Figure 1

Numbering according to Kabat (VH)	Numbering according to Chotia (VH)	Aho numbering	IMGT
11	11	12	12
14	14	15	15
41	41	48	46
42	42	49	47
87	87	101	99
89	89	103	101
108	108	144	---
110	110	146	---
112	112	148	---

Source: http://www.bioc.uzh.ch/plueckthun/antibody/Numbering/NumFrame.html

Figure 2

SEQ ID NO:1	C-terminal end	VTVKS
SEQ ID NO:2	C-terminal end	VTVQS
SEQ ID NO:3	FR4 sequence	WGQGTQVTVKS
SEQ ID NO:4	FR4 sequence	WGKGTLVTVKS
SEQ ID NO:5	FR4 sequence	RGQGTRVTVKS
SEQ ID NO:6	FR4 sequence	WGLGTQVTISS
SEQ ID NO:7	FR4 sequence	GSQGTQVTVKS
SEQ ID NO:8	FR4 sequence	LRGGTQVTVKS
SEQ ID NO:9	FR4 sequence	RGQGTLVTVKS
SEQ ID NO:10	FR4 sequence	RSRGIQVTVKS
SEQ ID NO:11	FR4 sequence	WGKGTQVTVKS
SEQ ID NO:12	FR4 sequence	WGQGTQVTVQS
SEQ ID NO:13	FR4 sequence	WGKGTLVTVQS
SEQ ID NO:14	FR4 sequence	RGQGTRVTVQS
SEQ ID NO:15	FR4 sequence	WGLGTQVTISS
SEQ ID NO:16	FR4 sequence	GSQGTQVTVQS
SEQ ID NO:17	FR4 sequence	LRGGTQVTVQS
SEQ ID NO:18	FR4 sequence	RGQGTLVTVQS
SEQ ID NO:19	FR4 sequence	RSRGIQVTVQS
SEQ ID NO:20	FR4 sequence	WGKGTQVTVQS
SEQ ID NO:21	C-terminal end with C-terminal extension	$VTVKS(X)_n$

Figure 2 (continued)

SEQ ID NO:22	C-terminal end with C-terminal extension	VTVQS$(X)_n$
SEQ ID NO:23	FR4 sequence with C-terminal extension	WGQGTQVTVKS$(X)_n$
SEQ ID NO:24	FR4 sequence with C-terminal extension	WGKGTLVTVKS$(X)_n$
SEQ ID NO:25	FR4 sequence with C-terminal extension	RGQGTRVTVKS$(X)_n$
SEQ ID NO:26	FR4 sequence with C-terminal extension	WGLGTQVTISS$(X)_n$
SEQ ID NO:27	FR4 sequence with C-terminal extension	GSQGTQVTVKS$(X)_n$
SEQ ID NO:28	FR4 sequence with C-terminal extension	LRGGTQVTVKS$(X)_n$
SEQ ID NO:29	FR4 sequence with C-terminal extension	RGQGTLVTVKS$(X)_n$
SEQ ID NO:30	FR4 sequence with C-terminal extension	RSRGIQVTVKS$(X)_n$

Figure 2 (continued)

SEQ ID NO:31	FR4 sequence with C-terminal extension	WGKGTQVTVKS$(X)_n$
SEQ ID NO:32	FR4 sequence with C-terminal extension	WGQGTQVTVQS$(X)_n$
SEQ ID NO:33	FR4 sequence with C-terminal extension	WGKGTLVTVQS$(X)_n$
SEQ ID NO:34	FR4 sequence with C-terminal extension	RGQGTRVTVQS$(X)_n$
SEQ ID NO:35	FR4 sequence with C-terminal extension	WGLGTQVTISS$(X)_n$
SEQ ID NO:36	FR4 sequence with C-terminal extension	GSQGTQVTVQS$(X)_n$
SEQ ID NO:37	FR4 sequence with C-terminal extension	LRGGTQVTVQS$(X)_n$
SEQ ID NO:38	FR4 sequence with C-terminal extension	RGQGTLVTVQS$(X)_n$
SEQ ID NO:39	FR4 sequence with C-terminal extension	RSRGIQVTVQS$(X)_n$

Figure 2 (continued)

SEQ ID NO:40	FR4 sequence with C-terminal extension	WGKGTQVTVQS$(X)_n$
SEQ ID NO:41	CDR1 sequence	SFGMS
SEQ ID NO:42	CDR2 sequence	SISGSGSDTLYADSVKG
SEQ ID NO:43	CDR3 sequence	GGSLSR
SEQ ID NO:44	Reference A.	HHHHHHEVQLVESGGGLVQPGNSLRLSCAASGFTFSSF GMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTI SRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGT LVTVSS
SEQ ID NO:45	Reference B. SEQ ID NO:37 from WO 12/175741	HHHHHHEVQLVESGGGLVQPGNSLRLSCAASGFTFSSF GMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTI SRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGT LVTVSSA
SEQ ID NO:46	Alb-8 (WO 06/122787)	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSS
SEQ ID NO:47	Alb-8 + 112K	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKS
SEQ ID NO:48	Alb-8 + 112K + A	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA
SEQ ID NO:49	Alb-8 + 112K + AA	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA A
SEQ ID NO:50	Alb-8 + 112K + AAA	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA AA
SEQ ID NO:51	Alb-8 + 112K + G	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG
SEQ ID NO:52	Alb-8 + 112K + GG	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG G

Figure 2 (continued)

SEQ ID NO:53	Alb-8 + 112K + GGG	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG GG
SEQ ID NO:54	Alb-8 + 112Q	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQS
SEQ ID NO:55	Alb-8 + 112Q + A	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA
SEQ ID NO:56	Alb-8 + 112Q + AA	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA A
SEQ ID NO:57	Alb-8 + 112Q + AAA	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA AA
SEQ ID NO:58	Alb-8 + 112Q + G	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG
SEQ ID NO:59	Alb-8 + 112Q + GG	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG G
SEQ ID NO:60	Alb-8 + 112Q + GGG	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG GG
SEQ ID NO:61	Alb-23 (WO 12/175400)	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSS
SEQ ID NO:62	Alb-23 + 112K	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKS
SEQ ID NO:63	Alb-23 + 112K +A	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA
SEQ ID NO:64	Alb-23 + 112K +AA	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA A
SEQ ID NO:65	Alb-23 + 112K +AAA	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSA AA

Figure 2 (continued)

SEQ ID NO:66	Alb-23 + 112K +G	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG
SEQ ID NO:67	Alb-23 + 112K +GG	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG G
SEQ ID NO:68	Alb-23 + 112K +GGG	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVKSG GG
SEQ ID NO:69	Alb-23 + 112Q	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQS
SEQ ID NO:70	Alb-23 + 112Q +A	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA
SEQ ID NO:71	Alb-23 + 112Q +AA	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA A
SEQ ID NO:72	Alb-23 + 112Q +AAA	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSA AA
SEQ ID NO:73	Alb-23 + 112Q +G	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG
SEQ ID NO:74	Alb-23 + 112Q +GG	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG G
SEQ ID NO:75	Alb-23 + 112Q +GGG	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVQSG GG
SEQ ID NO:76	C-terminal end	VTVSS
SEQ ID NO:77	C-terminal end with C-terminal extension	$VTVSS(X)_n$
SEQ ID NO:78	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSS

Figure 2 (continued)

SEQ ID NO:79	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA
SEQ ID NO:80	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA A
SEQ ID NO:81	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA AA
SEQ ID NO:82	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG
SEQ ID NO:83	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG G
SEQ ID NO:84	Serum albumin-binding nanobody with V89T substitution	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG GG
SEQ ID NO:85	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSS
SEQ ID NO:86	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA

Figure 2 (continued)

SEQ ID NO:87	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA A
SEQ ID NO:88	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSA AA
SEQ ID NO:89	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG
SEQ ID NO:90	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG G
SEQ ID NO:91	Serum albumin-binding nanobody with V89T substitution	EVQLLESGGGLVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTATYYCTIGGSLSRSSQGTLVTVSSG GG
SEQ ID NO:92	Nanobody A used in Example 6	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWF RQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISR DNAKNTLYLQMNSLRPEDTAVYYCAASAIGSGALRRFE YDYSGQGTLVTVSS
SEQ ID NO:93	Nanobody B used in Example 6	EVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSS
SEQ ID NO:94	Nanobody C used in Example 6	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYR HRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTV YLQMNSLRPEDTAVYYCNFNKYVTSRDTWGQGTLVTV SS

Figure 2 (continued)

SEQ ID NO:95	C-terminal end	VKVSS
SEQ ID NO:96	C-terminal end	VQVSS
SEQ ID NO:97	C-terminal end	VKVSS(X)n
SEQ ID NO:98	C-terminal end	VQVSS(X)n
SEQ ID NO:99	FR4 sequence	SSQGTLVTVKS
SEQ ID NO:100	FR4 sequence	SSQGTLVTVQS
SEQ ID NO:101	FR4 sequence	SSQGTLVKVSS
SEQ ID NO:102	FR4 sequence	SSQGTLVQVSS
SEQ ID NO:103	FR4 sequence with C-terminal extension	SSQGTLVTVKS(X)n
SEQ ID NO:104	FR4 sequence with C-terminal extension	SSQGTLVTVQS(X)n
SEQ ID NO:105	FR4 sequence with C-terminal extension	SSQGTLVKVSS(X)n
SEQ ID NO:106	FR4 sequence with C-terminal extension	SSQGTLVQVSS(X)n
SEQ ID NO:107	C-terminal sequence	VZVZS
SEQ ID NO:108	C-terminal sequence	VZVZS(X)n
SEQ ID NO:109	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSS

Figure 2 (continued)

SEQ ID NO:110	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
SEQ ID NO:111	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA A
SEQ ID NO:112	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA AA
SEQ ID NO:113	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG
SEQ ID NO:114	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG G
SEQ ID NO:115	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GG

Figure 2 (continued)

SEQ ID NO:116	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSS
SEQ ID NO:117	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
SEQ ID NO:118	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA A
SEQ ID NO:119	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA AA
SEQ ID NO:120	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG
SEQ ID NO:121	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG G

Figure 2 (continued)

SEQ ID NO:122	Serum albumin-binding nanobody with L11V + V89L substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GG
SEQ ID NO:123	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSS
SEQ ID NO:124	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
SEQ ID NO:125	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA A
SEQ ID NO:126	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA AA
SEQ ID NO:127	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG

Figure 2 (continued)

SEQ ID NO:128	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG G
SEQ ID NO:129	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKT TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GG
SEQ ID NO:130	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSS
SEQ ID NO:131	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
SEQ ID NO:132	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA A
SEQ ID NO:133	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA AA

Figure 2 (continued)

SEQ ID NO:134	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG
SEQ ID NO:135	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG G
SEQ ID NO:136	Serum albumin-binding nanobody with L11V + V89L + T110K substitution	EVQLLESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKN TLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GG
Note: In the sequences above, whenever $(X)_n$ is present, it represents a C-terminal extension, with n = 1, 2, 3, 4 or 5 (preferably 1, 2 or 3, more preferably 1 or 2, most preferably 1) and each X being independently chosen from suitable amino acids (preferably from naturally occurring amino acid residues, more preferably from the group consisting of A, G, V, L or I, with A and/or G being particularly preferred).		
Note: In the sequences of SEQ ID NO: 107 (VZVZS) and 108 (VZVZS(X)n), each Z is independently K or Q.		

Figure 3

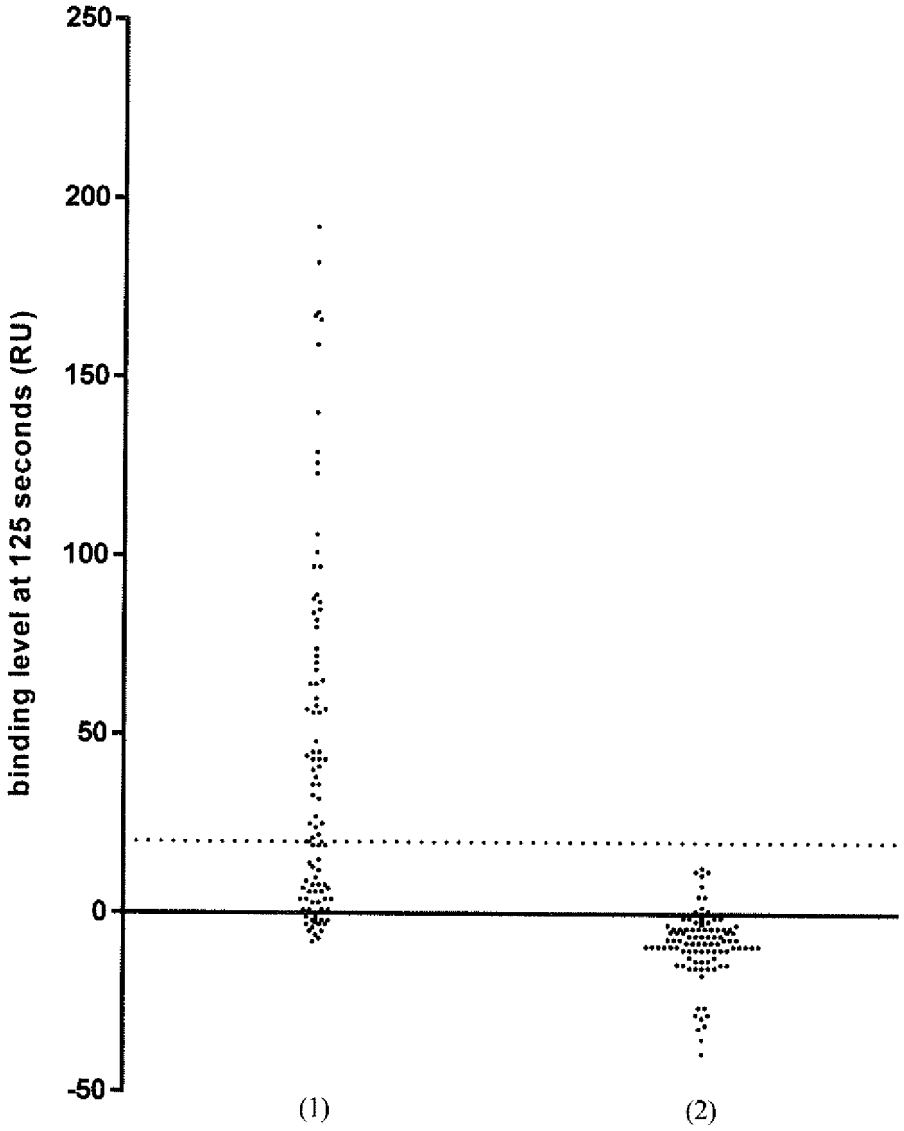
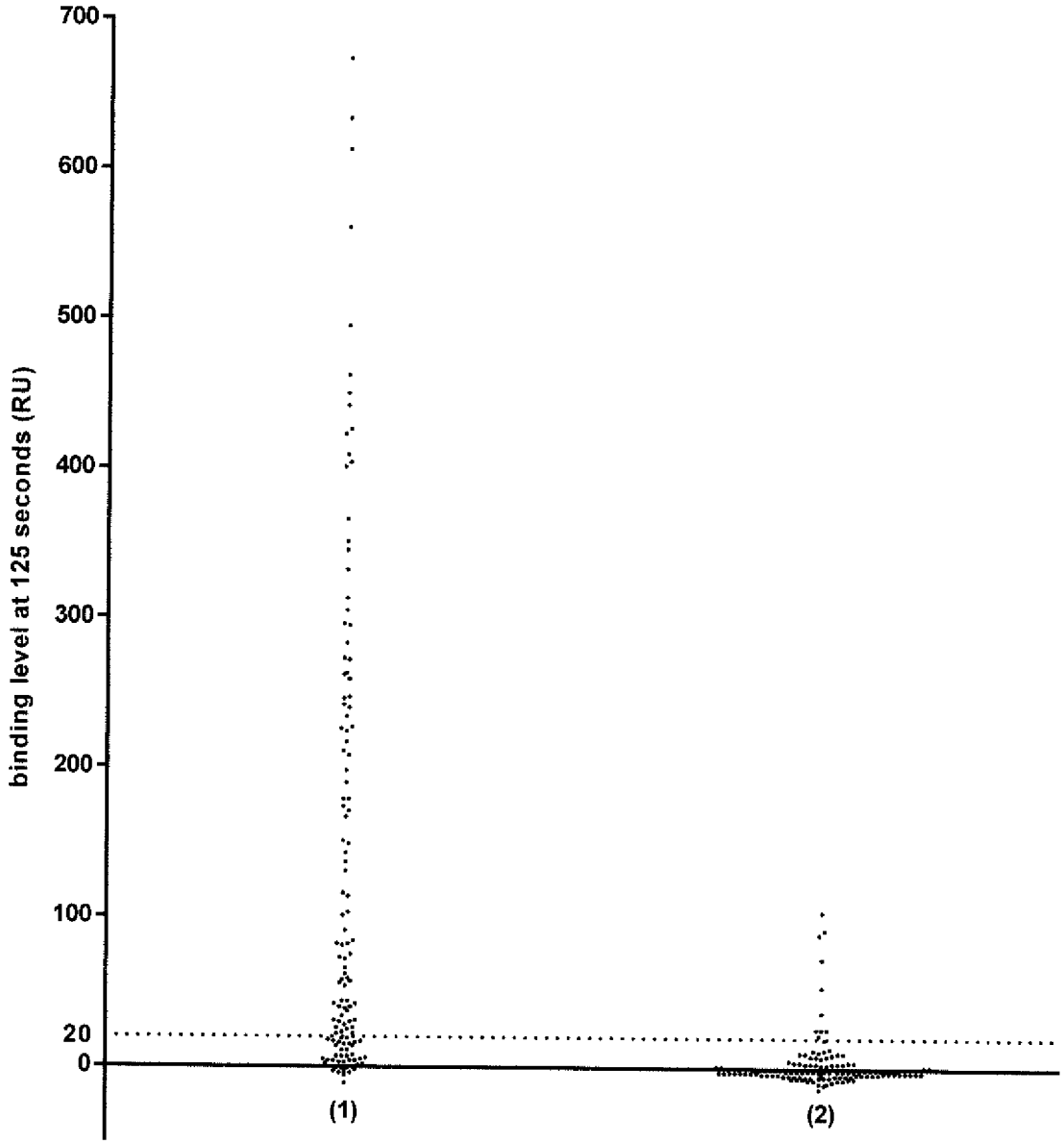


Figure 4


700
600
500
400
300
200
100
20
0
binding level at 125 seconds (RU)
(1)
(2)

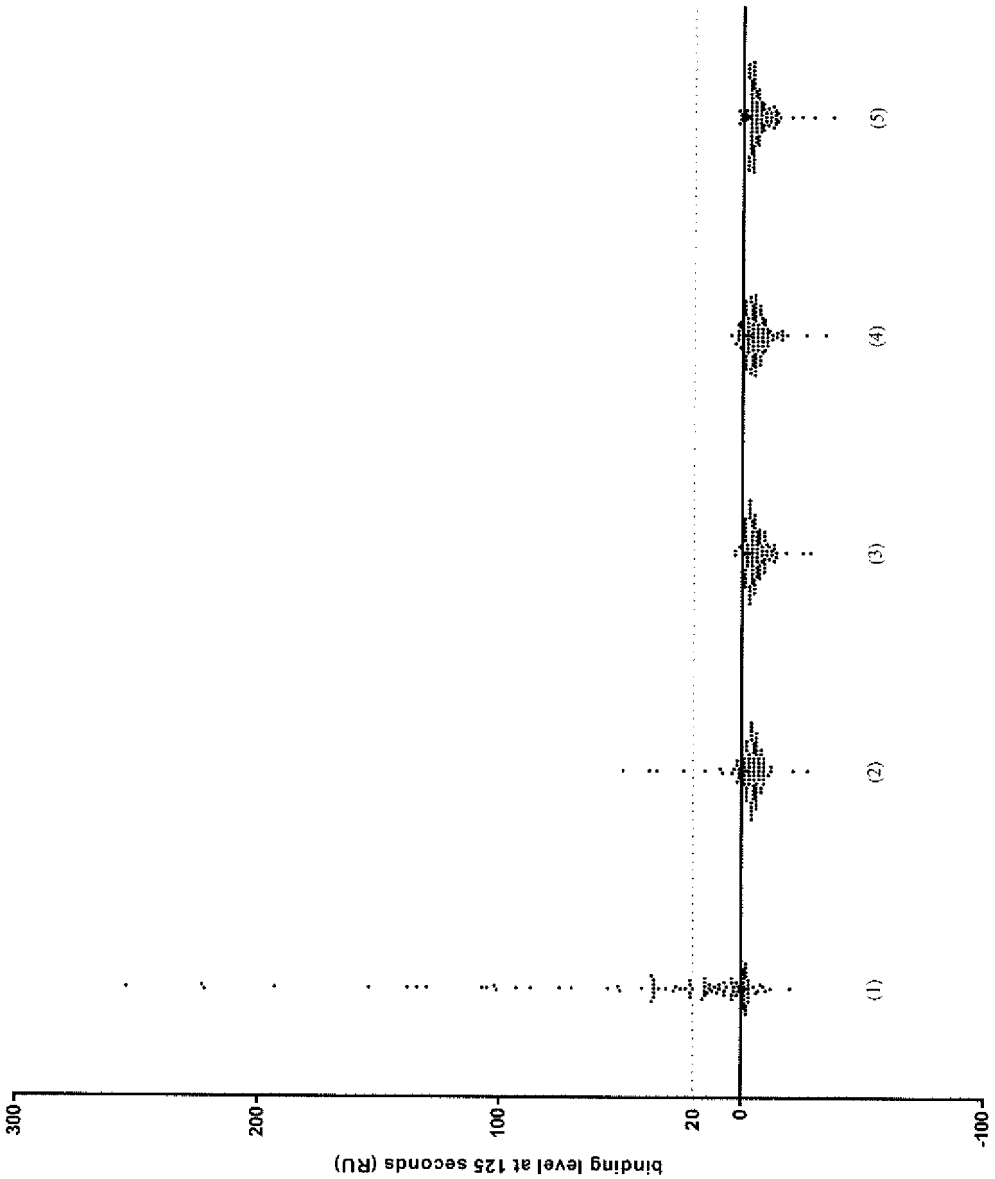


Figure 5

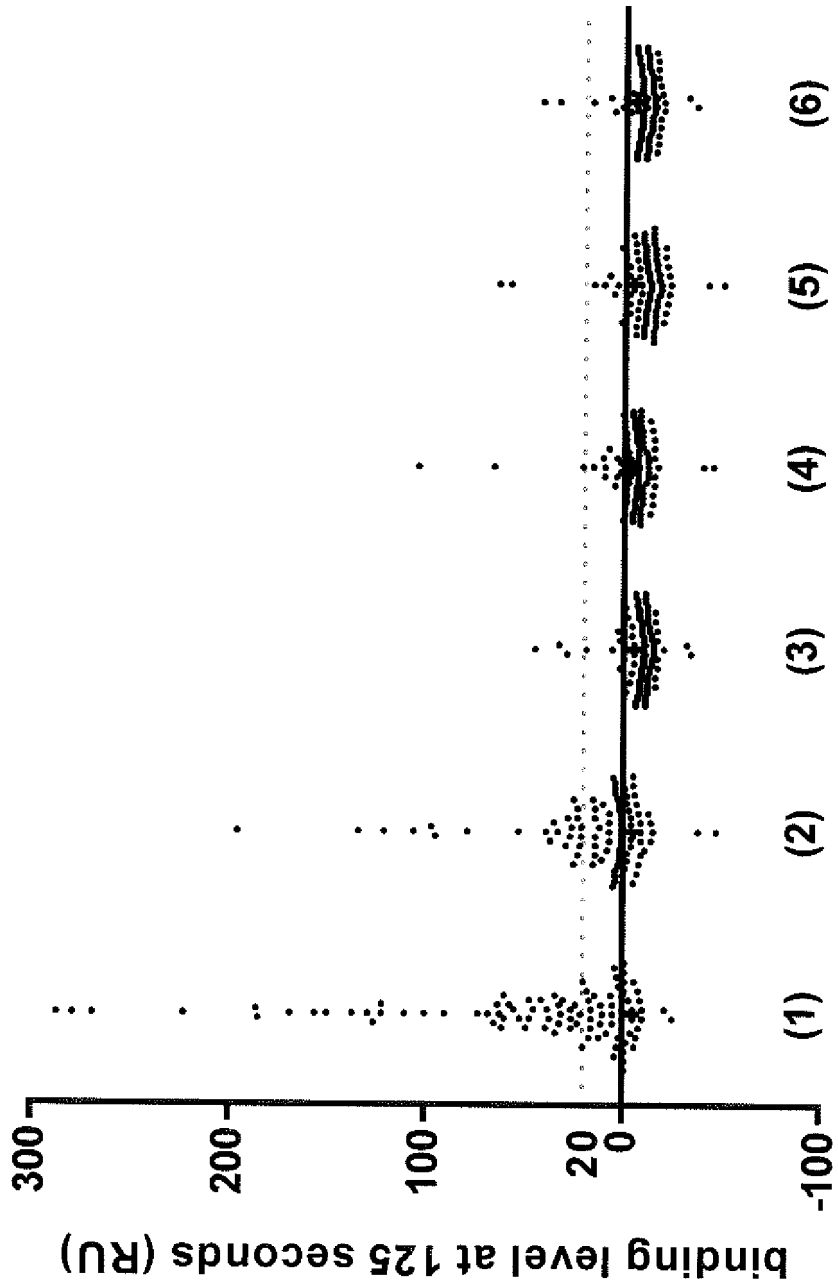


Figure 6

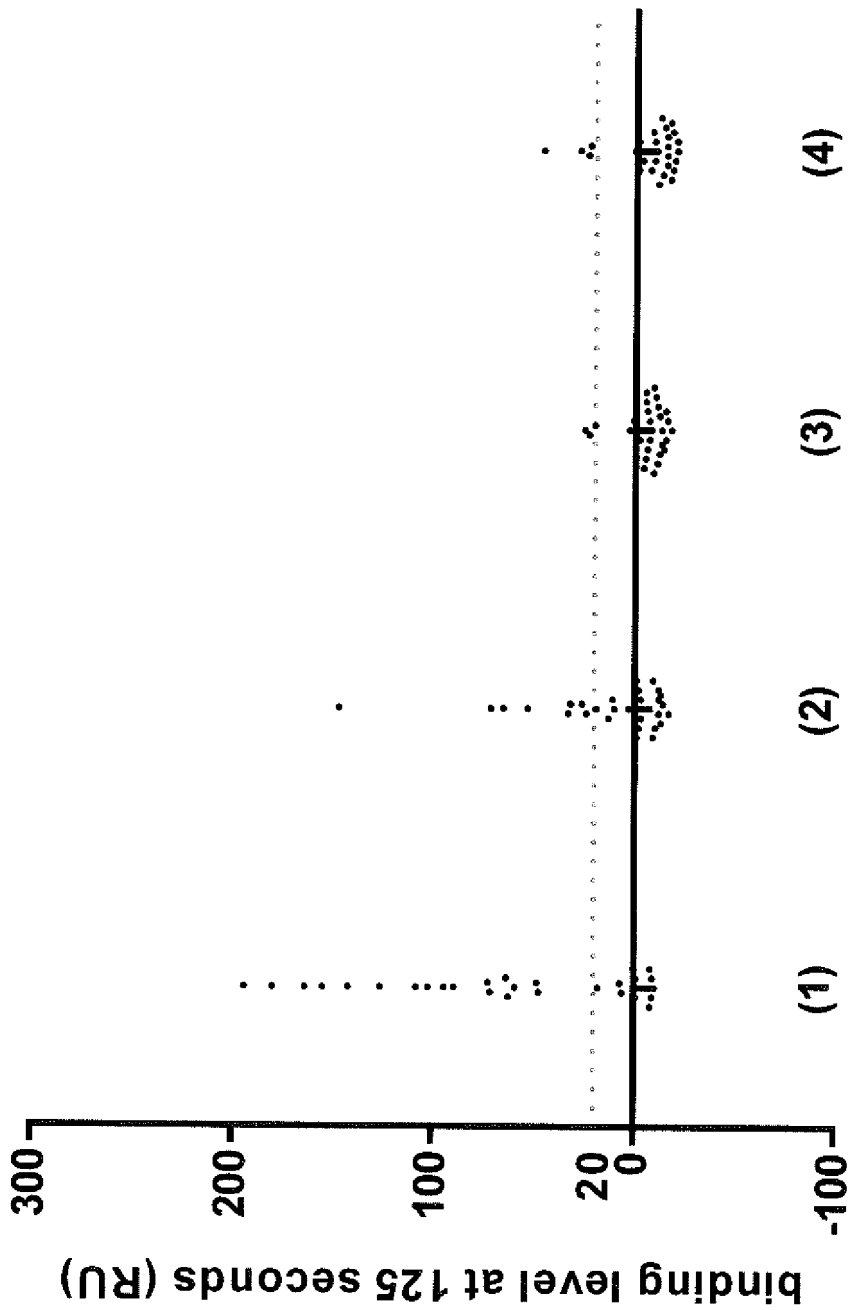


Figure 7

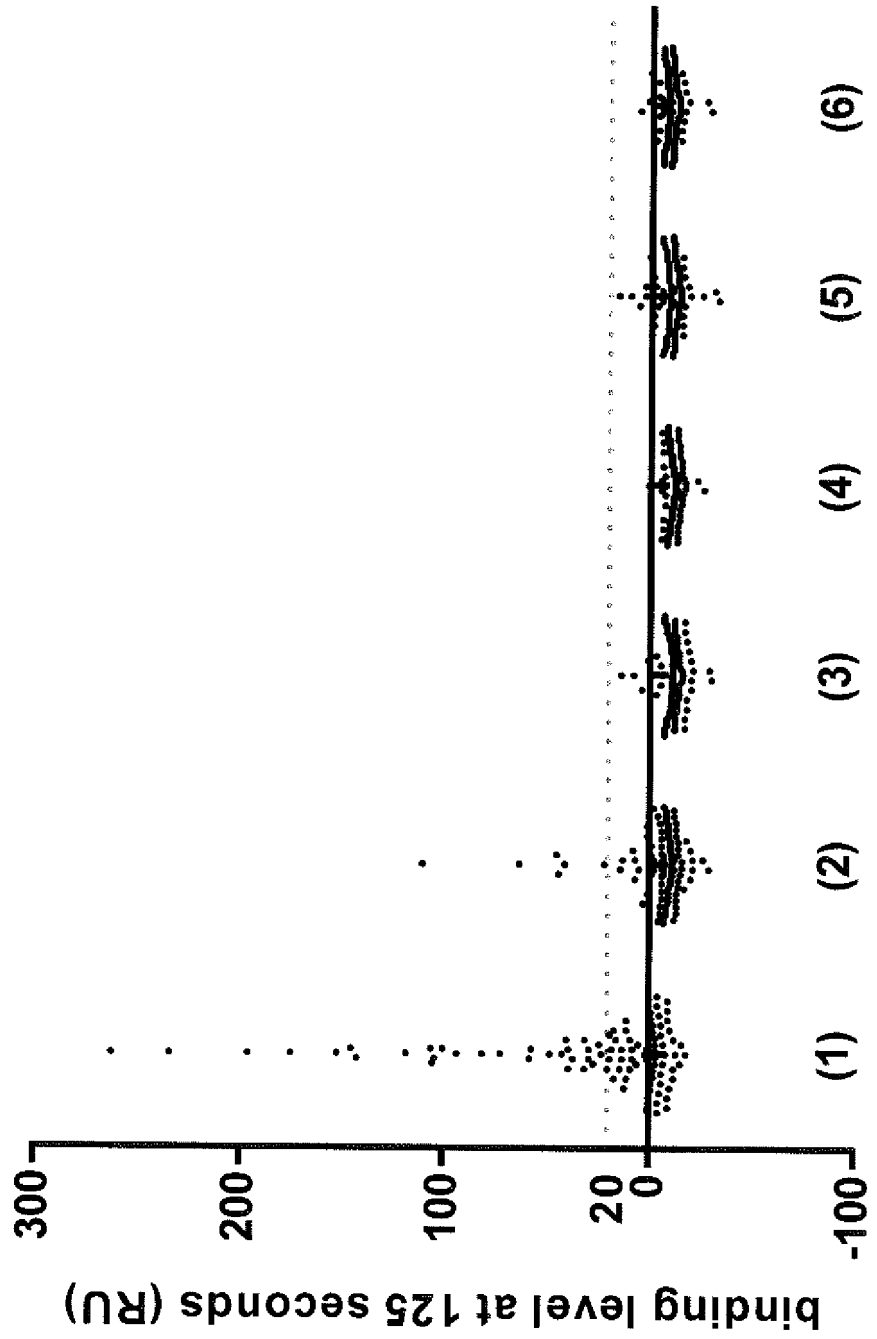


Figure 8

Figure 9A

Clone	SEQ ID NO:	Sequence
A0194009G09 (reference)	137 (495)(*)	EVQLVESGGGLVQAGGSLGLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRMGGSINYADTVKG RFTISRDNAKNTVYLQMNSLKPEDTAVYYCSSWRTGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,S94G)	138 (523)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,T97E)	139 (524)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,S94G,T97E)	140 (525)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G)	141 (526)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
(*) In Figures 9A and 9B, the number between parenthesis refers to the SEQ ID NO by which this sequence is listed in the co-pending US provisional application entitled "Kv1.3 binding immunoglobulins" (filing date: March 16, 2015; assignee: Ablynx N.V.).		

Figure 9A (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,T97E)	142 (527)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G,T97E)	143 (528)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G)	144 (529)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,T97E)	145 (530)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G,T97E)	146 (531)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS

Figure 9A (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L, S94G)	147 (532)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L, T97E)	148 (533)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L, S94G,T97E)	149 (534)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L, S94G)	150 (535)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L, T97E)	151 (536)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L, S94G,T97E)	152 (537)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS

Figure 9A (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L, S94G)	153 (538)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L, T97E)	154 (539)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSS
A0194009G09 (L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L, S94G,T97E)	155 (540)	EVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSS

Figure 9B

Clone	SEQ ID NO:	Sequence
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G)-35GS-A0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G)-35GS-ALB82-A(**)	156 (514) (*)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGG GSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPG KQREFVARIRQGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWG QGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRL SCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,T97E)-35GS-A0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,T97E)-35GS-ALB82-A	157 (515)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKG RFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGG GSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPG KQREFVARIRQGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWG QGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRL SCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVTVSSA
(*) In Figures 9A and 9B, the number between parenthesis refers to the SEQ ID NO by which this sequence is listed in the co-pending US provisional application entitled "Kv1.3 binding immunoglobulins" (filing date: March 16, 2015; assignee: Ablynx N.V.). (**)"ALB82" refers to the sequence of SEQ ID NO:109		

Figure 9B (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,S94G)-35GS-A0194009G09 (L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,S94G)-35GS-ALB82-A	158 (516)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,T97E)-35GS-ALB82-A	159 (517)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09 (E1D,L11V,A14P,G19R,M53A,T62S,A74S,K83R,V89L,S94G,T97E)-35GS-ALB82-A	160 (518)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRAGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA

Figure 9B (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G)-35GS-A0194009G09 (L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G)-35GS-ALB82-A	161 (519)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,T97E)-35GS-A0194009G09 L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,T97E)-35GS-ALB82-A	162 (520)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSSWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09 (E1D,L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G,T97E)-35GS-0194009G09 (L11V,A14P,G19R,M53Y,T62S,A74S,K83R,V89L,S94G,T97E)-35GS-ALB82-A	163 (521)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRYGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA

Figure 9B (continued)

Clone	SEQ ID NO:	Sequence
A0194009G09 (E1D,L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G,T97E)-35GS-0194009G09 (L11V,A14P,G19R,M53Q,T62S,A74S,K83R,V89L,S94G,T97E)-35GS-ALB82-A	164 (522)	DVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRQGGSINYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCSGWREGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
A0194009G09(E1D)-35GS-A0194009G09-35GS-ALB8-A (Reference)	165 (497)	DVQLVESGGGLVQAGGSLGLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRMGGSINYADTVKGRFTISRDNAKNTVYLQMNSLKPEDTAVYYCSSWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGLVQAGGSLGLSCSASGLLFSRNSAGWYRQAPGKQREFVARIRMGGSINYADTVKGRFTISRDNAKNTVYLQMNSLKPEDTAVYYCSSWRTGFYEYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSA

Figure 9C

Clone	SEQ ID NO:	Sequence
CDR1 (Kabat)	166	RNSAG
CDR2 (Kabat)	167	RIRMGGSINYADTVKG
CDR3 (Kabat)	168	WRTGFYEY
CDR1 (Abm)	169	GLLFSRNSAG
CDR2 (Abm)	170	RIRMGGSIN
CDR3 (Abm)	171	WRTGFYEY

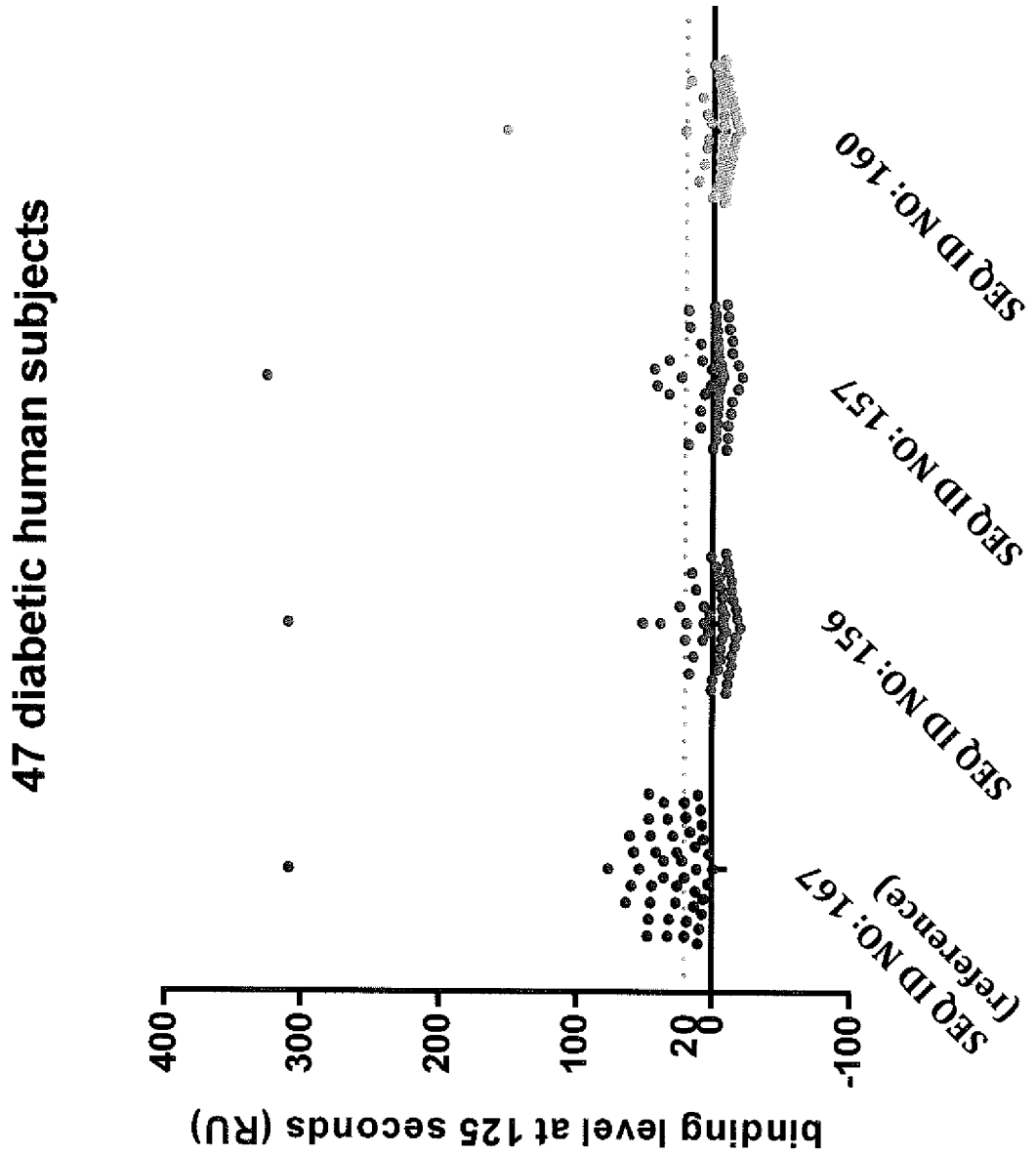

47 diabetic human subjects
binding level at 125 seconds (RU)
400
300
200
100
20
0
-100
SEQ ID NO: 167 (reference)
SEQ ID NO: 156
SEQ ID NO: 157
SEQ ID NO: 160

Figure 10

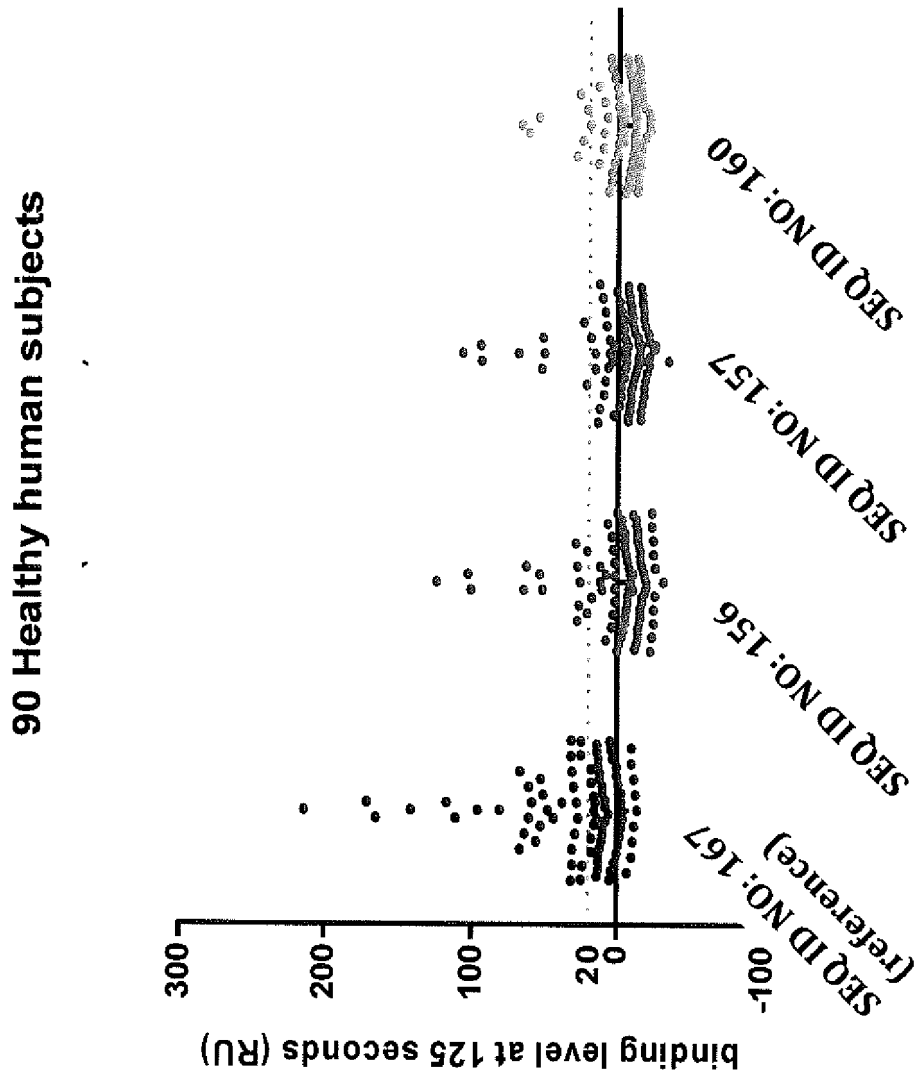

90 Healthy human subjects
binding level at 125 seconds (RU)
300
200
100
20
0
-100
SEQ ID NO: 167 (reference)
SEQ ID NO: 156
SEQ ID NO: 157
SEQ ID NO: 160

Figure 11

Figure 12A

SEQ ID	Mutation(s)	Sequence
172	None (reference)	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVTVSS
173	CDR1	LPASGNIFNLLTIA
174	CDR2	APGKGRELVATINSGSRTYYADSVKG
175	CDR3	SGSGSPNF
176	89L + 110K	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTALYYCQTSGSGSPNFWGQGTLVKVSS
177	89L + 110Q	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTALYYCQTSGSGSPNFWGQGTLVQVSS
178	110K	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVKVSS
179	110Q	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVQVSS
180	112K	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVTVKS
181	112Q	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVTVQS
182	89T	EVQLLESGGGLVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTATYYCQTSGSGSPNFWGQGTLVTVSS
183	11V + 89L	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTALYYCQTSGSGSPNFWGQGTLVTVSS
184	11V + 89L + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTALYYCQTSGSGSPNFWGQGTLVKVSS
185	11V + 89L + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTALYYCQTSGSGSPNFWGQGTLVQVSS
186	11V + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVKVSS
187	11V + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVQVSS
188	11V + 112K	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVTVKS
189	11V + 112Q	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAW YRQAPGKGRELVATINSGSRTYYADSVKGRFTISRDNSKKTVYL QMNSLRPEDTAVYYCQTSGSGSPNFWGQGTLVTVQS

Figure 12B

SEQ ID	Mutation(s)	Sequence
190	None (reference)	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSS
191	CDR1	SYAMG
192	CDR2	RISQGGTAIYYADSVKG
193	CDR3	DPSPYYRGSAYLLSGSYDS
194	89L + 110K	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSS
195	89L + 110Q	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSS
196	110K	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSS
197	110Q	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSS
198	112K	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVKS
199	112Q	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVQS
200	89T	EVQLLESGGGLVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTATYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSS
201	11V + 89L	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSS
202	11V + 89L + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSS
203	11V + 89L + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSS
204	11V + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSS

Figure 12B (Continued)

SEQ ID	Mutation(s)	Sequence
205	11V + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSS
206	11V + 112K	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVKS
207	11V + 112Q	EVQLLESGGGVVQPGGSLRLSCAASGRTLSSYAMGWFRQAPGK GREFVARISQGGTAIYYADSVKGRFTISRDNSKNTLYLQMNSLR PEDTAVYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVQS

Figure 13

SEQ ID	Mutation(s)	Sequence
208	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVTVSS
209	CDR1	LDRMG
210	CDR2	TITGGSSINYGDSVKG
211	CDR3	NKYVTSRDT
212	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTALYYCNFNKYVTSRDTWGQGTLVKVSS
213	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTALYYCNFNKYVTSRDTWGQGTLVQVSS
214	110K	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVKVSS
215	110Q	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVQVSS
216	112K	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVTVKS
217	112Q	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVTVQS
218	89T	EVQLVESGGGLVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTATYYCNFNKYVTSRDTWGQGTLVTVSS
219	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTALYYCNFNKYVTSRDTWGQGTLVTVSS
220	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTALYYCNFNKYVTSRDTWGQGTLVKVSS
221	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTALYYCNFNKYVTSRDTWGQGTLVQVSS
222	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVKVSS

Figure 13 (Continued)

SEQ ID	Mutation(s)	Sequence
223	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVQVSS
224	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVTVKS
225	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGE PRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPE DTAVYYCNFNKYVTSRDTWGQGTLVTVQS

Figure 14

SEQ ID	Mutation(s)	Sequence
226	None (reference)	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVTVSS
227	CDR1	NYDMA
228	CDR2	SIDTGGDITHYADSVKG
229	CDR3	DEEYALGPNEFDY
230	89L + 110K	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYWCATDEEYALGPNEFDYYGQGTLVKVSS
231	89L + 110Q	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYWCATDEEYALGPNEFDYYGQGTLVQVSS
232	110K	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVKVSS
233	110Q	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVQVSS
234	112K	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVTVKS
235	112Q	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVTVQS
236	89T	DVQLLESGGGLVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTATYWCATDEEYALGPNEFDYYGQGTLVTVSS
237	11V + 89L	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYWCATDEEYALGPNEFDYYGQGTLVTVSS
238	11V + 89L + 110K	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYWCATDEEYALGPNEFDYYGQGTLVKVSS
239	11V + 89L + 110Q	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYWCATDEEYALGPNEFDYYGQGTLVQVSS

Figure 14 (continued)

SEQ ID	Mutation(s)	Sequence
240	11V + 110K	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVKVSS
241	11V + 110Q	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVQVSS
242	11V + 112K	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVTVKS
243	11V + 112Q	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPG KRPEWVSSIDTGGDITHYADSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYWCATDEEYALGPNEFDYYGQGTLVTVQS

Figure 15A

SEQ ID	Mutation(s)	Sequence
244	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVTVSS
245	CDR1	SYAMS
246	CDR2	GIKSSGDSTRYAGSVKG
247	CDR3	SRVSRTGLYTYDN
248	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAKSRVSRTGLYTYDNRGQGTLVKVSS
249	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAKSRVSRTGLYTYDNRGQGTLVQVSS
250	110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVKVSS
251	110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVQVSS
252	112K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVTVKS
253	112Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVTVQS
254	89T	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTATYYCAKSRVSRTGLYTYDNRGQGTLVTVSS
255	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAKSRVSRTGLYTYDNRGQGTLVTVSS
256	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAKSRVSRTGLYTYDNRGQGTLVKVSS
257	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAKSRVSRTGLYTYDNRGQGTLVQVSS

Figure 15A (Continued)

SEQ ID	Mutation(s)	Sequence
258	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVKVSS
259	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVQVSS
260	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVTVKS
261	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGK GLEWVSGIKSSGDSTRYAGSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAKSRVSRTGLYTYDNRGQGTLVTVQS

Figure 15B

SEQ ID	Mutation(s)	Sequence
262	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVTVSS
263	CDR1	NYAMG
264	CDR2	AITRSGVRSGVSAIYGDSVKD
265	CDR3	SAIGSGALRRFEYDY
266	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVKVSS
267	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVQVSS
268	110K	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVKVSS
269	110Q	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVQVSS
270	112K	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVTVKS
271	112Q	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVTVQS
272	89T	EVQLVESGGGLVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTATYYCAASAIGSGALRRFEYDYSGQGTLVTVSS
273	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVTVSS
274	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVKVSS
275	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVQVSS

Figure 15B (Continued)

SEQ ID	Mutation(s)	Sequence
276	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVKVSS
277	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVQVSS
278	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVTVKS
279	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASGRTFNNYAMGWFRQAPG KEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRDNAKNTLYLQ MNSLRPEDTAVYYCAASAIGSGALRRFEYDYSGQGTLVTVQS

Figure 16A

SEQ ID	Mutation(s)	Sequence
280	None (reference)	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVTVSS
281	CDR1	LNAMA
282	CDR2	GIFGVGSTRYADSVKG
283	CDR3	SSVTRGSSDY
284	89L + 110K	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCRMSSVTRGSSDYWGQGTLVKVSS
285	89L + 110Q	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCRMSSVTRGSSDYWGQGTLVQVSS
286	110K	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVKVSS
287	110Q	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVQVSS
288	112K	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVTVKS
289	112Q	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVTVQS
290	89T	DVQLVESGGGLVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTATYYCRMSSVTRGSSDYWGQGTLVTVSS
291	11V + 89L	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCRMSSVTRGSSDYWGQGTLVTVSS
292	11V + 89L + 110K	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCRMSSVTRGSSDYWGQGTLVKVSS
293	11V + 89L + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCRMSSVTRGSSDYWGQGTLVQVSS

Figure 16A (continued)

SEQ ID	Mutation(s)	Sequence
294	11V + 110K	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVKVSS
295	11V + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVQVSS
296	11V + 112K	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVTVKS
297	11V + 112Q	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPG KERELVAGIFGVGSTRYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCRMSSVTRGSSDYWGQGTLVTVQS

Figure 16B

SEQ ID	Mutation(s)	Sequence
298	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVTVSS
299	CDR1	LNAMG
300	CDR2	AIDWSEGNKDYADSVKG
301	CDR3	DTPPWGPLIYIESYDS
302	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSS
303	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSS
304	110K	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVKVSS
305	110Q	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVQVSS
306	112K	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVTVKS
307	112Q	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVTVQS
308	89T	EVQLVESGGGLVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTATYYCAADTPPWGPLIYIESYDSWGQGTLVTVSS
309	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSS
310	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSS
311	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSS

Figure 16B (continued)

SEQ ID	Mutation(s)	Sequence
312	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVKVSS
313	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVQVSS
314	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVTVKS
315	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASGRTYYLNAMGWFRQAPG KEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAADTPPWGPLIYIESYDSWGQGTLVTVQS

Figure 17A

SEQ ID	Mutation(s)	Sequence
316	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVTVSS
317	CDR1	DYWMY
318	CDR2	EINTNGLITKYPDSVKG
319	CDR3	SPSGFN
320	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYYCARSPSGFNRGQGTLVKVSS
321	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYYCARSPSGFNRGQGTLVQVSS
322	110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVKVSS
323	110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVQVSS
324	112K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVTVKS
325	112Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVTVQS
326	89T	EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTATYYCARSPSGFNRGQGTLVTVSS
327	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYYCARSPSGFNRGQGTLVTVSS
328	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYYCARSPSGFNRGQGTLVKVSS
329	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTALYYCARSPSGFNRGQGTLVQVSS

Figure 17A (continued)

SEQ ID	Mutation(s)	Sequence
330	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVKVSS
331	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVQVSS
332	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVTVKS
333	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPG KGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQMNSL RPEDTAVYYCARSPSGFNRGQGTLVTVQS

Figure 17B

SEQ ID	Mutation(s)	Sequence
334	None (reference)	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVTVSS
335	CDR1	TADMG
336	CDR2	RISGIDGTTYYDEPVKG
337	CDR3	PRYADQWSAYDY
338	89L + 110K	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTALYYCRSPRYADQWSAYDYWGQGTLVKVSS
339	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTALYYCRSPRYADQWSAYDYWGQGTLVQVSS
340	110K	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVKVSS
341	110Q	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVQVSS
342	112K	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVTVKS
343	112Q	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVTVQS
344	89T	EVQLVESGGGLVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTATYYCRSPRYADQWSAYDYWGQGTLVTVSS
345	11V + 89L	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTALYYCRSPRYADQWSAYDYWGQGTLVTVSS
346	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTALYYCRSPRYADQWSAYDYWGQGTLVKVSS
347	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTALYYCRSPRYADQWSAYDYWGQGTLVQVSS

Figure 17B (continued)

SEQ ID	Mutation(s)	Sequence
348	11V + 110K	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVKVSS
349	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVQVSS
350	11V + 112K	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVTVKS
351	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCTASGFTFSTADMGWFRQAPGK GREFVSRISGIDGTTYYDEPVKGRFTISRDNAKNTLYLQMNSLRP EDTAVYYCRSPRYADQWSAYDYWGQGTLVTVQS

Figure 18A

SEQ ID	Mutation(s)	Sequence
352	None (reference)	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVTVSS
353	CDR1	YYAIG
354	CDR2	CIDASDDITYYADSVKG
355	CDR3	PIGLSSSCLLEYDYDY
356	89L + 110K	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTALYYCATPIGLSSSCLLEYDYDYWGQGTLVKVSS
357	89L + 110Q	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTALYYCATPIGLSSSCLLEYDYDYWGQGTLVQVSS
358	110K	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVKVSS
359	110Q	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVQVSS
360	112K	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVTVKS
361	112Q	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVTVQS
362	89T	DVQLVESGGGLVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKE REGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLRP EDTATYYCATPIGLSSSCLLEYDYDYWGQGTLVTVSS
363	11V + 89L	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCATPIGLSSSCLLEYDYDYWGQGTLVTVSS
364	11V + 89L + 110K	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCATPIGLSSSCLLEYDYDYWGQGTLVKVSS
365	11V + 89L + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTALYYCATPIGLSSSCLLEYDYDYWGQGTLVQVSS

Figure 18A (continued)

SEQ ID	Mutation(s)	Sequence
366	11V + 110K	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVKVSS
367	11V + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVQVSS
368	11V + 112K	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVTVKS
369	11V + 112Q	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGK EREGVLCIDASDDITYYADSVKGRFTISRDNSKNTVYLQMNSLR PEDTAVYYCATPIGLSSSCLLEYDYDYWGQGTLVTVQS

Figure 18B

SEQ ID	Mutation(s)	Sequence
370	None (reference)	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVTVSS
371	CDR1	DDYAIG
372	CDR2	SISSTYGLTYYADSVKG
373	CDR3	TPIGLIGLDAYEYDY
374	89L + 110K	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTALYYCAATPIGLIGLDAYEYDYWGQGTLVKVSS
375	89L + 110Q	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTALYYCAATPIGLIGLDAYEYDYWGQGTLVQVSS
376	110K	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVKVSS
377	110Q	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVQVSS
378	112K	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVTVKS
379	112Q	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVTVQS
380	89T	DVQLVESGGGLVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTATYYCAATPIGLIGLDAYEYDYWGQGTLVTVSS
381	11V + 89L	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTALYYCAATPIGLIGLDAYEYDYWGQGTLVTVSS
382	11V + 89L + 110K	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTALYYCAATPIGLIGLDAYEYDYWGQGTLVKVSS
383	11V + 89L + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTALYYCAATPIGLIGLDAYEYDYWGQGTLVQVSS

Figure 18B (continued)

SEQ ID	Mutation(s)	Sequence
384	11V + 110K	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVKVSS
385	11V + 110Q	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVQVSS
386	11V + 112K	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVTVKS
387	11V + 112Q	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGE EREGVSSISSTYGLTYYADSVKGRFTISSDNSKNTVYLQMNSLRP EDTAVYYCAATPIGLIGLDAYEYDYWGQGTLVTVQS

Figure 19

SEQ ID	Mutation(s)	Sequence
388	None (reference)	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSS
389	CDR1	SYPMG
390	CDR2	SITGSGGSTYYADSVKG
391	CDR3	YIRPDTYLSRDYRKYDY
392	89L + 110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSS
393	89L + 110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSS
394	110K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSS
395	110Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSS
396	112K	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVKS
397	112Q	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVQS
398	89T	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTATYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSS
399	11V + 89L	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSS
400	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSS
401	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSS

Figure 19 (continued)

SEQ ID	Mutation(s)	Sequence
402	11V + 110K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSS
403	11V + 110Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSS
404	11V + 112K	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVKS
405	11V + 112Q	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGK GREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNSLR PEDTAVYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVQS

Figure 20A

SEQ ID	Mutation(s)	Sequence
406	None (reference)	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTAVYYCNIGGTLYDRRRFESWGQGTLVTVSS
407	CDR1	INYMG
408	CDR2	TLTSGGSTNYAGSVKG
409	CDR3	GGTLYDRRRFES
410	89L + 110K	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTALYYCNIGGTLYDRRRFESWGQGTLVKVSS
411	89L + 110Q	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTALYYCNIGGTLYDRRRFESWGQGTLVQVSS
412	110K	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTAVYYCNIGGTLYDRRRFESWGQGTLVKVSS
413	110Q	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTAVYYCNIGGTLYDRRRFESWGQGTLVQVSS
414	112K	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTAVYYCNIGGTLYDRRRFESWGQGTLVTVKS
415	112Q	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTAVYYCNIGGTLYDRRRFESWGQGTLVTVQS
416	89T	EVQLVESGGGLVQPGGSLRISCAASGSIYLINYMGWYRQAPGKQ RELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLKP EDTATYYCNIGGTLYDRRRFESWGQGTLVTVSS
417	11V + 89L	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTALYYCNIGGTLYDRRRFESWGQGTLVTVSS
418	11V + 89L + 110K	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTALYYCNIGGTLYDRRRFESWGQGTLVKVSS
419	11V + 89L + 110Q	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTALYYCNIGGTLYDRRRFESWGQGTLVQVSS

Figure 20A (continued)

SEQ ID	Mutation(s)	Sequence
420	11V + 110K	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTAVYYCNIGGTLYDRRRFESWGQGTLVKVSS
421	11V + 110Q	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTAVYYCNIGGTLYDRRRFESWGQGTLVQVSS
422	11V + 112K	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTAVYYCNIGGTLYDRRRFESWGQGTLVTVKS
423	11V + 112Q	EVQLVESGGGVVQPGGSLRISCAASGSIYLINYMGWYRQAPGK QRELVATLTSGGSTNYAGSVKGRFAISRDNAKNTVYLQMNSLK PEDTAVYYCNIGGTLYDRRRFESWGQGTLVQVSS

Figure 20B

SEQ ID	Mutation(s)	Sequence
424	None (reference)	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVSS
425	CDR1	NYAMG
426	CDR2	AITPRAFTTYYADSVKG
427	CDR3	QLVGSGSNLGRQESYAY
428	89L + 110K	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTALYYCAAQLVGSGSNLGRQESYAYWGQGTLVKVSS
429	89L + 110Q	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTALYYCAAQLVGSGSNLGRQESYAYWGQGTLVQVSS
430	110K	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVKVSS
431	110Q	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVQVSS
432	112K	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVKS
433	112Q	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVQS
434	89T	EVQLVESGGGLVQTGASLRLSCAASGRTFSNYAMGWFRQAPGK ERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSLK PEDTATYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVSS
435	11V + 89L	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTALYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVSS
436	11V + 89L + 110K	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTALYYCAAQLVGSGSNLGRQESYAYWGQGTLVKVSS
437	11V + 89L + 110Q	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTALYYCAAQLVGSGSNLGRQESYAYWGQGTLVQVSS

Figure 20B (continued)

SEQ ID	Mutation(s)	Sequence
438	11V + 110K	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVKVSS
439	11V + 110Q	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVQVSS
440	11V + 112K	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVKS
441	11V + 112Q	EVQLVESGGGVVQTGASLRLSCAASGRTFSNYAMGWFRQAPG KERERVAAITPRAFTTYYADSVKGRFTISRDNAKNTAYLQMVSL KPEDTAVYYCAAQLVGSGSNLGRQESYAYWGQGTLVTVQS

Figure 20C

SEQ ID	Mutation(s)	Sequence
442	None (reference)	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVTVSS
443	CDR1	AYIMG
444	CDR2	GIWSGGYTHLADSAKG
445	CDR3	GIWSGGYTHLADSAKG
446	89L + 110K	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTALYYCAAGLRGRQYSNWGQGTLVKVSS
447	89L + 110Q	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTALYYCAAGLRGRQYSNWGQGTLVQVSS
448	110K	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVKVSS
449	110Q	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVQVSS
450	112K	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVTVKS
451	112Q	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVTVKS
452	89T	EVQLVESGGGLVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTATYYCAAGLRGRQYSNWGQGTLVTVSS
453	11V + 89L	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTALYYCAAGLRGRQYSNWGQGTLVTVSS
454	11V + 89L + 110K	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTALYYCAAGLRGRQYSNWGQGTLVKVSS
455	11V + 89L + 110Q	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTALYYCAAGLRGRQYSNWGQGTLVQVSS

Figure 20C (continued)

SEQ ID	Mutation(s)	Sequence
456	11V + 110K	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVKVSS
457	11V + 110Q	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVQVSS
458	11V + 112K	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVTVKS
459	11V + 112Q	EVQLVESGGGVVQAGESLTLSCAASGRTLSAYIMGWFRQAPGK EREFVAGIWSGGYTHLADSAKGRFSISRDNAKNTVYLQMNGLK PEDTAVYYCAAGLRGRQYSNWGQGTLVTVQS

Figure 21A

SEQ ID	Mutation(s)	Sequence
460	lead	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVSS
461	CDR1	TDTMG
462	CDR2	AVTWNSGRINYADSVKG
463	CDR3	HRFVVGGNRVEDWRY
464	89L + 110K	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTALLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVKVSS
465	89L + 110Q	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTALLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVQVSS
466	110K	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVKVSS
467	110Q	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVQVSS
468	112K	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVKS
469	112Q	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVQS
470	89T	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTATLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVSS
471	11V + 89L	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTALLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVSS
472	11V + 89L + 110K	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTALLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVKVSS
473	11V + 89L + 110Q	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTALLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVQVSS

Figure 21A (continued)

SEQ ID	Mutation(s)	Sequence
474	11V + 110K	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVKVSS
475	11V + 110Q	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVQVSS
476	11V + 112K	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVKS
477	11V + 112Q	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGK GREFVAAVTWNSGRINYADSVKGRFTISRDNSKNTAYLQMNSL RPEDTAVYYCAAHRFVVGGNRVEDWRYWGQGTLVTVQS

Figure 21B

SEQ ID	Mutation(s)	Sequence
478	lead	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVTVSS
479	CDR1	NYNMG
480	CDR2	AVSRSGVSTYYADSVKG
481	CDR3	AYRGTAINVRRSYSS
482	89L + 110K	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTALYYCAAAYRGTAINVRRSYSSWGQGTLVKVSS
483	89L + 110Q	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTALYYCAAAYRGTAINVRRSYSSWGQGTLVQVSS
484	110K	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVKVSS
485	110Q	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVQVSS
486	112K	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVTVKS
487	112Q	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVTVQS
488	89T	EVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAPGK GREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSL RPEDTATYYCAAAYRGTAINVRRSYSSWGQGTLVTVSS
489	11V + 89L	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAAAYRGTAINVRRSYSSWGQGTLVTVSS
490	11V + 89L + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAAAYRGTAINVRRSYSSWGQGTLVKVSS
491	11V + 89L + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTALYYCAAAYRGTAINVRRSYSSWGQGTLVTVSS

Figure 21B (continued)

SEQ ID	Mutation(s)	Sequence
492	11V + 110K	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVKVSS
493	11V + 110Q	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVQVSS
494	11V + 112K	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVTVKS
495	11V + 112Q	EVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNS LRPEDTAVYYCAAAYRGTAINVRRSYSSWGQGTLVTVQS

Figure 22

SEQ ID	Sequence
514	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
515	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
516	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
517	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
518	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
519	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 22 (continued)

SEQ ID	Sequence
520	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
521	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
522	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
523	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
524	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
525	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 22 (continued)

SEQ ID	Sequence
526	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
527	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
528	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
529	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
530	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
531	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 22 (continued)

SEQ ID	Sequence
532	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
533	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
534	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
535	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
536	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
537	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 22 (continued)

SEQ ID	Sequence
538	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
539	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
540	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
541	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
542	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
543	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 22 (continued)

SEQ ID	Sequence
544	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
545	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
546	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA
547	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVTVSSA
548	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVKVSSA
549	EVQLLESGGGVVQPGGSLRLSCAASGRIFSLPASGNIFNLLTIAWYRQAPGKGREL VATINSGSRTYYADSVKGRFTISRDNSKKTVYLQMNSLRPEDTALYYCQTSGSGSP NFWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFG MSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRP EDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRL SCAASGRTLSSYAMGWFRQAPGKGREFVARISQGGTAIYYADSVKGRFTISRDNSK NTLYLQMNSLRPEDTALYYCAKDPSPYYRGSAYLLSGSYDSWGQGTLVQVSSA

Figure 23

SEQ ID	Sequence
550	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
551	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
552	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
553	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
554	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA

Figure 23 (continued)

SEQ ID	Sequence
555	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
556	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
557	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
558	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
559	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA

Figure 23 (continued)

SEQ ID	Sequence
560	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
561	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV TVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
562	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
563	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
564	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA

Figure 23 (continued)

SEQ ID	Sequence
565	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
566	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
567	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
568	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
569	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA

Figure 23 (continued)

SEQ ID	Sequence
570	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
571	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
572	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
573	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
574	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA

Figure 23 (continued)

SEQ ID	Sequence
575	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
576	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
577	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
578	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
579	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA

Figure 23 (continued)

SEQ ID	Sequence
580	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
581	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
582	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA
583	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVTVSSA
584	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVKVSSA
585	EVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRMGWYRHRPGEPRELVATITGGSSI NYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTALYYCNFNKYVTSRDTWGQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGK GLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGS LSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASRSIGRLDRM GWYRHRPGEPRELVATITGGSSINYGDSVKGRFTISIDNSKNTVYLQMNSLRPEDTAL YYCNFNKYVTSRDTWGQGTLVQVSSA

Figure 24

SEQ ID	Sequence
586	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
587	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
588	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA
589	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
590	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
591	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA
592	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
593	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
594	DVQLLESGGGVVQPGGSLRLSCAASGFTFGNYDMAWVRQAPGKRPEWVSSIDT GGDITHYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYWCATDEEYALGPN EFDYYGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGFTFR SFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYLQMN SLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA

Figure 25

SEQ ID	Sequence
595	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVTVSSA
596	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVKVSSA
597	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVQVSSA
598	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVKVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVTVSSA
599	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVKVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVKVSSA
600	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVKVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVQVSSA
601	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVQVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVTVSSA
602	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVQVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVKVSSA
603	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSGIKSSG DSTRYAGSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAKSRVSRTGLYTYD NRGQGTLVQVSSGGGGSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGSLRLSC AASGRTFNNYAMGWFRQAPGKEREFVAAITRSGVRSGVSAIYGDSVKDRFTISRD NAKNTLYLQMNSLRPEDTALYYCAASAIGSGALRRFEYDYSGQGTLVQVSSA

Figure 26

SEQ ID	Sequence
604	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
605	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
606	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
607	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
608	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
609	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 26 (continued)

SEQ ID	Sequence
610	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
611	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
612	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
613	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
614	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
615	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 26 (continued)

SEQ ID	Sequence
616	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
617	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
618	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
619	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
620	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
621	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 26 (continued)

SEQ ID	Sequence
622	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
623	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
624	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
625	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
626	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
627	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 26 (continued)

SEQ ID	Sequence
628	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
629	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
630	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAV YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
631	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
632	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
633	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 26 (continued)

SEQ ID	Sequence
634	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
635	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
636	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA
637	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVTVSSA
638	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVKVSSA
639	DVQLVESGGGVVQPGGSLRLSCAASGSIGGLNAMAWYRQAPGKERELVAGIFGV GSTRYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCRMSSVTRGSSDYWG QGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAL YYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAAS GRTYYLNAMGWFRQAPGKEREFVAAIDWSEGNKDYADSVKGRFTISRDNSKNTV YLQMNSLRPEDTALYYCAADTPPWGPLIYIESYDSWGQGTLVQVSSA

Figure 27

SEQ ID	Sequence
640	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
641	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
642	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
643	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
644	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
645	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 27 (continued)

SEQ ID	Sequence
646	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
647	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
648	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
649	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
650	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
651	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 27 (continued)

SEQ ID	Sequence
652	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
653	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
654	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
655	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
656	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
657	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 27 (continued)

SEQ ID	Sequence
658	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
659	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
660	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
661	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
662	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
663	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 27 (continued)

SEQ ID	Sequence
664	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
665	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
666	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
667	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
668	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
669	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 27 (continued)

SEQ ID	Sequence
670	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
671	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
672	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA
673	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVTVSSA
674	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVKVSSA
675	EVQLVESGGGVVQPGGSLRLSCAASGFTFSDYWMYWVRQAPGKGLEWVSEINTN GLITKYPDSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCARSPSGFNRGQGTL VQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAP GKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCT IGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTF SDYWMYWVRQAPGKGLEWVSEINTNGLITKYPDSVKGRFTISRDNAKNTLYLQM NSLRPEDTALYYCARSPSGFNRGQGTLVQVSSA

Figure 28A

SEQ ID	Sequence
676	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
677	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
678	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVTVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA
679	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
680	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
681	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVKVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA
682	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSA
683	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSA
684	DVQLVESGGGVVQPGGSLRLSCAASGFILDYYAIGWFRQAPGKEREGVLCIDAS DDITYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALYYCATPIGLSSSCLLE YDYDYWGQGTLVQVSSGGGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGF TFRSFGMSWVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSKNTLYL QMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSA

Figure 28B

SEQ ID	Sequence
685	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVTVSSA
686	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVKVSSA
687	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVQVSSA
688	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVTVSSA
689	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVKVSSA
690	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVQVSSA
691	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVTVSSA
692	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVKVSSA
693	DVQLVESGGGVVQPGGSLRLSCAASGFAFDDYAIGWFRQAPGEEREGVSSISSTYGL TYYADSVKGRFTISSDNSKNTVYLQMNSLRPEDTALYYCAATPIGLIGLDAYEYDYW GQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWV RQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALY YCTIGGSLSRSSQGTLVQVSSA

Figure 29

SEQ ID	Sequence
694	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
695	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
696	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTAVYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
697	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
698	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
699	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 29 (continued)

SEQ ID	Sequence
700	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
701	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
702	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
703	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
704	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
705	EVQLVESGGGVVQPGGSLRLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGG STYYADSVKGRFTISRDNAKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYR KYDYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSS FGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSL RPEDTALYYCTIGGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSL RLSCAASGFTFSSYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDN AKNTLYLQMNSLRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 29 (continued)

SEQ ID	Sequence
706	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
707	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
708	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
709	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
710	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
711	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 29 (continued)

SEQ ID	Sequence
712	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
713	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
714	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
715	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
716	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
717	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV KVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 29 (continued)

SEQ ID	Sequence
718	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
719	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
720	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGLVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTAVYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
721	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
722	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
723	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 29 (continued)

SEQ ID	Sequence
724	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
725	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
726	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA
727	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVTVSSA
728	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVKVSSA
729	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSG SDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLV QVSSGGGGSGGGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVRQAPG KGLEWVSSISGSGSDTLYADSVKGRFTISRDNAKTTLYLQMNSLRPEDTALYYCTI GGSLSRSSQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGGSLRLSCAASGFTFS SYPMGWFRQAPGKGREFVSSITGSGGSTYYADSVKGRFTISRDNAKNTLYLQMNS LRPEDTALYYCAAYIRPDTYLSRDYRKYDYWGQGTLVQVSSA

Figure 30

SEQ ID	Sequence
730	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
731	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
732	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
733	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
734	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA

Figure 30 (continued)

SEQ ID	Sequence
735	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
736	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
737	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
738	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
739	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA

Figure 30 (continued)

SEQ ID	Sequence
740	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
741	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
742	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
743	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
744	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA

Figure 30 (continued)

SEQ ID	Sequence
745	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
746	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
747	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
748	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
749	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA

Figure 30 (continued)

SEQ ID	Sequence
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751	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
752	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
753	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVKVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
754	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA

Figure 30 (continued)

SEQ ID	Sequence
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756	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGLVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
757	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
758	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
759	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVTVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA

Figure 30 (continued)

SEQ ID	Sequence
760	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
761	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA
762	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVKVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
763	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
764	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVKVSSA

Figure 30 (continued)

SEQ ID	Sequence
765	EVQLLESGGGVVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTALLQMNSLRPEDTAVYYCAAHRFVVG GNRVEDWRYWGQGTLVQVSSGGGGSGGGSEVQLVESGGGVVQPGNSLR LSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKGR FTISRDNAKTTLYLQMNSLRPEDTALYYCTIGGSLSRSSQGTLVQVSSG GGGSGGGSEVQLLESGGGVVQPGGSLRLSCAASGRTFNNYNMGWFRQAPG KGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTALY YCAAAYRGTAINVRRSYSSWGQGTLVTVSSA
766	EVQLLESGGGLVQPGGSLRLSCVHSGPTFRTDTMGWFRQAPGKGREFVAAVT WNSGRINYADSVKGRFTISRDNSKNTAYLQMNSLRPEDTAVYYCAAHRFVV GGNRVEDWRYWGQGTLVTVSSGGGGSGGGSEVQLVESGGGLVQPGNSL RLSCAASGFTFSSFGMSWVRQAPGKGLEWVSSISGSGSDTLYADSVKG RFTISRDNAKTTLYLQMNSLRPEDTAVYYCTIGGSLSRSSQGTLVTVSS GGGGSGGGSEVQLLESGGGLVQPGGSLRLSCAASGRTFNNYNMGWFRQAP GKGREFVAAVSRSGVSTYYADSVKGRFTISRDNSKNTVYLQMNSLRPEDTAV YYCAAAYRGTAINVRRSYSSWGQGTLVTVSSA

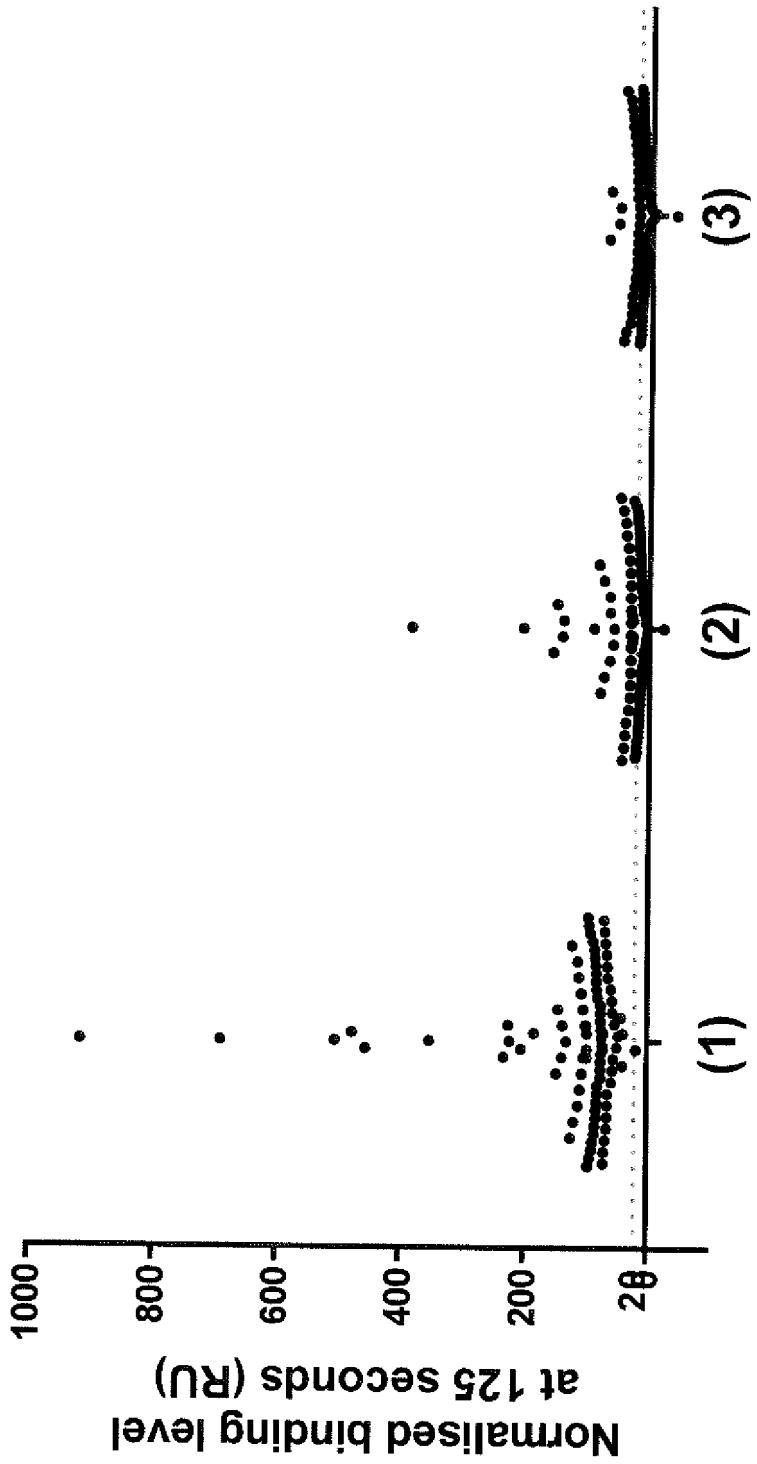

Normalised binding level
at 125 seconds (RU)
1000
800
600
400
200
2θ
(1)
(2)
(3)

Figure 31A

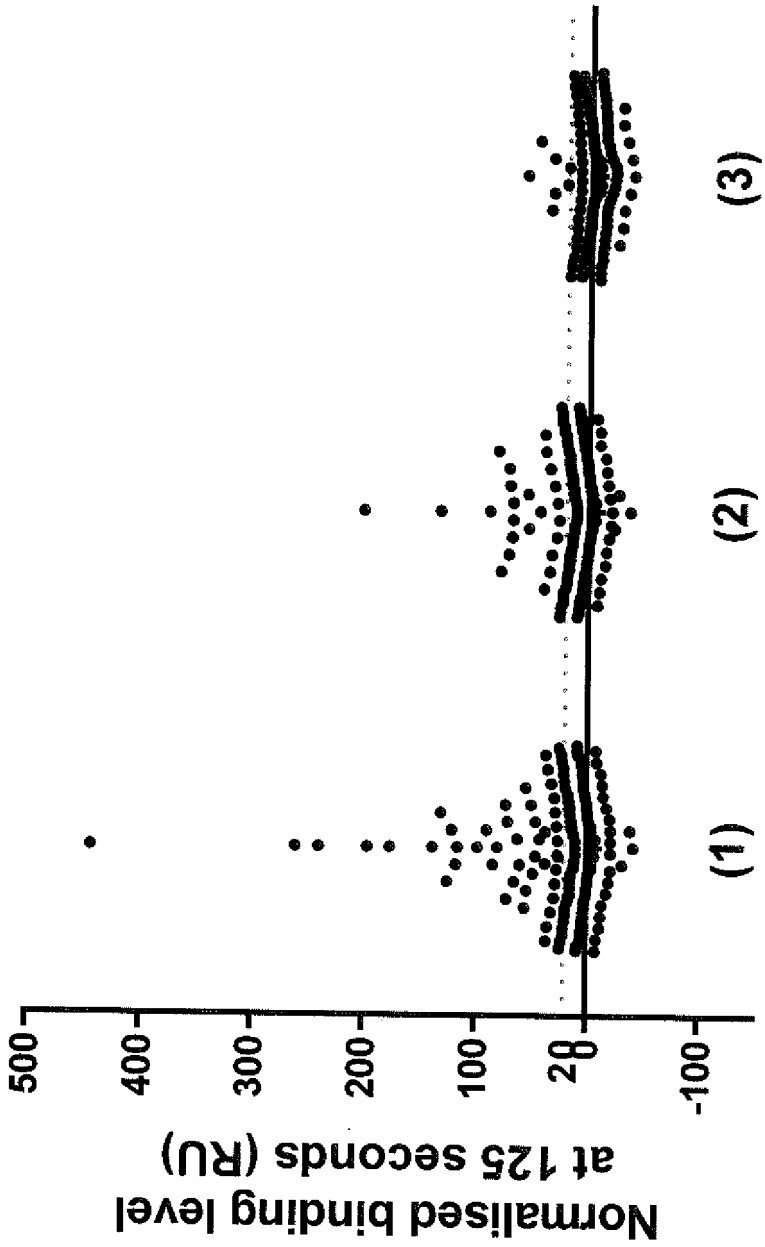

Normalised binding level
at 125 seconds (RU)
500
400
300
200
100
0
-100
(1)
(2)
(3)

Figure 31B