATGTCAATAATCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTCATTATTATTGCACTTCATATACAACCCGCATCATTCATTGGGTGTTCGGCGGAGGGACCAAACTGACCGTCGTAG
003	p95w145		*IGLV*	GGACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTACCAACAAAAACCTGGGAAAGCCCCTAAACTCCTGATCTATGCTGCGTCCAGTTTGTCCGCTGGGGTCCCATCAAGATTCAGCGGCAGTGGTTCTGGGACAGAGTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTATTGTTGTCAACAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p95w15		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCGCCATCTCCTGCACTGGAACCAGCAGTGACGTTGGTCGTTATAACTATGTCTCCTGGTACCAGCAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCAGTAATCGGCCCTCAGGGGTTTCCAATCGCTTCTCTGGCTCCAAGTCTGACACCACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGTTCATATACAACCATCAACACTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w159		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTATTCAGCTCCAACAAAAAGAACTACTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGTTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTATTGTCAGCAATATTATACTACTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p95w162		*IGLV*	GCCATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATTTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGGGCATTAGAAATGATGTAGGCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGTTGCATCCAGTTTAGAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGCACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGTCTACAAGATTACATTTACCCGTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC

003	p95w163		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGAGTTATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTTTGAGGTCAGTAAGCGGCCCTCAGGGGTTTCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGTCTGAGGACGAGGCTGATTATTACTGCTGCTCATATTCAGGTTATACCACTTATGTAGTCTTCGGCGGAGGGACCAAGCTGGCCGTCCTGG
003	p95w168		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCTAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGCCAGAGTATTACCAGCAGCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCTTTATGTTAGCTCTTTCCCTTTCGGCCCTGGGACCAAAGTGGATATCAAAC
003	p95w172	19	*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCCAACGTCGGAAGTCATACTGTGAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCAAACTCCTCATCTATAATAATGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTATTGTACAGCATGGGATGACAGCCTGAATGGTCCGGTGCTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w174		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGGGACAGAGTAACCATGTCTTGCCGGGCAAGTCAGAGCGTTAGGAGTCATTTAAATTGGTACCAACAAAAACCTGGGAAAGCCCCTAAACTCCTGATCTATGCTGCGTCCAGTTTGTCCGCTGGGGTCCCATCAAGATTCAGCGGCAGTGGTTCTGGGACAGAGTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTATTGTTGTCAACAGGGTTTCCAGACCCCTCTCACGTTCGGCGGAGGGACCAAGGTGGACATGAATC
003	p95w178		*IGLV*	CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGATGGTCACCATCTCCTGCACTGGAAGCAGCTCCAACATTGGGACTAATCATGTCTCCTGGTACCAGCAAGTCCCAGGAAAAGTCCCCAGACTCCTCATTGATGCCTATAAAAAGAGACCCTCAGGGATTCCTGACCGATTCTCTGGCTCCAAGTCTGGAACGTCAGCCACCCTGGACATCACCGGCCTCCAGACTGGGGACGAGGCCGATTATTACTGCGCAACATGGGATAACACTTTGAGTGGTGTGGTTTTCGGCGGAGGGACTAAGTTGACCGTCCTAG
003	p95w184		*IGLV*	ACTTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGATAGAGCCACCCTCTCCTGCAGGGCCAGTCAGACTGTCAGCAGCACTTACTTAGCCTGGTTTCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCTTCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGT
003	p95w185		*IGLV*	AACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCACTGACGTTGCTAATTATAACTATGTCTCCTGGTACCAAAAACACCCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCACTAATCGGCCCTCAGGGGTTTCCAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCATCTCATATTCCACCACCATTACTCATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w187		*IGLV*	CAGCCTGTGCTGACTCAGCCACCTTCCTCCTCCGCATCTCCTGGAGAATCCGCCAGACTCACCTGCACCTTGTCCAGTGACATCAGTGTTGCGAACTACAACATATATTGGTATCAGCAGAAGCCCGGGAGCCCTCCCAGGTATCTCCTGTACTACTACTCAGACTCAGATAAGGGCCAGGGCTCTGGAGTCCCCAGCCGCTTCTCTGGATCCAAGGATGTCTCAGCCAATACAGGGATTCTACTCATCTCCGGGCTCCAGTCTGAGGATGAGGCTGACTATTACTGTATGATTTGGCCAGGCAATCTTTCGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
003	p95w191		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGATGTTGGGACTTATAACCTTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTTTGAGGTCACTCAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACAATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTATTGCTGCTCATATGCAGGTAGTAGCACTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAA
003	p95w193		*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCAACTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGTATTAGTAATTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAGGCTCCTGATCTATGATGCATCCAGTTTCCTAAGTGGGGTCCCATCAAGGTTCAGTGCCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGATTTTGCAACTTATTTCTGTCAACAGAGTCACAGTGCCCCGTACACGTTTGGCCAGGGGACCAAGCTGGAGATCAAGG
003	p95w2		*IGLV*	CAGTCTGCCCTGACTCAGCCAGCCTCCGTGTCTGGCTCTCCTGGACAGTCGATCACCATCTCCTGTACTGGAACCAGTAGTGATGTTGGGAGTTATAACCTTGTCTCCTGGTACCAACAATACCCAGGCAAAGCCCCCAAACTCTTAATTTTTGAAGTCTTCGAGCGGCCCTCAGGGGTTTCTAATCGGTTCTCTGGCTCCAAGTCTGGCAATACGGCCTCCCTGACGATCTCTGGCCTCCAGGCTGAGGACGAGGCTGATTATTATTGCTGCTCATATGTATTTAGAAGTACTTCTTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTGG
003	p95w203		*IGLV*	CCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCGCTGGAACCACCAGTGACGTTGGTGGTTATAACTCTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATAATTTATGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTATTTCTGCAGCTCATATGCAGGCAGCAACAATGTGGTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w25		*IGLV*	GACATCCAGTTGACCCAGTCTCCATCGTTCCTGTCTGCATCTGTTGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGGTATTATTTAGGCTGGTATCAGCAAAAGCCAGGGAAAGCCCCTAAGCTCCTGATCTATACTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTC

003	p95w26		IGLV	GACATCCAGATGACCCAGTCTCCACCCTCCCTGTCTGCATCTGTTGGAGACAGAGTCATCATCACTTGCCGGGCAAGTCAGACCATTCGCAGAT TTTTAAATTGGTATCAGCAGAAGCCAGGGAAAGCCCCCAAACTCCTGATCCATGGTGCATCCACTTTGCAGACTGGGGTCCCATCAAGGTTCAGT GGCGGTGGGTCTGAGACAGAATTCACTCTCACCATCAGCAGTCTGCAACCCGAAGACTCCGCAACTTACTACTGTCAACAGAGTTACACTAGCT CTCTTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAGAC
003	p95w3		IGLV	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAATGTTTTATACA GCTCCAACAATAAGAACTTCTTAGCTTGGTACCAGCAGAAACCAGGACAGCCTCCTAAGCTGCTCATGTACTGGGCATCTACCCGGGAATCCGG GGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGT CAGCAATATTTTGGTCCTCCTTGGACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p95w30		IGLV	GAGATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCATCCTGTTTTATACA GGTCCCACAATAAGAACTTCTTAGCTTGGTACCAACAGAAATTAGGACAGGCTCCTAAGTTACTCATTTACTGGGCATCTACCCGGGAATCCGGG GTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACCGATTTCACTCTCACCATCAGCAGCCTCCAGCCTGAAGATGTGGCAGTTTATTACTGTC AGCAATATTTTGGTACTCCCCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p95w35		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGATCCAGCAGTGACGTTGGTGATT ATGACTATGTCTCCTGGTACCAACAGCACCCAGGCAAAGCCCCCAAAGTCATTATTTATGCTGTCAATAAGCGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGCCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCTCATATACAA GCAGCAGCACTGTGTTATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w36	25	IGLV	CAGCTTGTGCTGACTCAATCGCCCTCTGCCTCTGCCTCCCTGGGAACCTCGGTCAAGCTCACCTGCACTCTGAGTAGTGGGCACAGCACCTACG CCATCGCCTGGCATCAGCAGCAGCCGGAGAAGGGCCCTCGATATTTGATGAAACTTTACAGTGATGGCAGACATATCAAGGGGGACGGGATCC CTGATCGCTTCTCAGGCTCCAGCTCTGGGGCTGAGCGCTACCTCACCATCTCCAGCCTCCACTCTGAGGATGAGGCTGACTATTACTGTCAGAC CTGGGACACTGGCATTCGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w37		IGLV	GATATTGTGATGACCCAGACTCCACTCTCTCTGTCCGTCACCCCTGGACAGCCGGCCTCCATCTCCTGCAAGTCTAGTCAGAGCCTCCTGCATA GTGATGGAACGACCTATTTGTATTGGTATCTGCAGAGGCCAGGCCAGCCTCCACAGCTCCTGATCTCTCAAGTTTCCAACCGGTTCTCAGGAGT GCCAGAAAGGTTAAGTGGCAGCGGGTCAGGGACAGATTTCACACTGAAAATCAGCCGGGTAGAGGCTGACGATATTGGGATTTATTTCTGCATG CAAAGTGTACAGCTTCCGTACACTTTTGGCCAGGGGACCAAACTGGAGATCAAAC
003	p95w44		IGLV	CAGTCTGTGCTGACGCAGCCGCCCTCAGTGTCTGGGGCCCCAGGGCAGAGGGTCACCATCTCCTGCACTGGGAGCAGCTCCAACATCGGGGC AGGTTATGGTGTCCACTGGTACCAGCAGCTTCCAGGAACAGCCCCCAAACTCCTCATCTATGGTAACAGCAATCGGCCCTCAGGGGTCCCTGAC CGATTCTCTGGCTCCAGGTCTGGCACCTCAGCCTCCCTGGCCATCACTGGGCTCCAGGCTGAGGATGAGGCTGATTATTACTGCCAGGCCTATG ACAGCAGCCTGAGTGGTTTGAATTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p95w46		IGLV	CAGTCTGCCCTGACTCAACCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCACTGACGTTGCTAATT ATAACTATGTCTCCTGGTACCAAAAACACCCAGGCAAAGCCCCCAAACTCATCATTTATGATGTCACTAATCGGCCCTCAGGGGTTTCCAATCGC TTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCATCTCATATTCCAC CACCATTACTCATTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w47		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCTTCGACGACGTTGGTCATC GTGACTATGTCTCCTGGTACCAACATTTTCCAGGCAAAGCCCCCAAACTGATGATTTATGATGTAACCGAACGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAGAACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCGCATATACAA GGGTCGACACTGGGTGTTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w48		IGLV	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCA CCTACTTATCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTT CAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCAGCA
003	p95w5		IGLV	GACATCCAGATGACCCAGTCTCCATCCTCCCTGCCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTAGCATCT ATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGCTCCTGATCTATGGTGCATCCAGTTTGCAAAGTGGGGTCCCATTCAGGTTCAGT GGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCAGTCTGCAACCTGAAGACTTTGCAACTTACTACTGTCAACAGAGTTACAGTACCCC TCGAACGTTCGGCCAAGGGACCAAGGTGGAAATCAAAC
003	p95w51		IGLV	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCTTCGACGACGTTGGTCATC GTGACTATGTCTCCTGGTACCAACATTTTCCAGGCAAAGCCCCCAAACTGATGATTTATGATGTAACCGAACGGCCCTCAGGGGTTTCTAATCGC TTCTCTGGCTCCAAGTCTGGCAGAACGGCCTCCCTGACCATCTCTGGGCTCCAGGCTGAGGACGAGGCTGATTATTACTGCAGCGCATATACAA GGGTCGACACTTGGGTG
003	p95w55		IGLV	GACATCCAGATGACCCAATCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCAAGTCAGAGCATTGCCTTCTA TTTAAATTGGTATCAACAGAAACCAGGAAAAGCCCCTGAGCTTCTGATCTCTGCTGCATCGAATTTGCAAAGTGGGGTCCCATCAAGGTTC

003	p95w59		*IGLV*	CAGGCTGTGGTGACTCAGGAGCCCTCACTGACTGTGTCCCCAGGAGGGACAGTCACTCTCACCTGTGGCTCCAGCACTGGAGCTGTCACCAGTGGTCATTATCCCTACTGGTTCCAGCAGAAGCCTGGCCAAGTCCCCAGGACACTGATTTATGATACAACTAACAAACAGTCCTGGACACCTGCCCGGTTCTCAGGCTCCCTCCTTGGGGGCAAAGCTGCCCTGACCCTTTCGGGTGCGCAGCCTGAGGATGAGGCTGAGTATTACTGCTTGCTCTACTATAGTGGTGATCGGGTTTTCGGCGGAGGGACCAAGCTGACCGTCCTAC
003	p95w6		*IGLV*	GACATCGTGATGACCCAGTCTCCAGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCCAGCCAGAGTGTTTTATTCAGTTCCAACAGTAAGAACTACTTAGCTTGGTACCAGCAAAAACCAGGACAGCCCCCTAACCTGCTCATTTACTGGGCATCTACCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCAGCGGGTCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTATAGTACTCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p95w69		*IGLV*	CAGTCTGCCCTGACTCAGCCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATGTCCTGCACTGGAACCAGCAGTGACGTTGGTAATTATAACTGTGTCTCCTGGTACCAACAACACCCAGGCAAAGCCCCCAAACTCATGATTTATGAGGTCAGTAAGCGGCCCTCAGGGGTCCCTGACCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCAGGCTGAGGATGAGGCTGATTACTACTGCAGCTCATATGGGGGTAGCACCAATCTGATATTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w7		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGACAGAGCCACCCTCTCCTGCAGGGCCAGTCAGACTATTAGCAGCAACTACTTAGCCTGGTACCAGCAGAAACCTGGCCTGGCTCCCAGACTCCTCATCTTTGGTGCATCCAACAGGGCCACTGGCGTCCCCGACAGGTTCAGTGGCAGTGGGTCTGGAACAGACTTCACACTCACCATCACCAGACTGGAGCCTGCAGATTTTGCGGTATATTACTGTCAGCAGTTTGATACCCCACCGCTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAGC
003	p95w8		*IGLV*	GATATTGTGATGACTCAGTCTCCACTCTCCCTGTCCGTCACCCCTGGAGAGCCGGCCTCCATCTCCTGCAGGTCTAGTCAGAGCCTCCTCCATAGTAATGGATACAAGTATTTGGACTGGTACCTGCAGAAGCCAGGGCAGTCTCCACAGCTCCTGATCTATTTGGGTTCTAATCGGGCCTCCGGGGTCCCTGACAGGTTCAGTGGCAGTGGATCAGGCACAGATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATGTTGGGGTTTATTACTGCATGCAAGCTCTACAAACTCCGTTCACCTTCGGCCAAGGGACACGACTGGAGATTAAAC
003	p95w81		*IGLV*	GACATCCAGTTGACCCAGTCTCCATCCTTCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAGGGCATTAGTAGTTTTTTGGCCTGGTATCAGCAACAACCAGGGAAAGCCCCTAAACTCCTGATGTATGCTGCATCCACTTTGCAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGGATCTGGGACAGAATTCACTCTCACAACAGCAGCCTGCAGCCTGAAGATTTTGCGACTTATTACTGTCAACAACTTAGTTCTTACCCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p95w82		*IGLV*	CAGTCTGTGCTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGGCAGAGGGTCACCATCTCTTGTTCTGGAGGCAGCTCCAACGTCGGGAAGTCATACTGTGAACTGGTACCAGCAGCTCCCAGGAACGGCCCCCCAAACTCCTCATCTATAATAATGATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCCAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTATTGTACAGCATGGGATGACAGCCTGAATGGTCCGGTGCTCGGCGGAGGGACCAAGCTGACCGTCCTAG
003	p95w83		*IGLV*	GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCACCTACTTAGCCTGGTACCAGCAGAAACCTGGCCAGGCTCCCAGGCTCCTCATCTATGGTGCATCCAGCAGGGCCACTGGCATCCCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAGTGTATTACTGTCACCAGTATGGTAGCTCACTGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC
003	p95w93		*IGLV*	ACTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGTCGGGCGAGTCAGGGTATTAACAATTGGTTAGCCTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAGTCCCTGATCTATGCTGCATCCACTTTGCAAGGTGGGGTCCCATCAAGGTTCAGCGGCAGTCGATCTGGGACAGATTTCACTCTCACCATCAGCAGCCTGCAGCCTGAAGATTTTGCAACTTATTACTGCCAACAGTATAATAGTTACCCTGTCACTTTCGGCGGAGGGACCAAGGTGGAGATCAAAC
003	p95w94		*IGLV*	CAGTCTGTGGTGACTCAGCCACCCTCAGCGTCTGGGACCCCCGGACAGAGGGTCACCATCTCTTGCTCTGGAAGCAGCTCCAACATCGGAAGTAATTATGTATACTGGCACCAGCAGCTCCCAGGAACGGCCCCCCAAACTCCTCATCTATAGGAATAATCAGCGGCCCTCAGGGGTCCCTGACCGATTCTCTGGCTCGAAGTCTGGCACCTCAGCCTCCCTGGCCATCAGTGGGCTCCAGTCTGAGGATGAGGCTGATTATTACTGTGAAACATGGGATGACAGCCTGCATAGTTATGTCTTCGGAGCTGGGACCAAGGTCACCGTCCTAC
003	p95w97		*IGLV*	CAGTCTGCCCTGACTCAGCCTGCCTCCGTGTCTGGGTCTCCTGGACAGTCGATCACCATCTCCTGCACTGGAACCAGCAGTGACATTGGTAATTATGACTATGTCTCCTGGTTCCAACAGCACCCAGGCAAAGCCCCCAAACTCATGATTTATGATGTCACTAAGCGGCCCTCAGGGGTTTCTAATCGCTTCTCTGGCTCCAAGTCTGGCAACACGGCCTCCCTGACCATCTCTGGGCTCCAGACTGAGGACGAGGCTGATTATTACTGCAGCTCATATACGACCAGCAGCACTCTTTATGTCTTCGGAACTGGGACCAAGGTCACCGTCCTAG
003	p92w55	13	*IGLV*	GACATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCAGGCGAGTCAGGACATTAGCAACTATTTAAATTGGTATCAGCAGAAACCAGGGAAAGCCCCTAAACTCCTGATCTACGATGTATTCAATTTGGAAGCAGGGGTCCCATCAAGGTTCAGTGGCAGTGGATCTGGGACAGATTTTACTTTCACCATCAGCAGCCTGCAGCCTGAAGATATTGCAACATATTACTGTCAACAATATGATAATCTCCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAAC

Table S7. Primary data for in vivo RV challenge experiments. Number of mice with diarrhea on days 1-4 over the total number of mice in the indicated *in vivo* RV challenge experiments

Challenge virus	Treatment	Days Post Infection			
		1	2	3	4
DxRRV	mAb #27	0/7	0/7	0/7	0/7
DxRRV	Media	6/6	6/6	2/6	0/6
RRV	mAb #27	8/8	8/8	4/8	0/8
RRV	Media	7/7	7/7	3/7	0/7
RRV	mAb #57	0/6	0/6	0/6	0/6
RRV	Media	6/6	5/6	4/6	1/6
DxRRV	mAb #57	0/6	0/6	0/6	0/6
DxRRV	Media	6/7	7/7	5/7	0/7
Wa	mAb #41	2/6	1/5	0/5	0/5
Wa	Media	10/11	9/11	5/11	0/11
DS1xSB1A	mAb #41	0/6	0/6	0/6	0/6
DS1xSB1A	Media	6/6	0/6	0/6	0/6