

Figure 1

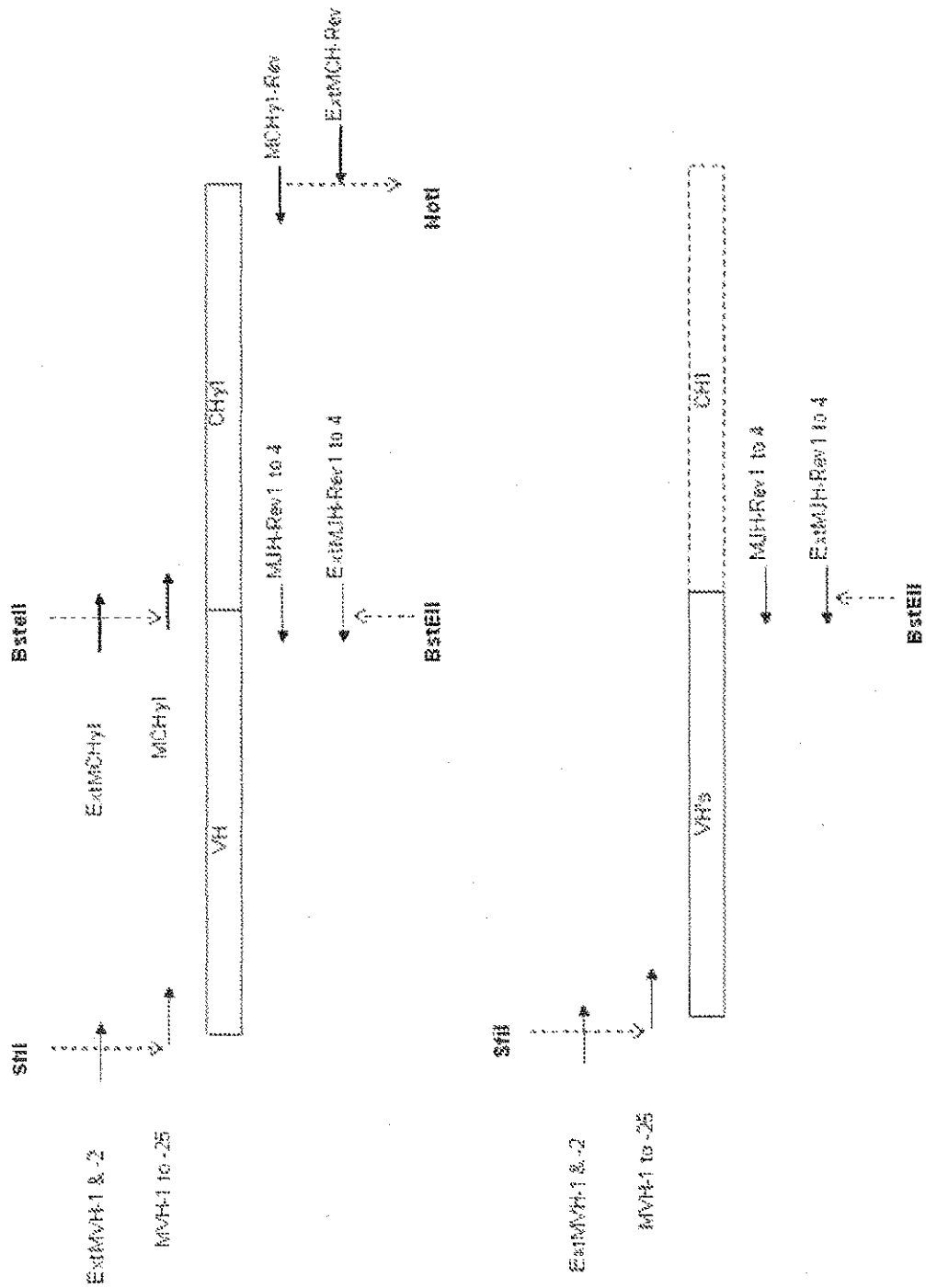


Figure 2

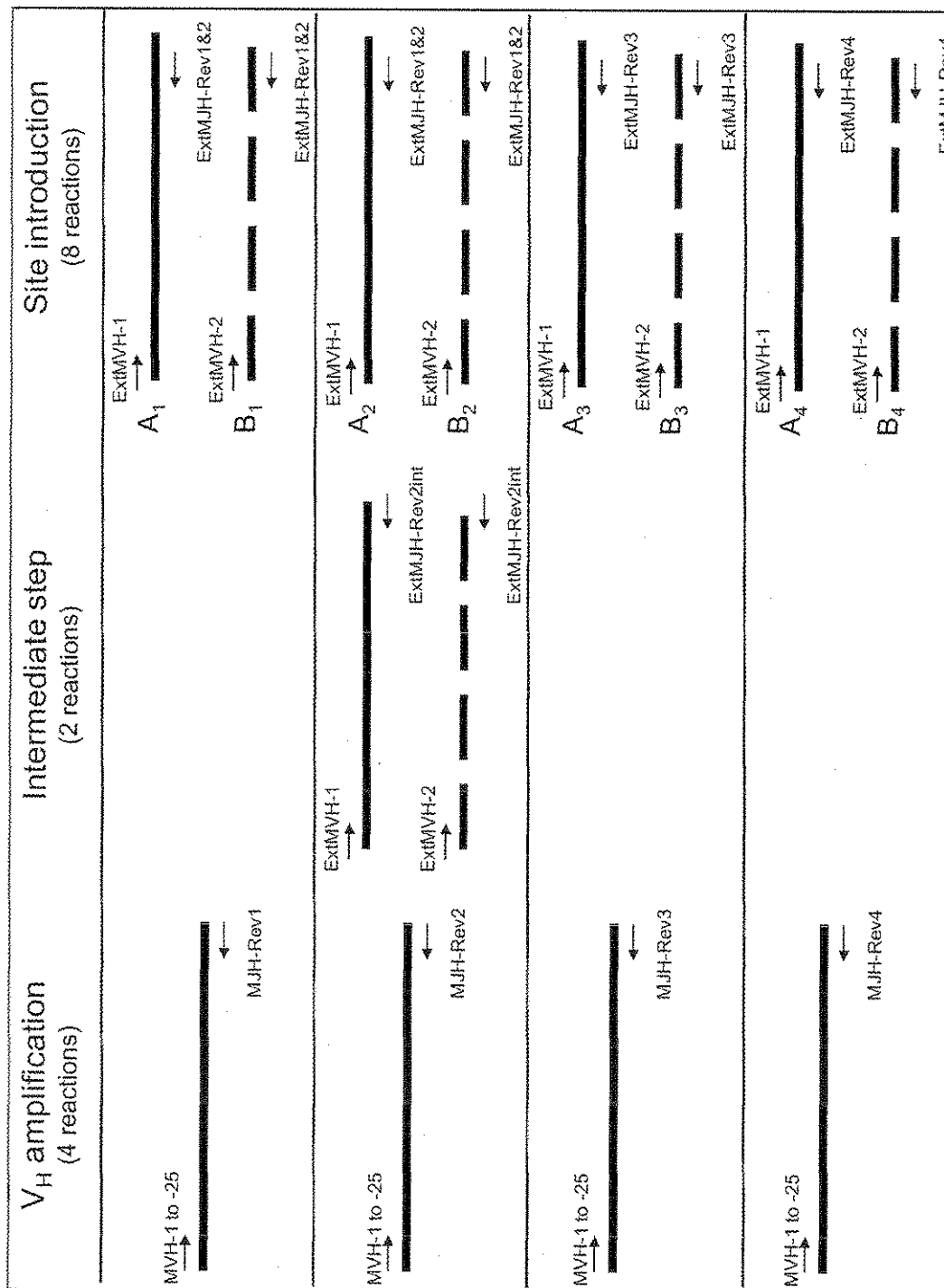


Figure 3

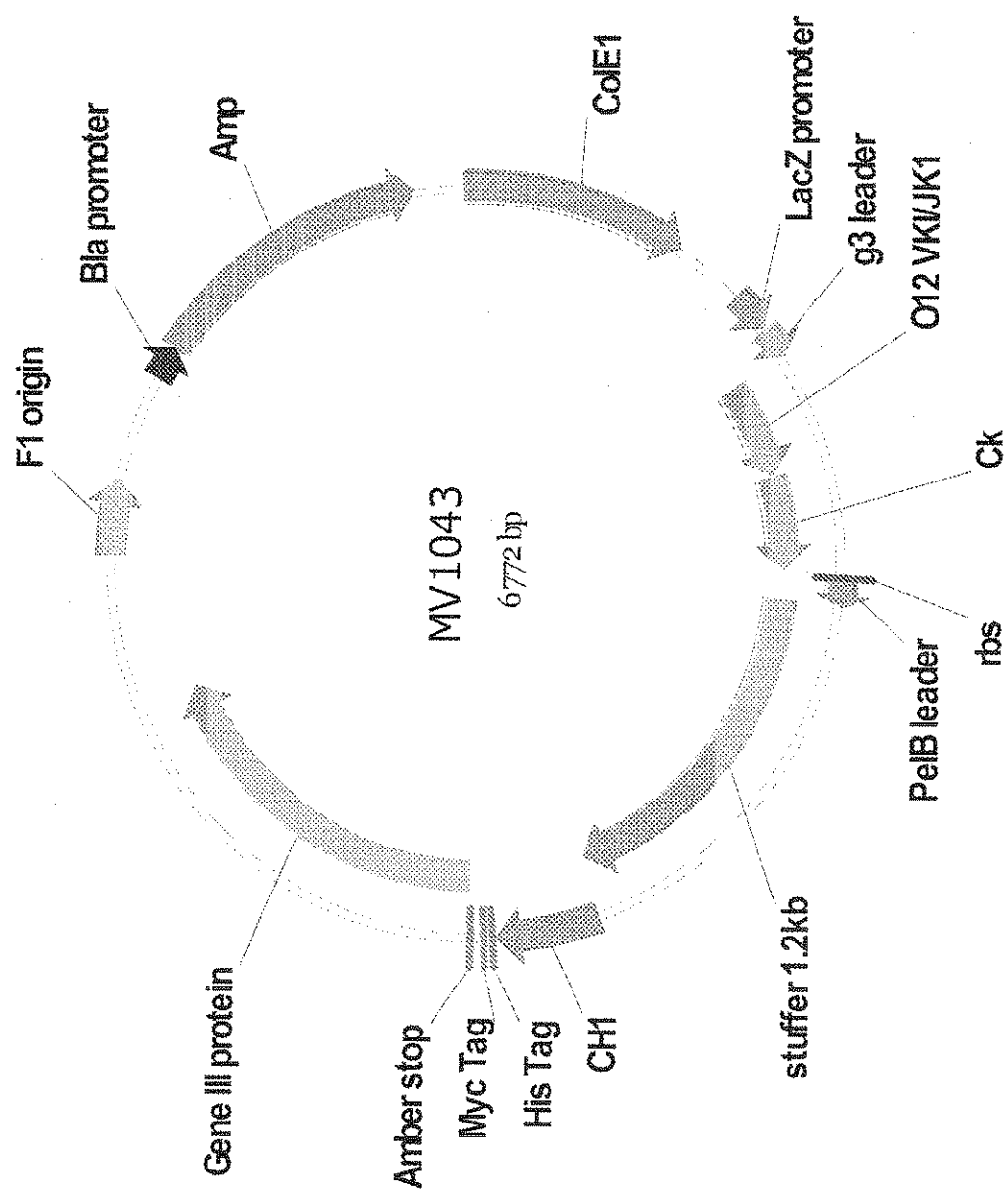


Figure 4

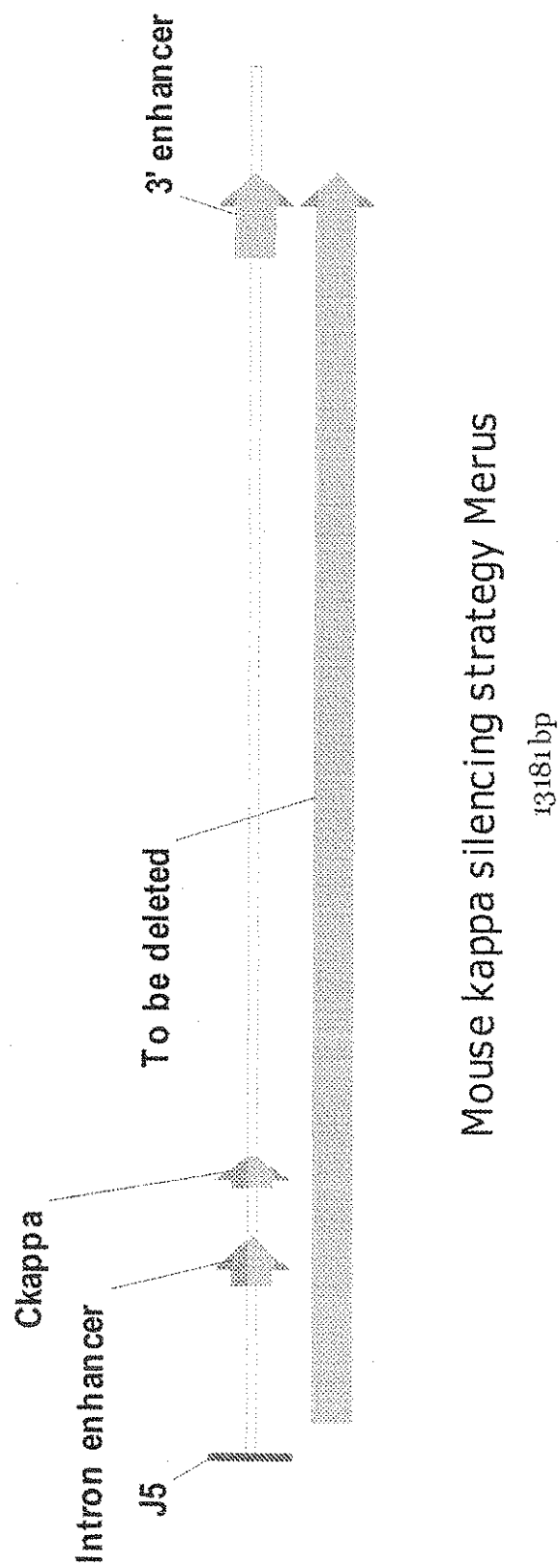


Figure 5

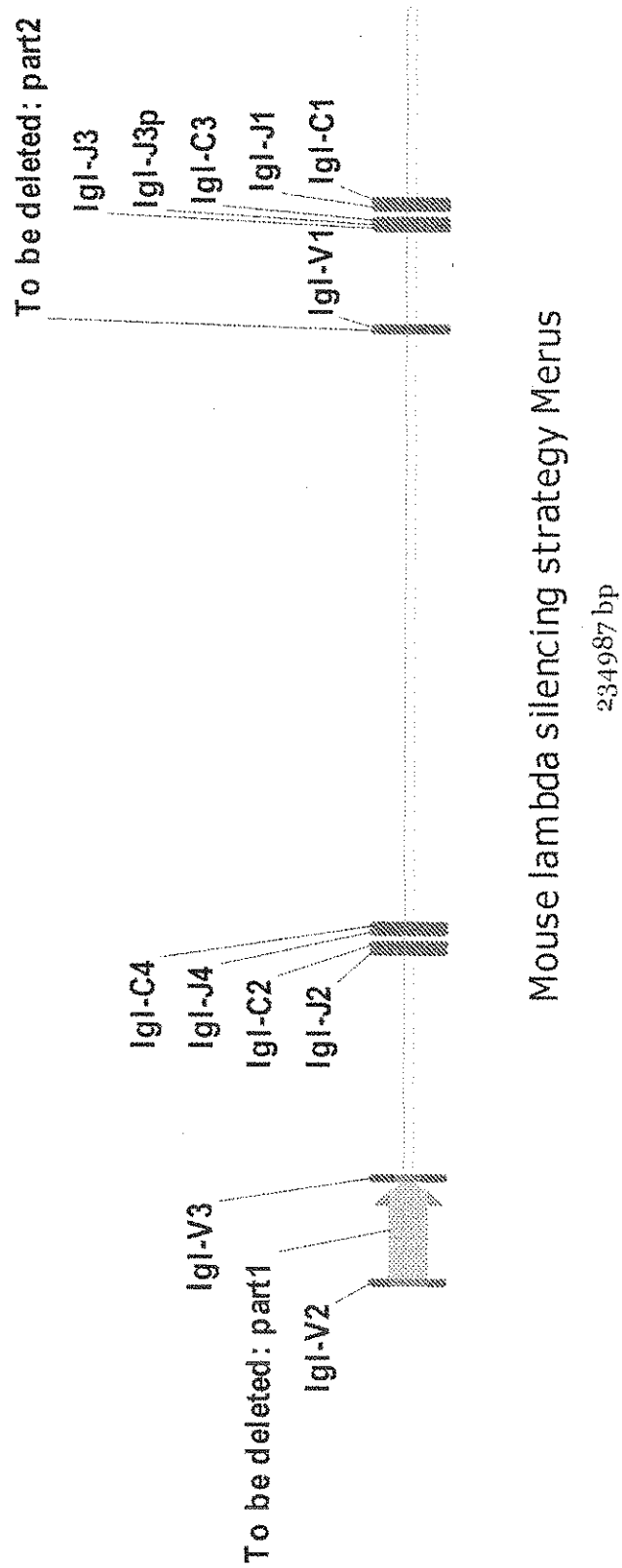


Figure 6

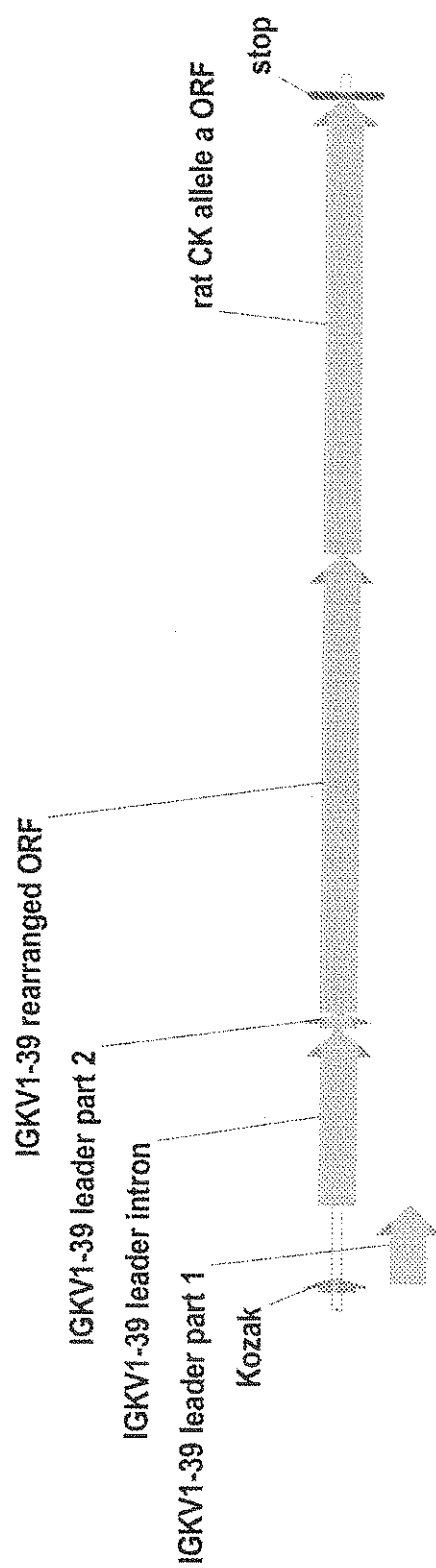


Figure 7

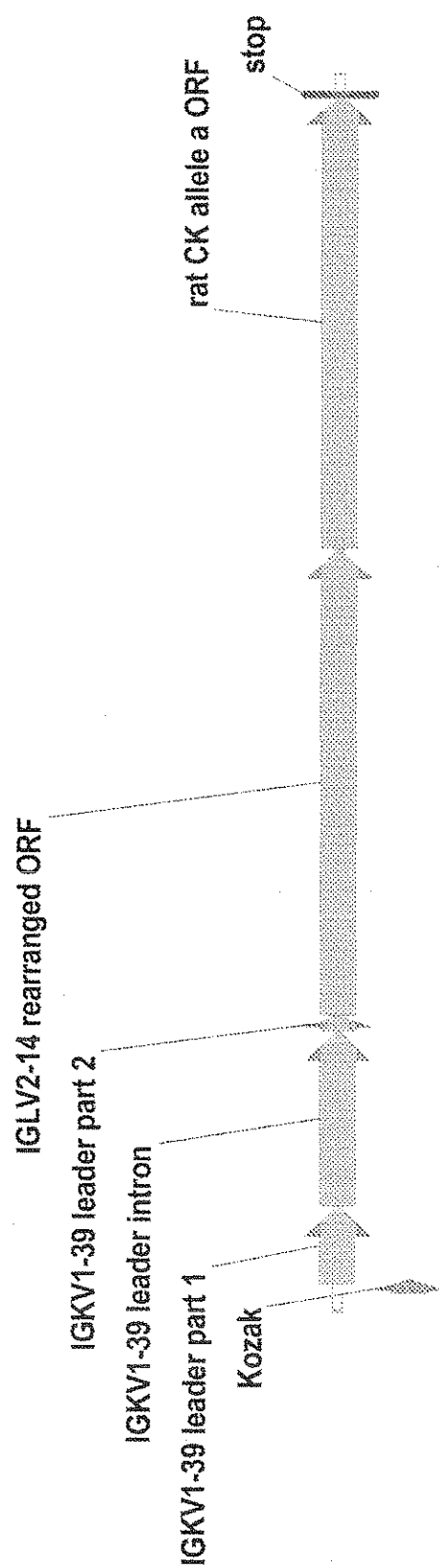


Figure 8

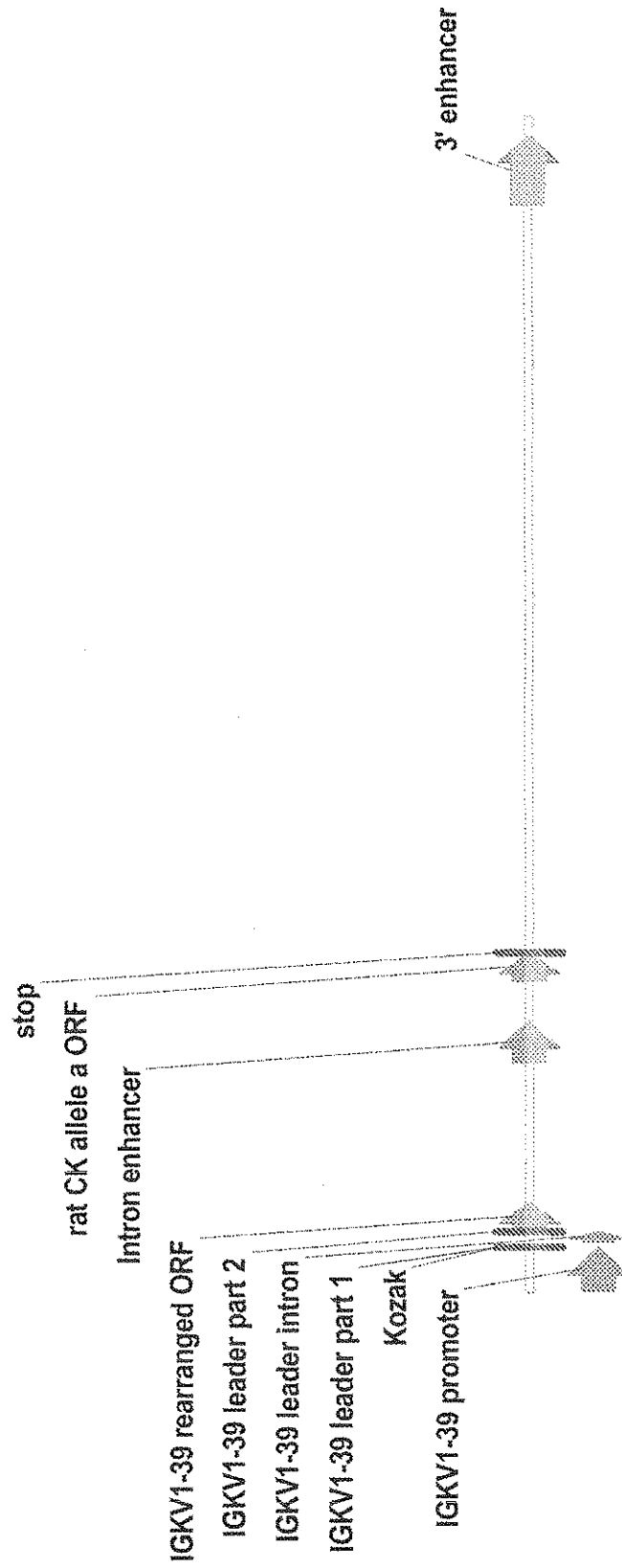


Figure 9

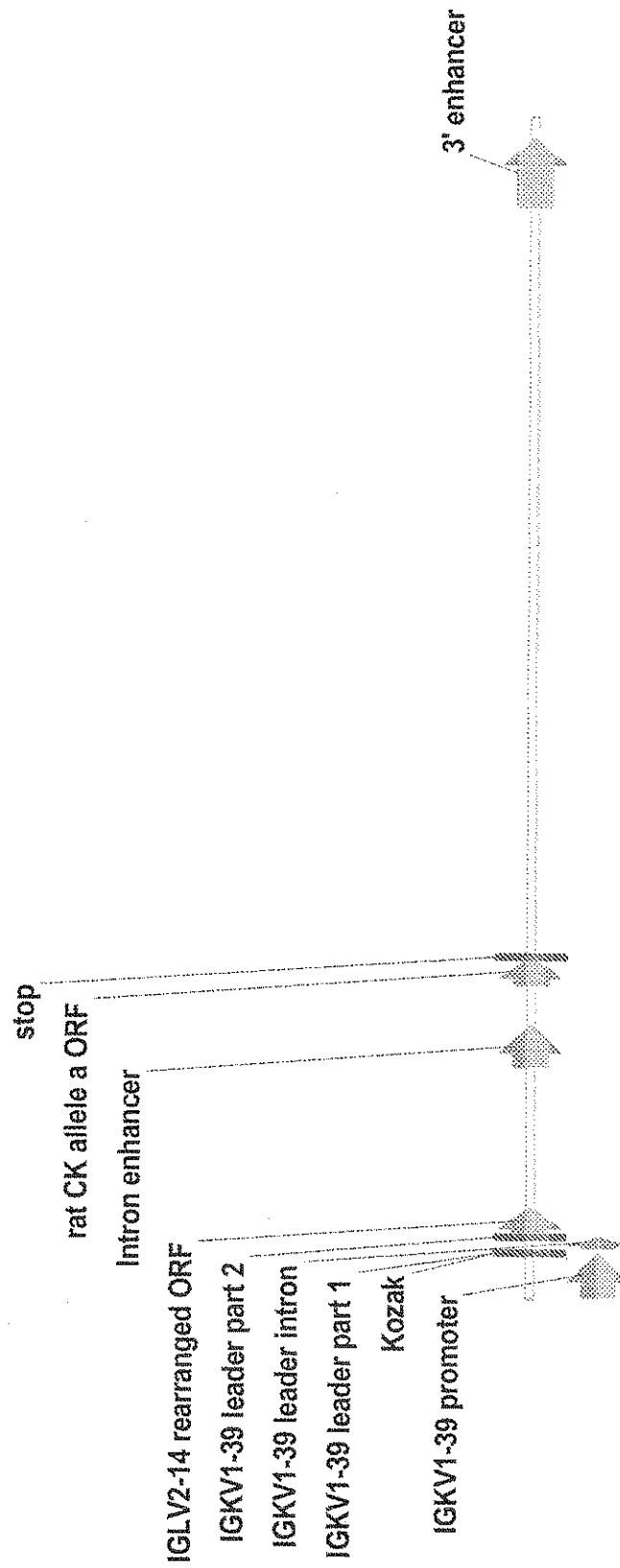


Figure 10

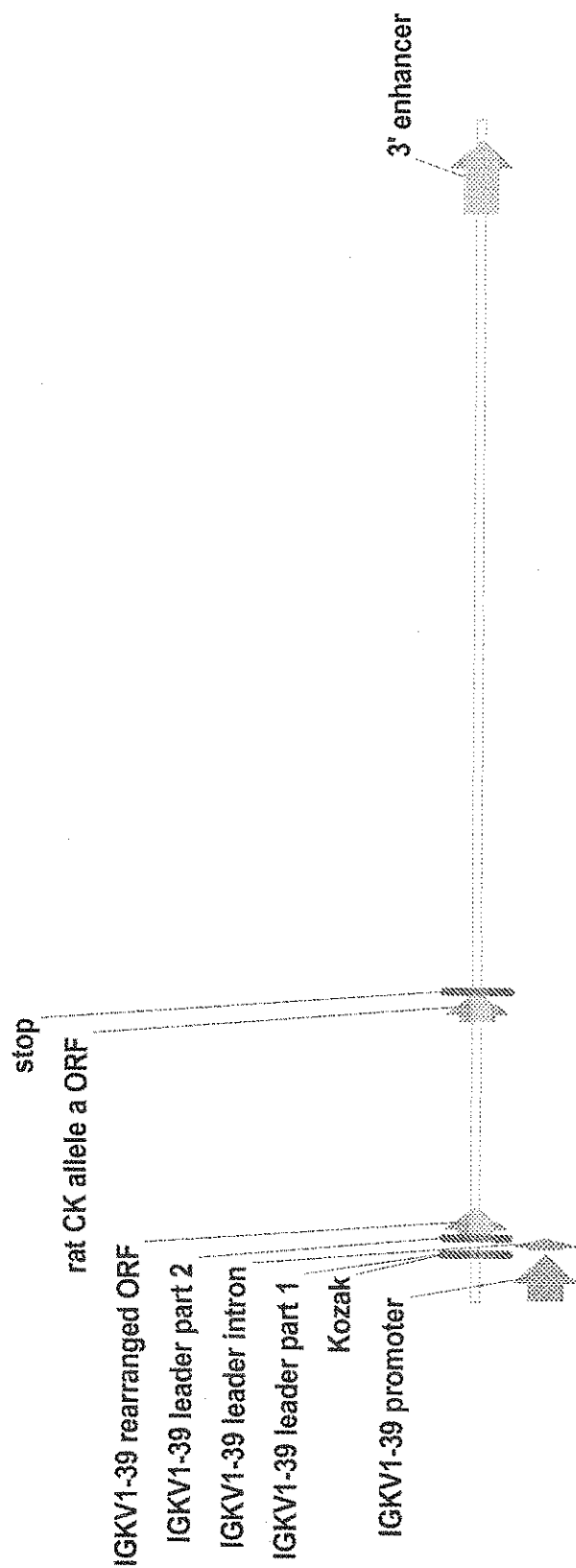


Figure 11

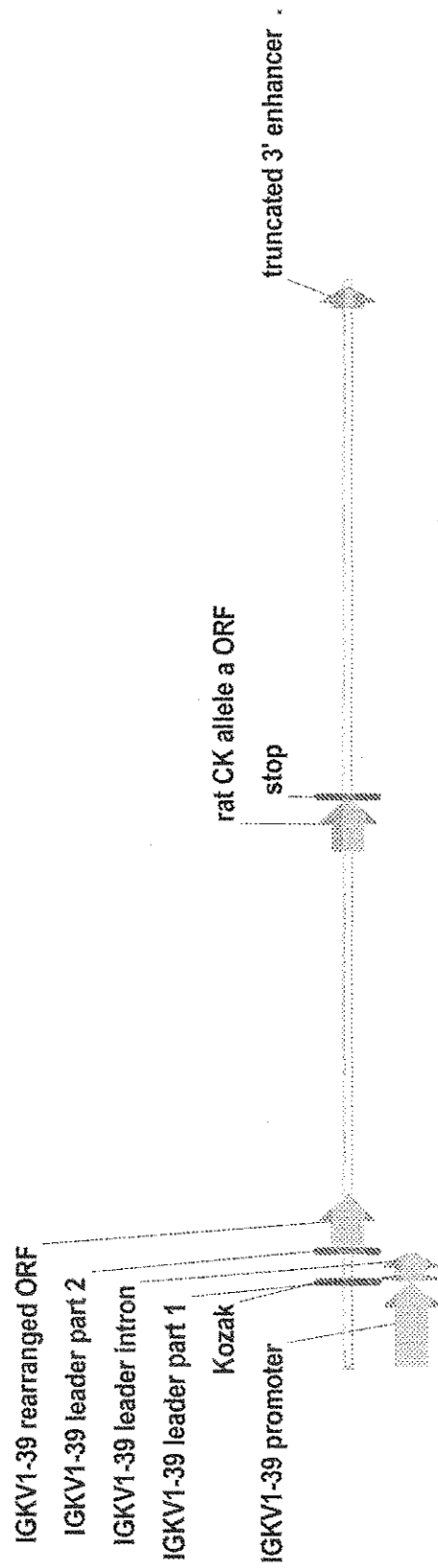


Figure 12

human germline IGKV1-39/J DNA

1 GAC ATC CAG ATG ACC CAG AGC CCC AGC AGC CTG AGC GGC GAC AGA GTG ACC ATC ACC TGC AGA GCC AGC
 79 CAG AGC ATC AGC AGC TAC CTG AAC TGG TAT CAG CAG AAG CCC GGC AAG GGC ACC CTG ATC TAC GCC GCC AGC
 157 TCC CTG CAG AGC GGC GTG CCC AGC AGA TTC AGC GGC AGC GGC TCC GGC ACC GAC TTC ACC CTG ACC AGC AGC CTG
 235 CAG CCC GAG GAC TTC GCC ACC TAC TAC TGC CAG CAG AGC TAC AGC ACC CCC ACC TTC GGC CAG GGC ACC AAG GTG
 313 GAG ATC AAG

human germline IGHV1-39/J Protein

1 DIQMTQSESS LRSVGEDRVIT ITCRASQSSIS SYLNMVQQKP GKAPKLLIYA
 51 ASSLGSGVPE RFGSGSGED FTLLISSLPQ EDFATYYCCQ SYSTPPTFGQ
 101 GDNVEIK

human germline IGLV2-14/J DNA

1 CAG TCT GCC CTG ACC CAG CCC GCC TCT GTG TCT GGC AGC CCT GGC CAG AGC ATC ACC ATC AGC TGC ACC GGC ACC AGC
 79 AGC GAC GTG GGC GGC TAC AAC TAC GTG TCC TGG TAT CAG CAG CAC CCC GGC AAG GCC CTG ATG ATC TAC GAG
 157 GTG TCC AAC AGA CCC AGC GGC GTG AGC AAC AGA TTC AGC GGC AAG AGC GGC AAC ACC GGC AGC CTG ACC ATC AGC
 235 GGC CTC CAG GCT GAG GAC GAG GCC GAC TAC TAC TGC AGC AGC TAC ACC AGC AGC TCC ACC CTG GTG TTT GGC GGC GGA
 313 ACA AAG CTG ACC GTG CTG

human germline IGLV2-14/J Protein

1 QSALTQPAV SGSPGOSITI SGTGTSSDVG GYNVSVWYQQ HPGKAPKIMI
 51 YEVSNNRPSGV SNRFGSKSG NTASLTISGL QAEDADYIC SSYTSSTLV
 101 FGGGTKLTVL

Rat IGCK allele a DNA

1 AGA GCC GAC GCC GCT CCC ACC GTG TCC ATC TTC CCC CCC AGC ATG GAA CAG CTG ACC TCT GGC GGA GCC ACC GTG GTG
 79 TGC TTC GTG AAC AAC TTC TAC CCC AGA GAC ATC AGC GTG AAG TGG AAG ATC GAC AGC AGC GAG ACC GGC GTG
 157 CTG GAC AGC GTG ACC GAC GAC GAC AAG GAC TCC ACC TAC AGC ATG AGC AGC ACC CTG AGC CTG ACC AAG GTG GAG
 235 TAC GAG AGG CAC AAC CTG TAC ACC TGC GAG GTG CAC AAG ACC AGC TCC ACC GGC ACC TTC TTC AAC CCG
 313 AAC GAG TGT

Rat IGCK allele a protein

1 RADAFTVSI FPPSMEQLTS GGATVVCVFN NFYDRDISVK WKIDGSEQRD
 51 GVLDSTVDQD SKDSTYSMS TSLTKVEYE RHNLYTCEVV HNTSSSEFVK
 101 SPNRNEC

Figure 12 contd

IGKV1-39/J-Ck

1 GGT ACC GCG GCC GCC TAG GAA TTT ACT GAC ATG AGA GTG CCC GCG CTC CTG GGG CTC CTG TGG CTC CGA GGT AAG
 75 GAT GGA GAA CAC CAC TAG GAA TTT ACT GAC ATG AGA GTG TCC TCA GGG AGT TTC TCT GAT AAC ATG
 157 ATT AAT AGT AGA AAT ATT TGT TAT GTT TCC AAT CTC AGG TGC CAG ATG TGA CAT CCA GAT GAC CCA GAG CCC CAG
 235 CAG CCG GAG CCG CCG GAG CAG AGT GAC CAT CAC CTG CAG AGC CAG CCA GAG CAT CAG CAG CTA CCT GAA CTG
 313 GTA TCA GCA GBA GCC CCG CBA GCG CCC GAA GCT GAT CTA CCG CCG CAG CTC CCT GCG CAG CCG GCG CCG CAG CAG
 391 ATT CAG CCG CAG CCG CTC CCG CAC CAG CAT GCT GAC CAG CAG CCG CCG CCA GCG CCG CCG CCG CCG CCG CCG
 469 CTG CCA GCA GAG CTA CAG CAC CCC CCG CCA GCG CAC CCA GGT GGA GAT CAA GAG AGC CCA GCG CCG CCG
 547 CAC CCG GTC CAT CTT CCC CCG CAG CAT GGA ACA CAG CTC TGG CCG AGC CAC CCG GGT CTG CTT GAT CAA CAA CTT
 625 CTA CCC CAG AGA CAT CAG CCG CAG CAG CCG CAG CAG CCG GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT
 703 CCA GGA CAG CAA GGA CTC CAC CAT CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 781 GTA CAC CTG CGA GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT
 859 CGA GCT C

IGLV2-14/J-Ck

1 GGT ACC CCG GCC GCC TAG GAA TTT ACT GAC ATG AGA GTG CCC GCG CTC CTG GGG CTC CTG TGG CTC CGA GGT AAG
 75 GAT GGA GAA CAC CAC TAG GAA TTT ACT GAC ATG AGA GTG TCC TCA GGG AGT TTC TCT GAT AAC ATG
 157 ATT AAT AGT AGA AAT ATT TGT TAT GTT TCC AAT CTC AGG TGC CAG ATG TGA CAT CCA GAT GAC CCA GCG CCG CCG
 235 TGT GTC TGG CAG CCC TGG CCA GAG CAT CAC CAT CAG CTG CAC CAG CAG CCG CCG CCG CCG CCG CCG CCG CCG
 313 GTC CTG GTA TCA GCA GCA CCC CCG CCA GCG CCA GCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG
 391 CAA CAG ATT CAG CCG CAG CAA GAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 469 CTA CTA CTG CAG CAG CTA CAC CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 547 CCG CCG TCC CAG CCG GTC CAT CTT CCC CCG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 625 GAA CAA CTT CTA CCC CAG AGA CAT CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 703 GGT GAC CGA CCA GGA CAG CAA GGA CTC CAC CTA CAG CAT GAG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 781 GCA CAA CCG GTA CAC CTG CGA GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT
 859 TTG AGC TAG CGA GCT C

VKP-IGKV1-39/J-Ck

1 GGC CCG CCC ACA TGA AAC AAT GGG BAC CAT GTG ACA ATC ACA GAG GTG TTG TTA TAG CAA AAG GGA TTG TTA CTC
 79 TCC ACA TCC CTT TAA GTA ACT TGA AGG CCT GAT AGA CCC ACC CTC TAA GAC TTC ATT AGA CAT TCC CTA CGA ATG GTT
 157 ATA CTC TCC TGT ATA CTC CCA ATA CAA CTC TAA TTA TTC CAT ATA GTC CTT AGG TTT GTA TTA AAG TTT GAC
 235 TTT TTT CTT TCA AAA TAT CTC TTG TCA CAG CCG CTC TAG AGA GAA ATA CAT TCC CTC CAG GCA AAT CTA TGC TGC
 313 GCT GGT CTG ACC TGG GAC CCG GGG GAC ATT GCC CCG CTC GTG AGT TAC TAA GAT GAG CCA GCG CCG CCG TGC TCA
 391 GGC TGC CCC ATG CCC TGC TGA TTG ATT TGC ATG TTC CAG AGC ACA GCC CCC TGC CCG GAA GAC TTT TTT ATG GGC TGG
 469 TCG CAC CCG GTG CAG GAG TCA GTC TCA GTC AGC AGC CAC CAT GGA CAT GAG AGT GCG CCG CCA GCT CCG GGT CCG
 547 GCT ACT CTG GCT CCG AGG TAA GGA TGG AGA CTA GGA ATT TAC TCA GCC AGT GTG CTC AGT ACT GAC TGG AAC TTC
 625 AGG GAA GTT CTC TGA TAA CAT GAT TAA TAG TAA GAA TAT TTG TTT TTA TGT TTC CAA TCT CAG GTG CCA GAT GTG ACA
 703 TCC AGA TGA CCC AGA GCC CCA GCA ACT GGT ATC AGC AGA GCG CCG CCA AGC TGC TGA TCT TCT AGC CCG CCA GCT CCC
 781 GCA TCA GCA GCT ACC TGA ACT GGT ATC AGC AGA GCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG
 859 TGC AGA GCG GCG TGC CCA GCA GAT TCA GCG GCA GCG GCT GCA GCG CCG CCG CCG CCG CCG CCG CCG CCG CCG
 937 CCG AGG ACT TCG CCA CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG
 1015 TCA AAC GTA AGT ACA CTT TTC TCA TCT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 1093 GAA AAT CTT GAG AAA ATG GAG AGG GCT CAT TAT CAG TTG ACG TGG CAT ACA GTG TCA GAT TTT CTG TTT ATC AAG CTA

Figure 12 contd

1171	GTG	AGA	TTA	GGG	GCA	AAA	AGA	GGC	TTT	AGT	TGA	GAG	GAA	AGT	AAT	TAA	TAC	TAT	GST	CAC	CAT	CCA	AGA	GAT	TGG	ATC
1172	GGA	GAA	TAA	GCA	TGA	GTA	GTT	ATT	GAG	ATC	TGG	GTC	TGA	CTG	CAG	GTA	GGG	TGT	TCT	AGA	CGT	TTA	AGT	GGG	AGG	
1173	TTT	GGA	GGG	GAT	GAG	GAA	TGA	AGG	AAC	TTC	AGG	ATA	GAA	AAG	GGC	TGA	AGT	CAA	GTT	CAG	CTA	AAA	TGG	ATG	TGG	
1174	GAG	CRA	ACT	TTG	AAG	ATA	AAC	TGA	ATC	ACC	CAG	AGG	ATA	AAG	CAA	CSC	AGA	TCA	AAG	AGS	GGC	CTG	GAG	CTC	TGA	
1175	GAG	AAG	GAG	AGC	ACT	CAT	CCG	TGT	TGA	GTT	TCC	ACA	AGT	ACT	GTC	TTG	AGT	TTT	GCA	ATA	AGA	GTG	GGA	TAG	GAA	
1176	GTG	AGC	CGT	AGG	CTG	AGT	TCT	CTC	TTT	TGT	TCT	CTC	ATA	AGT	TTT	TAT	GAC	TAC	AAA	AAT	CAG	TAG	TAT	GTC	TGA	
1177	TCA	ATG	AGC	TGT	TTG	AAA	GTA	TGA	CTG	CTT	GCC	ATG	TAG	ATA	CCA	TGG	CTT	GCT	TGA	TGA	ATA	CAG	GTC	AAA	TAA	
1178	TTA	TTA	AAT	TTG	TCA	CAA	AAT	GTC	ATA	AAA	ATG	AGA	GAC	TCT	GTA	GGG	AGT	CGT	CCT	TGA	ACA	GAT	CAA	GAG	GTT	
1179	TTT	TTT	CTT	TGT	CTC	ATT	TCT	ACA	TGA	ANG	TAA	ATT	TGA	AAT	GAT	CTT	TTT	TAT	TAT	AMG	AGT	AGA	AAT	ACA	GTT	
1180	TTT	GAA	CTA	TAT	GTT	TTA	ATG	GGC	AGT	GTT	TTG	TAA	GGT	TTT	TGG	TCC	TTT	GTT	TCT	CCA	GTT	ACT	CGA	TTG	TAA	
1181	TTT	TAT	ATC	GCC	AGC	ATA	GAT	GGA	CTT	GGA	CCG	TCC	ACA	ACC	TCT	TTA	CAA	CTG	GCT	GGC	ACT	GCG	GCT	GTG	CCT	
1182	ATT	TGG	CGT	TCA	CCC	TGC	TGC	CGC	TAA	GGG	CCA	TGT	GAA	CCC	CGG	TAG	CAT	CCC	TTG	CTC	CGC	GTG	GAC	CAC	TTT	
1183	GAG	GCA	CAG	TGA	TAG	GAA	CAG	CAC	TAA	TCT	GAA	GAG	AAC	AGA	GAT	GTA	GAC	TAC	ACT	AAT	ATG	AGA	AAA	ACT	AAA	
1184	AGC	AAA	GGG	TGA	CTT	ATT	GGA	GAT	TTT	AGA	AAT	AAA	ATG	CAT	TTA	TTA	TAT	TCC	CTT	ATT	TTA	ATG	AGA	AAA	ACT	
1185	GGA	ATT	AGA	AAG	GGC	ATA	AAC	TGC	TTT	ATC	CAG	TGT	TAT	ATT	AAA	AGC	TTA	ATG	TAT	ATA	ATC	TTT	TAG	AGG	TAA	
1186	CTA	CAG	CCA	GCA	AAA	GTC	ATG	GTA	AAT	ATT	CTT	TGA	CTG	BAC	TCT	CAC	TAA	ACT	CCT	CTA	AAT	TAT	ATG	TAA	ATG	
1187	CTG	GTT	AAA	TTA	ATA	TAA	AAT	TGT	GAC	ATC	ACC	ATA	CTT	TAA	TCT	TGT	GAT	AGA	AAA	ATG	TTT	ACA	TGC	AAA	AAT	
1188	CCA	TAA	TTT	TGA	AAA	CTA	TTT	ATT	AGC	TTT	TGT	TGA	CCC	TTT	TGT	TGA	CCC	TTC	CCT	AGC	CAA	AGG	CAA	CTA	TTT	
1189	AAA	CTC	TTG	AAA	CTA	CTT	TAG	AGT	CAT	TAA	GTT	ATT	TAA	CCA	CTT	TTA	ATT	ACT	TTA	AAA	TGA	TGT	CAA	TTT	CTT	
1190	TTT	TAT	TAA	TTT	ATT	TTA	AGG	GGG	GAA	AGG	CTG	CTC	ATA	ATT	CTA	TTG	TTT	TIG	TGA	AAA	TGA	TGT	CAA	TTT	CTT	
1191	TTT	TAT	TAA	CTT	CTG	TCA	CCC	ATA	AGG	TGG	CAT	CTC	AAC	GGG	GAC	TTT	CCG	AGA	GGC	GAC	TTT	CCG	AGT	CTC	TGG	
1192	GAT	CAG	AAG	TGA	AGT	CTG	CCA	GTT	CCT	CCC	AGG	CAG	GTG	CCC	CAG	ATT	ACA	GTT	AGC	CTG	TTT	TGG	TGT	GCT	TAA	
1193	TTG	TCC	CAT	GTT	ATA	AAC	ACT	TAG	ACC	AGG	CTG	TGA	TGA	ATT	GCT	CAG	AAT	ATT	CTC	AGC	CAC	CAA	AAT	ACA	GAC	
1194	CCT	GCG	TTA	AGG	CCC	TGT	CCA	TAC	AGT	AGG	TTT	AGC	TTG	GCT	ACA	BAG	GAA	GCC	ATA	CAG	AGG	CYA				

Figure 12 contd

4915	TTTT	AAA	ATT	AAG	AGA	GAC	ATA	AGT	TTT	GAG	GTA	GCA	AGA	TGG	AAA	CTC	TGG	GGC	TTG	GGG	AAT	GTT	CTG	TCT	CTC	TGT
4931	ATG	GGA	TGT	GAA	AGT	TAC	TAT	TGT	GGA	ATT	GGG	ATC	TAT	GTT	CTT	CUT	GTA	TAT	ATT	GTA	TAC	TTC	ATA	ATA	ACT	TCA
5071	CCT	AAA	GAA	ATA	TCT	AAT	ACC	CAG	TGC	ATA	CAT	AAA	AGA	GGA	TGA	ATC	ATA	CGT	CAA	GGC	CAG	AAA	GAC	AAA	GAC	
5149	AAT	AAA	GTA	GCG	GAT	CCA	GGA	TCA	AAT	CTC	CCA	CAA	CCT	TGA	GCC	TTT	TAC	TAT	GAT	GAT	TTC	CAG	AGC	TCA	AGT	TAC
5227	AAA	ACA	CAT	AAT	TCA	AAC	ACA	TGA	TCC	CTC	CTT	GGG	GTC	TCT	TCC	TTT	ATG	CAT	CGA	AAT	AGA	AAT	AGC	CAI	ATA	TAA
5305	AAT	GAG	ATA	GGA	GAG	ACT	ATC	AAC	AGG	TCA	AAG	AAT	ATA	GCT	AAT	TTT	GTC	TGG	GTA	TGA	AGA	GCC	CAC	GTA	TOA	
5383	AAG	GTT	ACA	TTA	GGG	AAG	GAA	GAG	GAC	ACT	AAC	AGT	GAC	TTT	CAT	TCT	CCC	CCT	CTT	CGA	GGC	CCC	TGC	ATA	TAG	
5461	TCC	CTC	GTG	GGC	TCA	TCC	ACT	CAG	CAC	ACA	TTT	ACT	AAG	CAT	CTT	CTC	AGC	CTA	GAC	TCT	GAA	GGC	AGT	GAA	TAA	
5539	TGT	TAG	TGT	CCC	TTT	CCC	CAG	TTA	ATA	TGC	AGT	CCA	GTT	TCC	CTG	CTC	CTT	CCC	TTT	CTC	AGT	CCA	CAT	AAG	GAT	
5617	GGG	AAA	GGG	CAG	TOA	CCA	AAT	AGG	AGA	GGG	CAA	CCC	TTT	GCC	TTT	CTA	CTT	CTT	GAG	AAT	GTA	CAI	TAT	TAT	CCA	CTT
5695	TTT	GA	ACT	TCT	TTT	ATT	TAT	TGC	TTT	TTT	TTT	TTT	TTT	TTT	AAA	TAG	CAT	CAT	CTT	GTT	CAT	CCA	TTT	CTG	GGG	ACT
5773	AAA	TTT	ATC	AAT	CAA	CAG	TGC	CTC	TAA	TCT	GGC	TAT	TAA	TAC	AAA	AAT	GCC	TCC	TCA	AAA	TAT	ATA	TGT	TGC	AGT	CTT
5851	ATT	TAA	AAC	AGA	ACC	CAC	AAT	AAA	AAA	GAA	GAA	AAA	ATA	CTA	TTT	TAT	ATA	ACA	CTG	AAA	TGA	TAC	CAT	CTT	GTG	CTT
5929	TGT	GA	AAA	AAT	ATA	ATC	TAA	TGT	CAC	ATC	ATG	CTG	TCT	TTT	TAT	TAA	ATA	ACA	CTG	AAA	TGA	TAC	CAT	TGA	CAA	GAA
6007	AGA	GGG	CAG	ACT	ACT	GAT	ACT	AGG	ATC	TAG	GGA	TGT	TAC	AGA	TAA	GAA	TAA	TGT	GAC	AAA	TGA	TAC	CAT	TGA	CAA	GAA
6085	GGG	TCT	TCA	AGG	TOA	CAG	AAT	CAC	TGT	CTT	GAT	TTC	AGT	GGT	GCT	TAC	ATA	CAT	TTA	AAT	ATG	TGA	TAA	AAT	GTT	GTT
6163	GAA	CTA	TAT	TCA	TAT	ATT	GTA	ACA	ATG	TCA	AAT	GAT	TTC	AGT	GCT	TAC	ATA	CAT	TTA	AAT	ATG	TGA	TAA	AAT	GTT	GTT
6241	TGG	ACA	RAG	AAT	ATG	TTT	ACA	TCA	TCB	AGG	CCA	TAT	TTG	TTA	TTG	TTA	OGA	ACA	TTA	AAT	ATG	CAC	TAT	ATA	ACT	ATT
6319	CTA	AUG	AAA	AGC	CAT	TTT	GTG	TGC	CTT	GGC	ATA	TCA	TGC	CTA	AGC	TGT	CAC	CAG	ATA	CAT	AAA	ABC	CAT	TTT	GGA	TAA
6397	CAG	ABG	CAA	GCC	CTT	GCC	CAG	CAA	GCA	GGC	AGC	GAT	AAG	AGC	TAA	ACC	CAG	GAC	AGG	CCA	TGA	TAT	GCT	AAT	GAA	
6475	CTA	CCT	TOA	AGG	TGT	TGT	TGC	TGA	CTT	AGT	GAA	CCA	GCC	AGC	TGT	GAT	GCC	CCC	CAA	TAG	CAC	AAA	GCT	ACT	GCC	CAA
6553	AGA	AAT	TAT	ACA	AAT	ATG	AGA	ACT	TTG	GGG	ATG	GTG	AGG	ATC	GCT	CTG	CAT	TAG	CAC	TGG	BAC	ACA	GCT	TCT	CTA	
6631	TGTT	TTT	GTA	TTG	ATB	CCA	GTC	TAG	ABG	CTT	CCA	AAA	CTT	TCT	CAC	TGA	AGA	TAT	CCC	ATG	TGG	BAC	CCC	TAT	AGA	
6709	CTC	TCT	TGC	CCA	AAC	AAC	TGC	TCT	CCCT	GGT	GTC	ATA	TTG													

Figure 12 contd

8659 TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC
 8737 TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC TCT TCT GCC
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 8993 AGT AAT CGC AAG TTG TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 8971 TTG CTT TGC TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT TTT GCT
 9049 GGG GAG GGA GGG TGG AGA AAG AAT CTT ACT ATG AAG CTC TGA CTG TCC TGG GAA CTT ACT ATA TAG ATC AGG CTT GAT
 9127 TCA ACT CAT AGA GAT CAT CTG CTT TCT TCT GCC TCC CAA GTG CGA ATA AAG GCA TAC ACC TCC ATG CCC AGA TAG TGA
 9205 TCC CAA GTT TTA GCA AAA GTT TCT TCT AGA CTT TCA GAG AAT AAT CAA TGG AGA TAG ACA CAA AGA ACT AAT GTG
 9383 GAG TTT ACC TGA ATC ATA CTC TAT ACT TTA TCA GAG AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT
 9361 CAT TCA ATG GCA GTG TTT GCC ATC AIG CAT AGG CTT AGT CTT CAG TGC TGA AAG GCA TGG GGG GCA ATA TTA CTC ATT
 9439 ATA CAG ATG AGA AAC TGG GAA AGA CTT GCC TCA GAT TCT CTA CTG AAA GGC TGA GTT TGT GGC TTT GAT AAA ATC TTT
 9517 TAC TTT CAA TAT TTT TTA TGT ATA ATT TTT TTA CCA CTG ATT TTA TTT ATT TTT AAT TAT AAG AAA TAA
 9595 ATG CAA TAA ACC AAA TAC ATG GAC AAA ATA CAA GAA TCA TAT GAT CAT CTC CAT GAT GGA AAA AAA GAA AGA
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 9751 AAA GCC CCC TAT ACC TTC CCG TGC CTT GCT CCC CAA CCC ACC CAC TCC TGC TTT CTG GGC GCA TTC CTC TGT ACT
 9829 GAG GCA TAT GAT CTT CAA AAA ACC AAG GGC CTC TCC TCT CAT TGG TGG CCG ACT ATT AGG CCA TCT TTT GCT ACA TAT
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 9985 CTC CTT GGA TAC TTT CTC TAG TTC CTT CAT TAG GGG CCG TGT GTC CCA TCC AAT AGA TGA CTG TGA TCC ACT TCT
 10063 GTA TTT GCC AGG CAC TGG CAT AGC CTC ACG AGA AAG AGA GAG CTA TGT CAG GAT CTT GTC AGT AAA ATC TTT CTC GCA
 10141 TAT GCA ATA GTA TCT GGG TTT GGT GGT TGT ATA TGG GAT GGA TCC CCA AGT GCA GTC TCT GAA TGG TCC CTC CTT
 10219 CCA TCT CAG CTC CAA ACT TTG TCT CTA TAA CTC CTT CCA TGG GTA TTT TGT TCC CCA TTC TAA GAA GGA GTG AAG AAT
 10297 CCA CAC TTT GGT CTT CTT TCT TCT TGA TAT TCA TAT TCA TAT TCA TAT TCA TAT TCA TAT TCA TAT TCA TAT TCA TAT
 10375 TAT CAG TGA GTG CAT ATC ATG CGT GTT ATT TTG TGA TTA GTT TAC TCT ACT CAG GAT GAT AAT CTC CAG CAT CCA
 10453 TTT GCC TAA GAA TTT CAT TAA TTT ACT GTT TTT AAT TGC TGA ATA GTA CTC CAT TGT GTA AAT GTA CCA CAT TTT CTG
 10531 TAT CCA TTC CTC TGT TGA GGG GCA TCT GGG TTC TTT CCA GCT TCT GGC TAT TAT AAA TAA GGC TGC TAT GAG CAT AGC
 10609 GGA GCA TGT CTC CTT ATC AAG TTG GAA CAT CTT CTA GGT ATA TGC CCA GGA GAG TTT CTG GAT CTT CCG GTA GTA
 10687 CCA TCA ACA TGC ATT CTT AAT AAA AGC CCT AGA ACA AGG AGG ACT GTA GGA AAC ATA TTC CAA CAT AAT AAA GGT TAT
 10765 GTA TGA CAA ACT CAT GAC CAA TAT CAT CTT AAA TGC ATG AAA CCA TTA ATA AGC TCC ATT AAA ATC AGA GGA CTG CCC
 10843 ACT ATC CCT ACT TCT CAT CCA TAA TGA GAT TGA AGC ATT AGC TGG AGC AAT AAG GCA AGA GGA GAT AAT CAA ATG GGA
 10921 AAA TAT TAA GTC AAA TTG TTT TCA AAT GAA GAT TAT AAT ATC TTA TAC CCA ATG ACC TCA AAT TTT GAC TAG AAA AAT
 10999 TGT AGA AAT TAT CAA TAA TTT CAG CAA AGT GGT ATG ATG CAC CAT CTC CTT CTT CTC CCC ACC TTC TGC TTG CTT
 11077 CTC TCT TCT TGC TCT TCA TCC TTT CTG TCC TTT CAG CAA AAT GAT CTA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA
 11155 CTC CTG TGA CTG AGT ATC TCA TCC TTT CTG TCC TTT CAG CAA AAT GAT CTA CCA CCA CCA CCA CCA CCA CCA CCA CCA
 11233 CTC TCT ACA TAG ACT CAA GAA AAT GAC AGG GAG GAT ATA ATG AAG TGG GGA AGG CTG ACA TTA GCA TTG CTC
 11311 CTG TGT GGC TCC TTA ATT TCT CAT ACT TCA CAC TGA GAT TAT AAT AAT TAT AAT AAT AAT AAT AAT AAT AAT AAT
 11389 AGG TTC TCA TAT TTG AGT GTT ATA GAA TGA GTA GAG CAG TAG TTC TCA AAC TAT GGG TCA TGA CTC CTT TAT GGG TCA
 11467 AAC TAC CTT TCA CAG GTT GCA TAT CAG ATA TCC TAA TTT TAT ATA CAT ATA TAT ATG CAT ATG TAT ATA TAT ATA
 11545 TTT CAC AAC AGT AGG AAA ATT ATT TAG TAA TCA TTT TAT AGT TGT GGG TCA TGG CAA CAT GAG GAA CTG TAT TAA AGG
 11623 GTT GCA GCA TTA GGA ATG TTG AGA CCC ACT GTA ATA GAG AAT GAG CTT TAA GGC AGG GCT ATA AAG CCC AAT GGA CCA
 11701 TGT GCC TTT TCC AAC ATT TGC CAC ATG GTA AGC TCT GTA TAG ACT TTT TAA AGA ACA TTG GTT TGT AAT TTT AAA TGG
 11779 ATA AGG GTC TTC ACT GTC TAT CAC CCA TAT ATA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA
 11857 AAT CCT CAA CCT AAG ACA TAG CAG TGA AAC ATT GAT GAC CAA ATA GGA AAT CCA TGT AGA GAC CTT CTA TCT TCT GAT
 11935 GGC TCC ACA GGC ACC ATC TTG CAA CAG AGT TCT ACT TTG CTA CCA GTA ATG AAT ACA GTG TCT CAA CTC CTG CCA TTG
 12013 AAT CTT CAG GAA GCC CCT GAA ATG ACT TGT ACT ACA CCA CCA TTT CTT AAA GAC AGA AAA GCT AAG ACT TAG AGG GAA TAA
 12091 ATG TCA TGC CTG AGA TCA TGC AAC CAA TAT AGT CCA ACT CAG CCA TAT CAG GCA CAA TTT CCA AAG ACT TAG AGG GAA TAA
 12169 CCT TCA CTT CTT GTG TAT GGT TGC TGA TTC CCG AAG CAA AGT ATC GAT GAA TAT CCA TAT CCA TAT CCA TAT CCA TAT
 12247 AAA TCA AAT GTC TCA TTT AAC AGA TTA GGA GAT GAA ACG GTA GAC TCT GTG TAG TAC ACC CTT GTG AIC CCA TCG
 12325 CTA GGA AGA CTG AGG CAG GAA GTC CTC GAG CTC AAA CCA GCT TAG GCT ACA CAG AGA AAC TAT CTA AAA AAT AAT TAC

Figure 12 contd

12403 TAA CTA CTT AAT AGG BGG TTG GAT GTT AAG ATC TGG TCA CTA AGA GGC BGA ATT GAG ATT CGA AGC CAG TAT TTT CTA
 12481 CCT GGT AAG TTT TAA AAT GCA GTA AGG ATC TAA GTG TAG ATA TAT AAT AAG ATT CTA TTG ATC TCT GCA ACA ACA
 12559 GAG AGT GTT AGA TTT GTT TGG AAA AAA ATA TTA TCA GCC AAC ATC TTC TAC CAT TTC AGT ATA GCA CAG AGT ACC CAC
 12637 CCA TAT GTT CCC ACC ACC CAT CCC TAC CAG ACT GAT TGA TTT TGA TGG TGA GAA GAT TGA AAA AAG
 12715 TAA TGC TAG CTT ATT GGG AGT GTC CCA TAG ACC AAG ATA GCT ACC GTC ACA CTG CTT TGA TCA AGA
 12793 AGA CCC TTT GAG GAA CTG AAA ACA GAA CCT TAG GCA CAT CTG TTG CTT CGC CCA TCC TCC AAC AGC CTG GGT
 12871 GGT GCA CTC CAC ACC CTT TCA AGT TTC CAA AGC CTC ATA CAG CTG CTC CTT ACC CCA GCA CCT GGC CAA GGC TGT ATC
 12949 CAG CAC TGG GAT GAA BAT GAT ACC CCA CCA CTT TGT TTT ATA TTA CTT TAT CAC AAG CCA GGC CAG GTT AGT CCC CAG
 13027 TCC CAA TGC TTT TGC AAA GTC AAA ACT CCA CCA CTT GTC ATA ATC AGT ATC CTT GAA GAG TTC TGA TAT GGT CAC TGG GGC
 13105 CAT ATA CCA TGT AAG ACA TGT GGA AAA GAT GTT TCA TGG GGC CCA GAC AGC TTC TAG AAG TAC CTG AGA GTG GCA AAA
 13183 AAT AGT TGT GCT AAA TAG TTT GGC CAT CTT TAG GCT GAG AGA CTA GCA AAT ACA GCG ATG GAC TAT ATC AGC ATT GCA
 13261 GGA TAG TTG TCA GTA AAC ACC CCA CAA CCC ATA ACA GAA GTA TTC TCT TCT TTC TAT ATC CCT TTT CCA TCC ATG TAG
 13339 ATG GCT GTC TTC ATA TTT GTT CTA GAC GGC CGG CC

VKP-IGKV1-39/J-Ck-A1

1 GGC CGG CCC ACA TGA AAC AAT GGG AAC CAT GTG ACA ATC ACA GAG GTG TTG TTA CTA TAG CAA AAG GGA TTG TTA CTC
 79 TCC ACA TCC CTT TAA ACT TGA AGC CCA GTT TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA
 157 ATA CTC TCC TGT ATA CTC CCA ATA CAA CAG CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA
 235 TTT TTT CTT TCA AAA TAT CTC TCG TCA CAA CAG CCG CTC TAG AGA GAA ATA CAT TCC CTC CAG GCA AAT CTA TGC TGC
 313 GCT GGT CTG ACC TGG GBC CCT GGG GAC ATT GCC CTT GTG CTG AGT TAC TAA BAT GAG CCA GGC CTG CAG CTG TGC TCA
 391 GCC TGC CCC ATG CCC TGC TGA TTG ATT TGC ATG TTC CAG AGC ACA GCC CCC TGC CCA GAT GAA GAT GAT GAT GAT GAT
 469 TCG CAC CCT GTG CAG GAG TCA CTC TCA GTC TCA GTC TCA GTC TCA GTC TCA GTC TCA GTC TCA GTC TCA GTC TCA GTC
 547 GCT ACT CTG GCT CCG AGG TAA GGA TGA GGA TGA GGA TGA GGA TGA GGA TGA GGA TGA GGA TGA GGA TGA GGA TGA GGA
 625 AGG GAA GTT CTC TCA TAA CAT GAT TAA TAG TAA GAA TAT TTG TTT TTA TGT TTC CAA TCT CAG GTG CCA GAT GTG ACA
 703 TCC AGA TGA CCC AGA GCC CCA GCA GAT TCA GCG GCA AGC CCG GCA CCG CCA AGC TGC TGA TCT ACG CCG CCA GCT CCC
 781 GCA TCA GCA GCT ACC TGA ACT GGT ATC AGC AGA AGC CCG CCA AGC TGC TGA TCT ACG CCG CCA GCT CCC
 859 TGC AGA GCG GCG TGC CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA
 937 CCG AGG ACT TCG CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA CCA
 1015 TCA AAC GTA AGT ACA CTT TTC TCA TCT TTT ATG TGT AAG ACA GCT ACA GCA CCC CCA CCA CCA CCA CCA CCA CCA CCA
 1093 GAA AAT CTT GAG AAA ATG GAG AGG GCT CAT TAT CAG TTG ACG TGG CAT ACA GTG TCA GAT TTT CTG TTT ATC AAG CTA
 1171 GTG AGA TTA GGG GCA AAA AGA GGC TTT AGT TGA GAG GAA AGT AAT TAA TAC TAT GGT CAC CAT CCA AGA GAT TGG ATC
 1249 GGA GAA TAA GCA TGA GTA GTT ATT GAG ATC TGG GTC TGA CTG CAG GTA GCG TGG TCT TCT AGA CGT TTA AGT GGG AGA
 1327 TTT GGA GGG GAT GAG GAA TGA AGG AAC TTC AGG ATA GAA AGG GGC TGA AGT CAA GTT CAG CTC CTA AAA TGG ATG TGG
 1405 GAG CAA ACT TTG AAG ATA AAC TGA ATG ACC CAG AGG ATG ARA CAG CGC AGA TCA AAG AGG GGC CTG GAG CTC TGA GAA
 1483 GAG AAG GAG ACT CAT CCG TGT TGA GTT TCC ACA AGT ACT GTC TTG AGT TTT GCA ATA ABA GTG GGA TAG CAG AGT TGA
 1561 GTG AGC GGT AGG CTG AGT TCT CTC TTT TGT CTC CTA AGT TTT TAT GAC TAC AAA AAT CAG TAG TAT GTG CTG AAA TAA
 1639 TCA TTA AGC TGT TTG AAA GTA TGA CTG CTT GCC ATG TAG ATA CCA TGG CTT GCT GAA TBA TCA GAA GAG GTG TGA CTC
 1717 TTA TTC TAA AAT TTG TCA CAA AAT GTC AAA ATG AGA GAC TCT GTA GAG AGC CCA TGA CAG ACA GCT CAA GGG GTT
 1795 TTT TTC CTT TGT CTC ATT TCT ACA TGA AAG TAA ATT TGA AAT GAT CTT TTT TAT TAT AAG AGT AGA AAT ACA GTT GGG
 1873 TTT GAA CTA TAT GTT TTA ATG GCC AGG GTT TTG TGA GAT TTG TCA CCA ACC TCT TCT TCT TCT TCT TCT TCT TCT TCT
 1951 TTT TAT ATC GCC AAT GGA CTG AAA CAG TCC GCA ACC TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT
 2029 ATT TGG CGT TCA CCC TGC CGC TAA GGG CCA TGT GAA CCC CCG CCG TAG CAT CCC TTG CTC CCG GTG GAC CAC TTT CCT
 2107 GAG GCA CAG TGA TAG GAA CAG AGC CAC TAA TCT GAA GAG AAC AGA GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT
 2185 AGG AAA GGG TGA CTT ATT GGA GAT TTC CCA GAT TTC CCA GAT TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA
 2263 GGA ATT AGA AAG GGC ATA AAC TGC TTT ATC CAG TGT TAT ATT AAA AGC TTA ATG TAT ATA ATC TTT TAG AGG TAA AAT
 2341 CTA CAG CCA GCA AAA GTC ATG GTA AAT ATT CTT TGA CTG AAC TCT CAC TAA ACT CCT CTA AAT TAT ATG TCA TAT TAA
 2419 CTG GTT AAA TTA ATA TAA AAT TGT GAC ATG ACC TTA ACT GGT TAG GTA GGA TAT TTT TCT TCA TGC AAA AAT ATG ACT

Figure 12 contd

2497	AAAT	AAAT	AAAT	TTTA	GCBA	CAAA	AAA	TAT	TTT	CCCA	ATA	CTTT	TAAA	TTT	TGAT	AGAA	ABAA	ATGG	TTTT	EAC	TCOA	GCT	ACT	ATA	ATC		
2595	CUA	TAA	TTTT	TGAA	AAA	CTTA	TTTT	ATTT	TGGG	CTTA	CAC	CAAA	AGGA	AAG	CCA	TAC	AGA	GGC	TAA	TAT	CAG	AGT	ATTT	CTTT	GGGA	AGA	
2653	GAC	AGC	AGA	AAA	TGA	AAA	CCCA	TTTT	TCT	GCT	CTTT	ACC	TTA	TGTT	GCT	TGTT	GTT	CAG	ACT	CCC	AAA	CAAT	CAG	TAG	TGTT	GAA	
2731	ATA	AGC	TGG	TCT	GAA	TCTT	CTTG	TCT	GAA	GCA	TGG	ATGA	AAA	GAA	TTTT	AGTT	TTTC	AGG	GAA	AGG	CAA	TAG	CAG	TAG	AAA		
2809	GCC	TGA	GAA	TAT	CTTT	CAAA	AGG	GTC	AGA	CTTC	AAAT	TTA	CTTT	TCT	AAA	GAA	GTA	GCT	AGG	AACT	TAG	GGTA	ATA	ACT	TAG	AAA	
2887	CAA	ACA	GAAT	TGAT	ATTA	GTG	CAAT	CCT	GGC	CCC	AAAT	TTA	CTTT	TCT	AAA	GAA	GTA	GCT	AGG	AACT	TAG	GGTA	ATA	ACT	TAG	AAA	
2955	TAT	ATA	ACA	TAA	CTG	TTTT	ACCA	CAAT	AAAT	ACCA	CTGA	CTTT	AAA	TGG	AGC	CCT	TCC	TTTG	TTTA	CTTT	CAAT	ACC	ATTC	TGTT	TGTT	TGTT	CTC
3043	TTTC	CTC	AGG	GGC	GGG	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC
3121	CGGT	GCT	CTG	CTTT	GGT	GAA	CAA	CTTT	CTTA	CCCA	CAG	AGGA	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	CAAT	
3199	CGGG	GCT	GCT	GGG	CAG	GCT	GAC	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	CGA	
3277	GCT	GGA	GTA	GCA	GAG	GCA	CAA	CCT	GTA	CAG	CTGG	CGA	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	
3355	CAA	COG	GAA	CGA	GTG	TTTG	BAAG	ACA	BAAG	GTC	CTGG	AGA	CGC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	CAC	
3433	AGG	CTT	TGG	AGG	CTT	CCC	CAC	AAAG	CGA	CTT	ACC	ATTT	GTT	GGG	GTGG	CTTC	CAAA	ACC	TCC	ACT	TGG	CTC	GGT	GGT	GGT	GGT	
3511	CCT	CCC	TTTT	CTT	TGG	ATTT	TTTA	TCCA	TGCT	TAA	CTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	
3589	TGTT	CTT	TCT	TAC	TAA	ATTT	GTA	GTA	AAT	AGTT	TGTT	TTTT	TCC	AGTT	TAC	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	
3667	GTT	GCC	CTGG	AAA	TCC	ACC	ACCA	CTTT	AAAT	GGTA	TAA	ATA	AAA	CCC	TCC	ACT	TGG	CTC	GGT	GGT	GGT	GGT	GGT	GGT	GGT	GGT	
3745	TTTT	TTTT	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC	
3823	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	
3901	CCC	AGT	AAA	CTT	GGC	GAA	GCA	AGG	TAG	AAAT	CAAT	TAT	CAC	AGG	AAAG	ACA	AGG	CAAA	CCT	AAA	TGTT	GCA	AGT	AGG	AAA	AAA	
3979	ATG	TGG	BAG	CCC	ATC	ATA	GTA	CTTT	GGA	CTTT	CAAT	CTG	CTTT	TTTG	TGCT	CTTT	CAC	TAA	GTT	TTTT	AAA	CAAT	GAG	CTGG	GCT	GCT	
4057	ATC	TGG	CAAT	TGG	CAA	GGC	TGG	GCA	CTA	CCC	AGCA	ACC	TAC	TTT	AAAG	GAC	CTC	TAT	ACC	GGTA	TTA	CAC	ACA	TAC	ATC	ATC	
4135	AAA	ATTT	TGG	GAA	AAAT	TGCT	TAC	CAA	GCT	AGCA	AGCA	ATTT	ATA	AGG	AGCA	ATTT	AAA	CTGG	GAT	ACA	ACC	AAA	ATGG	ATC	ATC	ATC	
4213	TAA	GAB	GCA																								

Figure 12 contd

6241 ACA ACT GCT TCC CTC CTG GTG TGA TAT CTG TTT TGC TTT TAT TAT GGT ACC ATA ATA TTA TGA GGA ATG TTT GTG TGA ATA
 6219 AAC CAA ACA TAT TTT AAA AGC AAA TAT TGT ATG CAC ATC CTA ATT GCT AAA TAG TTT ACA GCT AAT AGT CCC ATG CTC
 6397 TCC ACA ATA CTG GAT CCA AAT ANG TCC TAA TTT CAA TGT TGG GCA TCT TTA CAG AGA GAA AGA CAT TAA AAA TGA AGA
 6475 GAC ATG CAG AGA GTG CAG CAT GCC ATC ATG AGC GAG GTA TGA AGT GGT TTC TCC CTC AGA GTA TCC AGA GGA GAC TAA ACC AAC CAA CAC
 6553 TCC AGA ACC CAC CAA AGG AAG GAG AGA AGG AGT GGT TTT CAA TGT TGA GGT TTT CAA AGA GGA TTA AGG ACT
 6631 CTT TTT GCT TAA GAC TTC TTG CTT TCA GGA CTG TGA GAA GGT AGC TTC CTA TTG TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA
 6709 TTG TTA AGG TAG AGT CAA GAA ACC AAT AAA ATG CAG ACA GAC AAA AGG ATA GCT GAG TTT TCC AGG CCC TTC CTT CTT
 6787 ATT TTT GGT TTT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT GGT
 6865 GGG GTT TTT TTG TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 6943 TTT TTG TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 7021 TCA CAG GGG ATC CTC TTA TTT CAA ATG AGC AGT AGC TCT CCA TTT TTA GCT CTT ATT TAT TCA TTT ATT GTC TAC TTA CTT
 7099 ACT TAT TGT CTG TAG ATG AAA GAA TTT TGG AGT GGG AAA GGG TTC ATG AGC CCC CAG CAA CTA ATG AGG AGC TAC AGA
 7177 CAA TTG ATG TTT CTG GGG AAA GGA GAC TCA GTT TCT TTG AGA GTA TAG CTT CTG ATG GGT GGT GGT GGT GGT GGT GGT GGT
 7255 TGA TGT CAC ACC CAG CAG GAT GAT GCA GAC AAC AGA AAC TGG AGT TAA TGA GGT GGT TTA AAA ATA AAA AAG GGC ATG AAG
 7333 CTT GGG ATA GAA ATT AAG GAT AAA TAC AAT TAA ATA CAG GAA ATT CTG AAA GAA TTA CAA GGT AAA TAA GTT ATA TTG TAG
 7411 AAA AAA AAT CCA GAA TTA GCT ATG CTT CTT CAA AAT TGC TTC TGG AGA ACT TTA CAA GGT AAA TAA GTT ATA TTG TAG
 7489 AAA AGG TAG AGA GGA GAA TAG TGG AAG AGA GAG ATA AGG AGA CTT CAA AAG GAG TGG AGG AGA ATA GAG GAG GAG AAA
 7567 GCA GAA GCA ATG GCT GAT AGA CAC AGG ATA AGA GGG AAC AGA AAG GAG BAA GAG GAA GCC AGG ATG GGT AAT TCT TTG
 7645 CCT ATC TGT GAC TTG CAC ATG GTC TTG GCA ATT ATT GAT GAG TTC AAG GCT TAA TTT CAG GTC CTC TTA TCT OCT TAT AGC AAT CCT
 7723 GAG TCT TTC TTT CTT ATA ACC AGG CCC CCA GTA TGC TCA TGT ATG TAT CAG GTC CTC TTA TCT OCT TAT AGC AAT CCT
 7801 GTT TAT AAC TGG GUA ACT TTG TGA AGG GAA GGA AGT GCA CAC TGA GAT GTG CTA CAA CTT TTT AAT ACA AAA TTT TGA
 7879 AGA GTT TGT ACA ATG TAT GTA TTA ATA AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT
 7957 CTA TAT ATA TGG GTT AAA TCA TAA TAT TAA TTT CAC AAT TTT CAC AAT TTT CAC AAT TTT CAC AAT TTT CAC AAT TTT CAC
 8035 TTT CTC TGT ATA GCC CTG GCT GTC CTG GAA CCC AAT TAA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA
 8113 CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT
 8191 CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT
 8269 CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT CTG CCT
 8347 TCT CAT TCT ATT TCT ATC AGA TAG GAC TGT GTA GAT GGT TTG GGC CAC CAC GGC TGA AAT TTT TTA ACT TTA TAT ATG
 8425 TGT ATT GTT GTT TTG CTT TGC TTT GCT TTG TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT
 8503 CTT TGC TTT GCT TNG CTT TGC TTT GCT TTG CTT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT
 8581 GGA GAA AGA ATC TTA CTA TGA AGC TCT GAC TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT
 8659 ATC TGC CTT CTT CTG CCT CCA TGA TTA ATC GAT GGA GAT AGA CAT GAA TTA CAC AAA GHA CTA ATG TGG AGT TTA CCT GAA
 8737 CAA AAG TTT CTA GAC TTG ACA TTA ATC GAT GGA GAT AGA CAT GAA TTA CAC AAA GHA CTA ATG TGG AGT TTA CCT GAA
 8815 TCA TAC TCT ATA CTT TAT CAG AGA TTA AAT TAA CAT TTA ATA ATC CAG TGC CAG GCT AGA GGC CAA TAT TAC TCA TTA TAC TGA GAA
 8893 TGT TTG CCA TCA TGC ATA GGC TTA GTC TTC AGT GCT GAA AGG CAT TGG GGG CAA TAT TAC TCA TTA TAC TGA GAA
 8971 ACT GGG AAA GAC TTG CCT CAG AAT CTC TAC TGA AAG GCT GAT TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA TTA
 9049 TTT AAT GTA TAA TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 9127 AAT ACA TGG ACA AAA TAC AAG AAT CAT ATG ATC ACC TCA ATG GGA AAA GGA AAA AAA AAA AAA AAA AAA AAA AAA AAA
 9205 AAG AAT CAA CAT TCA TTC TTT TTT TAT TAG ATA TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 9283 CCT TCC CCT GGC CTG CCC AAC CCA CCC ACT CCT GCT TTC TGG CCC TGG CAT TCC TCT GTC AGG CAT ATG TGA TAG TAT
 9361 TTC AAA AAA CCA AGG GCT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT
 9439 CAG CTC TGG GGG TTA CTG GTT AGT TCA TAT TGT TAG TCC TCC TAT AGA GTT GCA GAC CCC TTT ASC TCC TTG GAT ACT
 9517 TTC TCT AGT TCC TTC ATT AGG GGC CTT GAT TCA TAT TGT TAG TCC TCC TAT AGA GTT GCA GAC CCC TTT ASC TCC TTG GAT ACT
 9595 ACT GGC ATA GCC TCA CGA GAA AGA GAG AGC TAT GTC ATC AGG ATC CTG TCA AAA TCT TTC TGG CAT ATG CAA TAG TAT
 9673 CTG GGT TTG GTG GTT GTA TAT GGG ATG CAT CCC CAA GTG CAG CBT CTT CTG AAT GGT TCC TTC CAT CTC AGC TCC
 9751 AAA CTT TGT CTC TAT AAC TCC TCC CAT GGT TAT TTT GGT CCC CAT TCT AAG AAG GAG TGA AGA ATC CAC ACT TTG GTC
 9829 TTC CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT
 9907 ATA TCA TGC GTG TTA TTT TGT GAT TAG TTT ACC TCA CTC AGG ATG ATA TCC TCC AGA TGC ATC CAT TTG CCT AAG AAT

Figure 12 contd

9885 TTC ATT AAT TCA CTG TTT TTA ATT GCT GAA TAG TAC TCC ATT TTG TGT TAC CAC ATT TTC TGT ATC CAT TCC TCT
 10063 GTT GAG GGG CAT CTG GGT TCT TTT TAG GTA TAT GCT CAG GAG AAG AAT TGC TGG ATC TTC CGG TAG TAC CAT CAA CAT GCA
 10141 TTA TCA AGT TGG AAC AUC TTC TAG TTA TAT GCT CAG GAG AAG AAT TGC TGG ATC TTC CGG TAG TAC CAT CAA CAT GCA
 10219 TTT TTA ATA AAA GCC CTA GAA CAA GGA CAT TAA TAA TGA TGA GAA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA
 10297 ATG ACC AAT ATC ATC CTA AAT GAT AAT GAA GCA TTA GCT GGA GCA ATA AAG CAA GAG AAG TAA TGA TGA TGA TGA
 10375 CTC ATC CAT AAT AAT GAT AAT GAA GCA TTA GCT GGA GCA ATA AAG CAA GAG AAG TAA TGA TGA TGA TGA TGA
 10453 AAT TGT TTT CAA TTG AAG ATT ATA TGA TGC ACC ACA TCC TTA TTC TTC TCC CCA GGT TCT GCT TCT CTT GCT
 10531 AAT AAT TTC AGC AAA GYG TTA TGA TGC ACC ACA TCC TTA TTC TTC TCC CCA GGT TCT GCT TCT CTT GCT
 10609 CTT CAT CTT TTC TGT TCC ATC TGC CTG CAC TCT TGT CTC AAG ACC TGC TGC AGC GTG TAA CTC TCC TGT GCT TGA
 10687 GTA TCT CAC AAA ACS TTC TAC CTG CCA AAC CTG GAT GAG CCC TTT GTC TTT CTG AAG CTA TGA GGC TCT CTA CAT AGA
 10765 CTC AAG AAG GAA ATG ACA GGG AAG TAA TAA TGA AGT GGG GAA GGC TGA CAT TAG CAT TCC TGT GGT GCT COT
 10843 TAA TTT CTC ATA CTT CAC ACT GAG ATG TTA TTA ACT CTG ACT CAT AAG TGA AGA AGC CAG AGC TAA GGT TCT CAT ATT
 10921 TGA GTG TTA TAG AAT GAG TAG AGC AGT TCT CAA ACT ATG GGT CAT GAC TCC TTT ATG GGT CAA ACT ACC CTT TCA
 10999 CAC AGG TTG CAT AUC AGA TAT COT AAT TTT ATA TAC ATA TAT ATA TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 11077 GGA AAA TTA TTT AGT AAT CAT TTT ATA GTT GGT CAT GGC AAC ATG AAG TGT ATT AAA GGG TTG CAG CAT TAG
 11155 GAA TGT TGA GAC CCA CTG TAA TAG AGA ATG AGG CTT AAG GCA GGG CTA TAA AGC CCA ATG GAC CAT GTG CTT TTT CCA
 11233 ACA TTT GCC ACA TGG TAA GCT CTG TAT AGA CTT TTT AAA GAA CAT TGG TTT GTA ATT TTA AAT GGA TAA GGG TCT TCA
 11311 CTG TCT ATC ACC CAT CTA TAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT AAT
 11389 AGA CAT AGC AGT GAA ACA TTG ATG ACC AAA TAG GAA ATC CAT GTA GAG ACC TTC TAT CTT CTG ATG GCT CCA CAG GCA
 11467 CCA TCT TGC AAC AGA GTT CTA CTT TGC TAC CAG TAA TGA ATA CAG TGT CTC AAC TCC TGC CAT TGA ATC TTC AGG AAG
 11545 CCC CTG AAA TGA CTT GTA CTA CAC CAT TTC TTA AAG ACA GAA AAG CTA AGA CTT AGA GGG AAT AAA TGT CAT GCC TGA
 11623 GAT CAT GCA ACC AAT TAA GTC CAA CTT GGC CTG ATC AAG AGG CAC AAT TCA AAA GCA ATG TTG CTT CAC TAG CTC
 11701 TTG TGT ATG GTT GCT GAT FCC GGA AGC AAA GTA TCA GTG AAT ATC CCT AGT GGG AAA AGA CTT GGA AAT CAA ATG TCT
 11779 CAT TTA ACA GAT TAG GAG ATG AAA CGG TAG ACT CTG TGT AGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT TGT
 11857 GGC AAG TCC TCG AGC TCA AAC CAG CTT AGG CTA CAC AGA GAA ACT ATC TTA AAA ATA ATT ACT AAC TAC TTA ATA
 11935 GGA GAT TGG ATG TTA AGA TCT GGT CAC TAA GAG GCA GAA TTG AGA TTC AGA TTC GAA GGC AGT ATT TTC TAC GTA TGT TTT
 12013 AAA TTG CAG TAA GGA TCT AAG TGT AGA TAT ATA ATA AGA TTC TAT TGA TCT CTG CAA CTA CAG AGA GTG TTA GAT
 12091 TTG TTT GGA AAA AAA TAT TAT CAT CAG CCA ACA TCT TCT ACC ATT TCA GTA TAG CAC AGA GTA CCC ACC CAT ATC TCC CCA
 12169 CCC ATC CCC CAT ACC AGA CTG GTT ATT GAT TTT CAT GGT GAC TGG CCT GAG AAG ATT AAA AAG AGT AAT GCT ACC TTA
 12247 TTG GGA GTG TCC CAT GGA CCA AGA TAG CAA CTG TCA TAG TGA CCG TCA CAC TGC TTT GAT CAA GAA GAC CCT TTG AGG
 12325 AAC TGA AAA CAG AAC CTT AGG CAC ATC TGT TGC TTT CGC TCC CAT CCT COT CCA ACA GGC TTG GTG CAC TCC ACA
 12403 CCC TTT CAA GTT TCC AAA GCC TCA TAC ACC TGC TCC CTA CCC CAG CAC CTG GCC AAG GCT GTA TCC AGC ACT GGG ATG
 12481 AAA ATG ATA CCC CAC CTC CAT CTT GTT TGA TAT TAC TCT ATC TCA AGC CCC AGG TTA GTC CCC AGT CCC AAT GCT TTT
 12559 GCA CAG TCA AAA CTC AAC TTG GAA TAA TCA GTA TCC TTG AAG AGT TCT GAT ATG GTC ACT GGG CCC ATA TAC CAT GTA
 12637 AGA CAT GTG GAA AAG ATG TTT CAT GGG GCC CAG ACA CGT TCT AGA AGT ACC TGA GAG TGG CAA AAA ATA GTT GTG CTA
 12715 AAT AGT TTG CCC ATC TTT AGG CTG AGA GAC TAG GAA ATA CAG CGA TGG ACT ATA TCA GCA TTG CAG GAT AGT TGT CAG
 12793 TAA ACA CCC CAC AAC CCA TTA CAG AAG TAT TCT CTT ATA TCC TCC CAT CCA TGT AGA TGG CTG TCT TCA
 12871 TAT TTG TTC TAG ACG GCC GGC C

Figure 12 contd

VKP-IGKV1-39/I-Ck-Δ2

1 GGC CGG CCC ACA TGA AAC AAT GGG AAC CAT GTG ACA ATC ACA GAG GTG TTG TTA CTA TAG CAA AAG GGA TTG TTA CTC
 79 TCC ACA TCC CTT TAA GTA ACT TGA AGG CCT GAT AGA ACC ACC CTC TAA GAC TTC ATT AGA CAT TCC CTA CGA ATG GTT
 157 ATA CTC TCC TGT ATA CTA CTC CCA ATA CAA CTA TAA AAT ATA TTA TTC CAT ATA GTC TTT AGG TTT TTA AAG TTT GAC
 235 TTT TTT CTT CTT TGA AAA TAT CTC TCA CAA CAG CCG CTT GAG GAA ATA CAT TCC CTC CAG GCA AAT CTA TGC TGC
 313 GCT GGT CTG ACC TGS GAC CTT GGG GAC CTT GGG GAC CTT GGG GAC CTT GGG GAC CTT GGG GAC CTT GGG GAC CTT
 391 GGC TGC CCC ATG CCC TGC TGA TTG ATT TGC ATG CTT GAG AGC ACA GAC ACC ACA GAC ACC ACA GAC ACC ACA GAC ACC
 469 TCG CAC CTT GTG CAG TCA GTC ACA GTC AGG AGC CAC CAT GGA CAT GAG AGT GCC CAG CTT GAG AGT GCC CAG CTT GAG
 547 GCT ACT CTG GCT CCG AGG TAA GGA TGA TAA CAT GAT TAA TAG TAA TTT TTA TGT TTT CAA TCT CAG GTG CCA GAT GTG ACA
 625 AGG GAA GTT CTC TGA TAA CAT GAT TAA TAG TAA TTT TTA TGT TTT CAA TCT CAG GTG CCA GAT GTG ACA
 703 TCC AGA TGA CCC AGA GGC CCA GAT TAA TAG TAA TTT TTA TGT TTT CAA TCT CAG GTG CCA GAT GTG ACA
 781 GCA TCA GCA GCT ACC TGA ACT GGT ATC AGC AGA GGC CCA GAT TAA TAG TAA TTT TTA TGT TTT CAA TCT CAG GTG CCA
 859 TGC AGA GCG GCG TGC CCA GAT TCA GCG GCA GCG GCT CCG GCA CCG ACT TCA CCA TCA GCA SCC TGC AGC
 937 CCG AGG ACT TGC CCA CTT ACT ACT GCG AGC AGA GCG GCT CCG GCA CCG ACT TCA CCA TCA GCA SCC TGC AGC
 1015 TCA AAC GTA AGT ACA CTT TTC TCA TCT TTT ATG TGT AAG ACA CAG GTT TTC ATG TTA GGA GTT AAA GTC AGT TCA
 1093 GAA AAT CTT GAG AAA ATG GAG AGG GCT CAT TAT CAG TTG ACG TGG CAT ACA GTG TCA GAT TTT CTG TTT ATC AAG CTA
 1171 GTG AGA TTA GGG GCA AAA AGA GGC TTT AGT TGA GAG GAA AGT AAT TAA TAC TAT GGT CAC CAT CCA AGA GAT TGG ATC
 1249 GGA GAA TAA GCA TGA GTA GTT ATT GAG ATC TGG GTC TGA CTG CAG GTA GCG TGG TGT TCT AGA CGT TTA AGT GGG AGA
 1327 TTT GGA GGG GAT GAG GAA TGA AGG AAC TTC AGG ATA GAA AAG GGC TGA AGT CAA GTT CAG CTC CTA AAA TGG ATG TGG
 1405 GAG CAA ACT TTG AAG ATA AAC TGA ATG ACC CAG AGG ATG AAA CAG CCG ACA TCA AAG AGG GGC CTG GAG CTC TGA GAA
 1483 GAG AAG GAG ACT AAT CCG TGT TGA GTT TGA GTT TGT TGA GTT TGT TGA GTT TGT TGA GTT TGT TGA GTT TGT TGA
 1561 GTG AGC CGT AGG CTG AGT TCT CTC TTT TGT CTC CTA AGT TTT TAT GAC TAC AAA AAT CAG TAG TAT TAT CAG TAG TAT
 1639 TCA TTA AGC TGT TTG AAA GTA TGA CTG CTT GCC ATG TAG ATA CCA TGG CTT GCT GAA TAA TCA GAA GAG GTG TGA CTC
 1717 TTA TTC TAA AAT TTG TCA CAA AAT GTC AAA AGA TGA AGT TGA AAT GAT CTT TTT TAT TAT TAT TAT TAT TAT TAT TAT
 1795 TTT TTC CTT TGT CTC ATT TCT ACA TGA AAT TGA AAT GAT CTT TTT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 1873 TTT GAA CTA TAT GTT TTA ATG GGC AGT TTT TGA GAG GAA AGT AAT TAA TAC TAT GGT CAC CAT CCA AGA GAT TGG ATC
 1951 TTT TAT ATC GGC AGC AAT GGA CTG AAA CCG TCC GCA ACC TCT TCT TTA CBA CTG GGT GAC CTC GCG CTT GTG CCA GCC
 2029 ATT TGG CTT TCA CCG TGC CCG TAA GCG CCA TGT GAA CCC CCG CCG TAG CAT CCG TTG CTC CCG GTG GAC CAC TTT CTT
 2107 GAG GCA CAG TGA TAG GAA CAG AGC CAC TAA TCT GAA GAG AAC AGA GAT GTG ACA GAC TAC ACT AAT GTG AGA AAA ACA
 2185 AGG AAA GGG TGA CTT ATT GGA GAT TTC AGA AAT AAA ATG CAT TTA TTA TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 2263 GGA ATT AGA AGG GGC ATA AAC TGC TTT ATC CAG TGT TAT ATT AAA AGC TTA ATG TAT TTA TTA TAT TAT TAT TAT TAT
 2341 CTA CAG CCA GCA AAA GTC ATG GTA AAT ATT CTT TGA CTG AAC TCT CAC TAA TAT CTT CTA TAT TAT TAT TAT TAT TAT
 2419 GAT AAT AAT TTA TAA TAA TAT TTT TGT GAC ATG ACC TTA ACT GGT TAG GTA GAA TAT TTT TCT TCA TGC AAA AAT ATG ACT
 2497 CCA TAA TTT TGA AAA CTA TTT ATT TGG CTA CAC CAA AGG AAG CCA TAC AGA GGC TAA TAT CAG AGT ATT CTT GGA AGA
 2575 GAC AGG AGA AAA TGA AAG CCA GTT TCT GCT CTT ACC TTA TGT GCT TGT GAT AGA AAA ATG TTT AAC TCA GCT ACT ATA ATC
 2653 ATA AAC TGG TCT GAA TCT CTG TCT GCT CTT ACC TTA TGT GCT TGT GAT AGA AAA ATG TTT AAC TCA GCT ACT ATA ATC
 2731 GCC TGA GAA TAT CTT CAA AGG GTC AGA CTC ART TTA CTT TCT AAA GAA GTA GCT AGG AAC TAG GSA ATA ACT TAG AAA
 2809 CAA CAA GAT TGT ATA TAT GTG CAT CTT GGC CCC ATT GTT CTT TAT TAG TGA TAA GGG TGC TTT TTT GTG TGT CTG
 2887 TAT ATA ACA TAA CTG TTT ACA CAT AAT AAT ACA CTG AAA TGG AGC CTT TCC TTG TTA CTT CAT ACC ATC CTC TGT GCT TCC
 2965 TTC CTC AGG GGC CCA CCG CCG TCC CAC CGT GTC CAT CTT CCC CCG CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG
 3043 CGT GGT CTT CTT GAT GAA CAA CTT CTA CCC CAG AGA CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG
 3121 CGT GGT CTT CTT GAT GAA CAA CTT CTA CCC CAG AGA CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG
 3199 GGT GGA GTA CCA GAG GCA CAA CTT GTA CCG GTT GGT GCA CAA CAG CAG CAT CAG CAT CAG CAT CAG CAT CAG CAT CAG
 3277 CAA CCG GAA CCA GAG GTG TTG AAG ACA AAG GTC CTG AGA CSC CAC CAG CTC CUC AGC TCC ATC CTA TCT TCC CTT CTT
 3355 AGG TCT TGG AGG CTT CCC CAC AAG CCA CTT ACC GTT GCG GTG CTC CAA ACC TCC CCA CTT CTT CTT CTT CTT CTT CTT
 3433 CCT CCC TTT CTT TGG CTT TTA TCA TGC TAA TAT TTG CAG AAA ATA TTC AAT AAA GTG AGT TGC ACT TGA GAT CTC
 3511

Figure 12 contd

3583 TGT CTT TCT TAC TAA ATG GTA ATC AGT TGT TTT TCC AGT TAC CTG GGT TTC TCT TCT AAA GAA GGT AAA TGT TTA
 3587 GGT GGC CTG AAA TCC ACC ACA CTT AAA GGA TAA ATA AAA CTT TGG CTT TGC CTT GGT TTT GGT TTT TTT TTT
 3745 TCC TTT CTA AGG TTC ACG AGT ACT ATT CAT GGC TTA TTT CTC TGG GGC ATG GTA GGT TTT GGT AGG CAT ACT TCC TAG
 3823 TTT TCT TCC TCC AAG TCG TCA AAG TCG TCA AAG TCG TCA AAG TCG TCA AAG TCG TCA AAG TCG TCA AAG TCG TCA AAG
 3901 CCC AGT AAA CTT GGC GAA GCA AAG TAG AAT CAT CAT TAT CAC AGG AAG CAA AGG CAA GGT AAA TGT GCA AGC AAT AGG AAA
 3979 ATG TGG AAG CCC ATC ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG ATG
 4057 ATC TGC CAT TGG CAA GGC TGG GCA CTA CCC ACA ACC TAC TTC AAG GAC CTC TAT ACC GTG AGA TTA CRC ACA TAC ATC
 4135 AAA ATT TGG GAA AAG TTC TAC CAA GCT GAG AGC TGA TCA CCC CAC TCT TAT GAT ACA ACC AAA ATG TCC ACC AAC AAT TAA
 4213 TAA GAA GCA ACC AGT ATT GAG AGA CTC ATT TAT GAA AGT CTA AAA CTG GAT ACA AAT AAA ATA AAA CTT AAG AGC ATA GTT TAA TCT
 4291 ATT ATG ACA TGT TCA CAA TTG AGC TAT TAC TTA ATA AGG AGA ATT AAT AAA ATA AAA CTT AAG AGC ATA GTT TAA TCT
 4369 CAT AAA CAA GAT AAT AAG CAA AAC AAA ACA TTT TTT CAT CCA TGT AAG TTT AAA AGC AAG TAA AAT TTA AAA TTA AGA
 4447 GAG ACA TAA GTT TTG AGG TAG CAA GAT GGA AAC TCT GGG GCT TGG GGA ATG TTT TCA TAA TAA TAA TAA TAA TAA TAA
 4525 GTT ACT ATT GTS GAA TTG GGA TCT AUG TTC TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 4603 CTA ATA CCC AGT GCA TAC ATA AAA GAG GAT ACA AGG AAT GAA TCA TAC GTC AAG GCC AGA AAG ACA ATA AAG TAG GGG
 4681 ATC CAG GAT CAA ATC TCC CAC AAC CTT GAG CTT TCT ACT ATT TTG TCT GGG TAT GAA GAG CCC AGG TAT CAA AGG TTA CAT TAG
 4759 CAA ACA CAT GAT CCC TCC TTG GGG TCT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT
 4837 AGA CCT TCA TCA ACA GGT CAA AGA ATA TGG GAT ATT TTG TCT GGG TAT GAA GAG CCC AGG TAT CAA AGG TTA CAT TAG
 4915 GGA AGG AAG AGG ACA CTA ACA GTG ACT TTC TCA GGC TAC ACT CTG AAG GCA GTG CAG AAT AAT GTT AGT GTC CCT
 5071 TCC CCC AGT TAA TAT GCA GTC CAG TTT CCC TGC TCC TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT
 5149 CAC CAA ATA GGA GAG GGC AAC CCT TTG CCT TCC TAC CTC TTG AGA ATG TAC ATT ATT ATT ATT ATT ATT ATT ATT ATT
 5227 TTA ATT GCT TTT TTT TTA TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 5305 AAC AGT GCT TCT AAT CTG GCT ATT AAT ACA AAA ANG CCT CTA TAA TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 5383 CCC ACA ATA AAA AAG AAG AAA GAA TAC ATA TAA GCA TTT CTA TAA TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 5461 TAA TCT AAT GTC ACA TGC TGT ATT CTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 5539 CTG ATC CTA GGA TCT AGG GAT GTT ACA GAT AAG AAA ACA AAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT
 5617 CAC AGA ATC ACT GTC TTG ATT TCA GTG GTT ACA TAC ATT TAA ATA TGT GAT AAA ATG TTT TTT TTT TTT TTT TTT TTT
 5695 ATA TTG TAC CAA TGT CAA ATG CTT AAT TTT GGC TCT ATA GTA TAA TTA TGC ACT AAA TTA TTT TTT TTT TTT TTT TTT
 5773 TGA TGT TTA CAT CAA AGG TGA GGC CAT ATT TGT TAG GAA CAT AAC TTA AAA ACC ATT TTG GAT AAC TTA TGA AAA GCC
 5851 ATT TTG TGT GGC TTG GCA TAT CAT GGC TAA GCT GTC ACC AGA TGA ATC TAA TGA GAC CTA AGC CTC AGA AGC AAG CCC
 5929 CTG CCC AGC AAG CAG GCA GCA CAG ATA AGA GCT AAA CCC AGG ACA GGC CAT GAT ATG CTA ATG AAT TTA AAA GGT
 6007 GGT GTT GCT GAC CTA GTG AAC CAG CCC CAA GCT GTG AGC CCC AAT AGC ACA AAG CTA CTG CCC AAA GAA AAT ATA CAA
 6085 AAA TTG GAA CTT TGG GAA TGG TGT GCA GGA TCG CTC TGC TGT AUG CCT GGA ACA CAG CTT CTC TAT GTT TTG TAT TGA
 6163 TAC CAG TCT AGA AGC TTC CAA AAC TTT CTC ACT GAA GAA GAT TCC CCA TGT GGG ACC CCT ACA GAC TCT TTT GCC CAA
 6241 ACA ACT GCT TCC CTC CTG TGG TGA TGA TCG ACC AAG ATA GCA ACT GTC ATA GCT ACC GTC ACA CTG CTT TGA TCA AGA
 6319 AGA CCC TTT GAG GAA CTG AAA ACA GAA CCT TAG GCA CAT CTG TTG CTT TCG CTC CCA TCC TCC AAC AGC ATG GCT
 6397 GTC TTC ATA TTT GTT CTA GAC GGC CGG CC

VKP-IGLV2-14/J-CK

1 GGC CGG CCC ACA TGA AAC AAT GGG AAC CAT GTG ACA ATC ACA GAG GTG TTG TTA CTA TAG CAA AAG GGA TTG TTA CTC
 79 TCC ACA TCC CTT TAA GTA ACT TGA AGG CCT GAT AGA CCC ACC CTC TAA GAC TTC AAT AGA CAT TCC CTA CGA ATG GTT
 157 ATA CTC TCC TGT ATA CTC CCA ATA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA
 235 TTT TTT CTT TCA AAA TAT CTC TTG TCA CAA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA
 313 GCT GGT CTG ACC TGG GAC CTT GGG GAC ATT GGC CTT CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA CTA
 391 GCC TGC CCC ATG CCC TGC TGA TTG ATT TGC ATG TTC CAG AGC ACA GCC CCC TGC CTA CTA CTA CTA CTA CTA CTA
 469 TCG CAC CCT GTG CAG GAG TCA GTC TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA TGA
 547 GCT ACT CTG GCT CCG AGG TAA GGA TGG AGA ACA CTA GGA ATT TAC TCA GCC AGT GTG CTC AGT ACT GAC TGG AAC TTC

62.5	AGG	GAA	GTT	CTC	TGA	TAA	CAT	GAT	TAA	TAG	TAA	GAA	DAT	TTG	TTT	TTA	TGT	TTT	CMA	TCT	CAG	GTG	CCA	GAT	GTC	AGT
70.3	CTG	CGC	TGA	CCC	AGC	ACT	ACG	CCT	CTG	TGT	CTG	GCA	GCC	CTG	GCC	AGA	GCA	TCA	CCA	GCT	GCA	CCG	GCA	CCA	GCA	GCC
78.1	ACC	TGG	GCG	GCT	ACA	ACT	ACG	TGT	CCT	GAT	ATC	AGC	AGC	ACC	CCG	GCA	TGA	TGA	TCT	TGA	TCT	ACG	AGA	TGT		
85.9	CCA	ACA	GAC	CCA	GCG	GCG	TGA	GCA	ACA	TCA	GCG	GCA	AGC	GCA	ACC	GCA	GCC	TGA	CCA	TCA	TGA	CCA	TCA	GCG	GCC	
93.7	TCC	AGG	CTG	AGG	AGG	AGG	CCG	ACT	ACT	ACT	GCA	SCA	GCT	ACA	CCA	GCA	GCT	CCG	TTG	CCG	GCG	GAA	CAA			
101.5	AGC	TGA	CCG	TGC	GTA	GTT	AGT	AGA	CIT	TTT	TTT	TTT	TTT	ATG	TTC	AAG	ACA	CAG	GTT	TTT	ATG	TTA	GGA	GTT	AAA	
110.3	GTC	AGT	CTA	GAT	AGT	GAT	AAA	ACT	GAT	CAA	CTT	TTC	CAT	TAT	CAG	TTG	TGS	CAT	ACA	GAT	TTC	GAT	TTT	CTG	TTT	
117.7	ATC	MAG	CTA	GAT	AGA	TTA	GGG	GCA	AAA	AGA	GGC	GTT	AGT	TAG	GAG	GAA	GAA	AAI	TAA	TAC	TAT	GST	CAT	CAI	AGA	
124.9	GAT	TGG	ATC	GGA	GAA	TAA	GCA	TGA	GTA	GTT	ATT	GAG	ATC	TGS	GTC	TGA	CTG	CAG	GTA	GCG	TGG	TCT	TCT	AGA	CGT	TTA
132.7	AGT	GGG	AGA	TTT	GGA	GGG	GAT	GAG	GAA	TGA	AGG	AAC	TTT	AGG	ATA	GAA	AAG	GGC	TGA	AGT	CAA	GTT	CAG	CTC	ATA	AAA
139.5	TGG	ATG	TGG	GAG	CAA	ACT	TTG	GAG	ATA	AGA	TGA	ATC	ACC	ACA	AGT	AAA	CAG	CGC	AGA	TCA	AAG	AGG	GCC	CTG	GAG	
148.3	CTC	TGA	GAA	GAG	AG	GAG	ACT	CAT	CCG	TGT	TGA	GTT	TCC	ACA	AGT	ACT	GTC	TTG	AGT	TTT	TAT	TAC	AAA	ATG	GGA	TAG
158.1	CAG	AGT	TGA	GTG	AGC	AGT	AGG	CTG	AGT	CTC	TTT	TGT	CTC	CTA	AGT	TAT	TAT	TAT	TAT	TAT	TAT	TAT	TAT	TAT	TAT	GTG
163.9	CTG	AAA	TAA	TCA	TTA	AGC	TGT	TTG	AAA	GTA	TGA	CTG	CTT	GCC	ATG	TAG	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA
171.7	GTG	TGA	CTC	TTC	TAA	AAI	TTG	TCA	CAA	AAI	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	ATA	
181.9	CAA	GCG	GTT	TTT	TTT	TTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	CTT	
187.3	ACA	GTT	GGG	GTT	GAA	CIT	TAT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	
195.1	CGA	TTG	TAA	TTT	TAT	ATC	GCC	AGC	AAI	GGA	CTG	AAA	CGG	TCC	GCA	ACC	TCT	TTT	TAA	CAC	ACT	CTT	CTT	CTT	CTT	CTT
202.9	GTG	CCA	GCC	ATT	TGG	CGT	TCA	CCC	TGC	CGC	TAA	GGG	CCA	TGT	GAA	CCC	CCG	TAG	CAI	CCC	TTG	CTC	CCG	GTG	GAC	
210.7	CAC	TTT	CGT	GAG	GCA	GAG	TGA	TAG	GAA	CAG	AGC	CAC	TAA	TCT	GAA	TCT	GAA	AAC	GAT	GTG	ACA	GAC	TAC	ACT	AAI	GTG
218.5	AGA	AAA	ACA	AGG	AAA	GCG	TGA	CTT	TTT	AGG	CAT	TAA	ACT	AAA	ATG	CAA	ATG	CAI	TTA	TTA	TTA	TTA	TTA	TTA	TTA	ATT
226.3	TTT	TAT	TAG	GGA	ATT	AGA	AAG	GGC	ATA	AGC	TTC	TTT	ATC	CAG	TGT	TAT	ATT	AAA	AGC	TTA	ATG	TAT	ATG	TTT	TAT	TAT
234.1	AGG	TAA	AAI	CTA	CAG	CCA	GCA	AAA	GTG	ATA	AAI	ATT	ATT	CTT	TGA	CTG	AAC	TCT	CAC	TAA	ACT	CCI	CTA	AAI	TAT	ATG
241.9	TCA	TAT	TAA	CTG	GTT	AAA																				

Figure 12 contd

4363 TTC TGT AAT CTG AAT CAA CCT ACC CAG TAA ACT TGG CGA AGC AAA GTA GAA TCA TTA TCB CAG GAA GCA AAG GCA ACC
 4447 TAA ATG TGC AAG CAA TAG GAA AAT GTG GAA GCC CAT CAT ACT TGG ACT TCA TCT GGT TTT GTG CCT TCA CTA AGT
 4535 TTT TAA ACA TGA GCT GGC TCC TAT CTG CCA TTG GCA AGG CTG GGC ACT ACC CAC AAC CTA CTT CAA GGA CCT CTA TAC
 4603 CGT GAG ATT ACA CAC GAA ACC TTA AGA AGC AAC CAG TAT TGA GAG ACT CAT TTA TGA AAG TCT AAA ACT GGA TAC AAC
 4681 TAT CTC TGT ACA CCA GAA ACC TTA AGA AGC AAC CAG TAT TGA GAG ACT CAT TTA TGA AAG TCT AAA ACT GGA TAC AAC
 4759 CAA AAT GTC CAC CAA CAG TTA AAT TAT GAC ATG TTG TTA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA
 4837 ACT TAA GAG CAT AGT TTA ATC TCA TAA ACA AGA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA
 4915 CAG GTA AAA TTT AAA ATT AAG AGA GAC ATA AGT TTT GAG GCA AAA CAA AAC ATT TTT TCA TCC ATG TAA GTT TAA AAG
 4993 TCT CTC TGT ATG GAA TGT GAA AGT TAC TAT TGT GGA ATT GGG ATC TAT GTT CTT GTA TAT ATT GTA TAC TTC ATA
 5071 ATA ACT TCA CCT AAA GAA ATA TCT AAT ACC CAG TGC ATA CAT AAA AGA GGA TAC AAG GAA ATC ATA CGT CAA GGC
 5149 CAG AAA GAC AAT AAA GTA GGG GAT CCA GGA TCA AAT CTC CCA CAA CCT TGA GCC TTC TAG TAT TCT GCC TTC CAG AGC
 5227 TCA AAG TAC AAA ACA CAT AAT TCA ACC ACA TGA TCC CTC CTC GTG TCT TCT GGG GTC TCT TCC TTC ATG AAT AGA AAT AGC
 5305 CAT GTA TAA AAT GAG ATA GAA GAG ACC TTC ATC AAC AGG TCA AAG AAT ATA GGT AAT TTT GTC TGG GTA TGA AGA GGC
 5383 CAC GTA TCA AAG GTT ACA TTA GGG AAG GAA GAG CAC ACT AAC AGT GAC TTT CAT TCT CCC CTT GGA GGC CCC
 5461 TGC AAT TAG TCC CTC GTG GGC TCA TCC ACT CAG CAC ACA TTT ACT AAG CAT CTT CTC AGC CTA GAC TCT GAA GGC AGT
 5539 GCA GAA TAA TGT TAG TGT CCC TTC CCC CAG TTA ATA TGC AGT CCA GTT TCC CTC GTG CAT CTT CTC AGT CCA CAT
 5617 AAG GAT GAT GGG AAA GGA CAG TCA COA AAT AGG AGA GGG CAA CCC TTT GCC TTC CTA COT CTT GAG AAT GTA CAT TAT
 5695 TAT CCA CTT TTT GAA ACT TCT TTT AAT TGC TTT TTT TTA ATT TGT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 5773 CTG GGA ACC AAA TTT ATC AAT CAA CAG TGC CTA TAA TCT GGC TAT TAA TAC AAA AAT GGC TCC TCA AAA TAT ATA TGT
 5851 TCG AGT CTT ATC TAA AAC AGA ACC CAC AAT AAA AAA GAA AGA ATA CAT ATA AGC ATT TAT ATA AIT CTG AGC AAC
 5929 CTT GTG CTT TGT GAA AAA AAT ATA ATC TAA TGT CAC ATG CTG TAT TCT TTT TAT TTA ACA CTG GTG AAA TTA TAC CAT
 6007 TAG AGA GAA GGA CAG ATC ACT GAT CCT AGC ATC TAG GAG TGT TAC AGA TAA GAG AAC AAA TGT GAC AAA GAG CTG
 6085 TCA CAA GGA GGA TCT TCA AGG TCA CAG AAT CAC TGT CTT GAT TTC AAT TTT TGG CTC TAT CAT ATA ATT ATG TGA TAA
 6163 AAT GTT GTT GAA CTA TAT TCA TAT ATT TGA CCA ATG TCA AAT TTT GAT TTT GAT TTT TTT TTT TTT TTT TTT TTT TTT
 6241 ATA ACT ATT TGG ACA AAG AAA ATG ATG TTY ACA TCA AAG GTG AGG CCA TAT TTG TTA GGA ACA TTA CTT AAA AAC CAT
 6319 TTT GGA TAA CTA ATG AAA AGC CAT TTT GTG TGC CTT GGC ATA TCA TGC CTA AGC TGT CAC CAG ATA GAT CTA ATA AGA
 6397 CTT AAG CTT CAG AAG CAA GCC CCT GGC CCA GCA GGC ACA AGC ACA GAT AAG AGC TAA ACC CAG GAC CCA TGA TAT
 6475 GCT AAT GAA CTA CCT TCA AGG TGG TGT TGC TGA CCT AGT GAA CCA GCC CCA AGC TGT GAG CCC CAA TAG CAC AAA GCT
 6553 ACT GGC CAA AGA AAT TAT ACA AAB ATT GGA ACT TTG GGA ATG GTG TGC AGG ATC GCT CTG CTG TAT GCC TGS AAC ACA
 6631 GCT TCT CTA TGT TTT GTA TTG ATA CCA GTC TAG AAG CTT CCA AAA CTT TCT CAC TGA AGA AGA TTC COT ATG TGG GAC
 6709 CCC TAC AGA CTC TTT TGC CCA AAC AAC TGC TTT CCA AAG CAA CTT TCT CAC TGA AGA AGA TTC COT ATG TGG GAC
 6787 ATA AGG AAT GTT TGT GTG AAT AAA CCA AAC ATA TTT TAA AAG CAA ATA TTT TAA AAG CAA ATA TTT TAA AAG CAA ATA
 6865 TAC AGC TAA TAG TCC CAT GCT CTC CAC AAT ACT GGA TCC AAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA
 6943 AGA ARG ACA TTA AAA ATG AAG AGA CAT GCA GAG AGT GCA CCA AGT GCA CCA TGC TTA AGA CTT CTT GCC TTC AGG ACT GTG AGA AGG TAG TGT
 7021 TAG TCA AAG AGG AAT AAG CAC TTC CAG AAG CCA CCA AAG GAA GGA GGT ATG AAG TGG TTT CTC COT CAG AGT ATC CAG
 7099 AGG AGA CTA AAC CAA CCA ACA CCT TTT TGC TTA AGA CTT CTT GCC TTC AGG ACT GTG AGA AGG TAG CTT COT AIT GTT
 7177 CTA AGC CCA AGT ATG TGG CAT TTT GTT GAG TGA GAG TCA AGA AAC CAA TAA AAT GCA GAC AGA CAA AAG GAT AGC TGA
 7255 GTT TTC CAG GCC CTT CCT TCT TAT TTT TGG TTT TGT TGG TGA TGG TGG TGG TGG TGG TGG TGG TGG TGG TGG TGG TGG
 7333 TGT TTT GTT TGG GGA GTT TTT TGG GGT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 7411 TGT TTG CTT TTT TGT TTT TTG TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 7489 TTC TAT CTC TAA TGT CTA CAT CTC AGA GGG GAT CTT CTA AT TCA AAT GAG CAG TAG CTT TTT AGC TCT TAT
 7567 TTA TTC AAT TAT TTA CTT ACT TAC TTA TTT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT
 7645 GCA ACT AAT GAG GAG CTA CAG ACA AAT GAT GTT TCT GGG GAA AGG AGA CTC AGT TTC TTT GAG AGT ATA GCT TCT GAT
 7723 GGG TCA ACC ATG TTC CTG TGG ATG TCA CAG CCA GGA GTA TGC AGA CAA CAG AAA CTG GAG TTA ATG AGT TGT TTT
 7801 AAA AAT AAA AAA GGG CAT GAA GCT TGG GAT AGA AAT TAA GGA TAA AAT CAA TAA AAT ACA GGA AAT TCT GAA AGA ATT
 7879 AAT AAA AAC AAT TCT TTT TTT AAA AAA TCC AGA AAT AGC TAT GCT TCT TCA AAA TTG CTT CTG GAG AAC TTT ACA
 7957 AGT TAA ATA AGT TAT ATT GTA GAA AAG GTA GAG AGG AGA ATA GTG GAA GAG AGA GAT AAG GAG ACT TCA AAA GGA GTG
 8035 GAG GGA GAT AGA GGA GGA AAG AAG AAT GGC TGA TAG ACA CAG GAT AAG AAG GAA CAG AAA GGA GGA AGA GGA

Figure 12 contd

8115	AGC	CAG	GAT	GGG	TAT	TTT	TTC	TTT	GCC	TAT	CTG	TGA	CTT	GCA	CAT	GGT	CTT	GGC	AAI	TAT	TGA	TGA	GTT	CAG	TTA	ATT
8131	CTT	CAC	TTG	CTC	CAA	CTC	ACA	TCC	TGT	TTA	TAA	CTG	TTT	CTT	TCT	TAT	AAC	CAG	GCC	CCC	AGT	ATG	CTC	ATG	GTA	GCT
8263	CTT	AUC	TTC	TTA	TGA	CAA	TCC	TAT	TGT	TTA	TAA	CTG	GGT	AAC	TTT	GTG	AAG	GGA	GGA	AGG	AAI	TGC	ACA	CTG	TGT	
8347	ACT	TTT	TAA	TAC	AAA	ATT	TTG	AAG	AGT	TTG	TAC	ATG	GTA	TGT	ATA	ATT	AAI	AAI	TAA	TAT	TAA	CTA	CTT	TAG	ACT	
8425	ATT	TCA	ACT	CAA	GAT	ACT	AAT	TCT	ATA	TAT	ATG	GAT	GGT	TAA	ATC	AAT	ATA	TTA	ATA	AGT	TTA	ATC	CAT	GCT	TAT	
8503	TAT	TGT	GGT	TTT	CGA	GAT	AGG	GTT	TCT	CTG	TAT	ATG	CAC	CGT	GGC	TGT	CGT	GGC	AGC	CAC	CTT	GAC	CAG	GCT	CTC	
8581	AAA	CTC	AGA	BAC	CTA	CCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	
8659	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	
8737	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	TCT	GCC	
8815	AAA	TTT	TTA	AAA	TTT	ATA	TAT	GTC	TCA	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT		
8895	GCC	CTC	AAA	AGT	AAT	CGC	AAG	TTG	TAT	TTC	TAT	TGT	TGT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT		
8971	TGC	TTT	GCT	TTG	CTT	TGC	TTT	GCT	TTG	CTT	TGC	TTT	GCT	TTG	CTT	TGC	TTT	GCT	TTG	CTT	TGC	TTT	TTT	GCT		
9049	TTT	TTT	CCG	GGG	GGA	GGA	GGG	TGG	AGA	AGT	ACT	ACT	ACT	AAI	AAI	AAI	AAI	AAI	AAI	AAI	AAI	AAI	AAI	AAI		
9127	AGC	CTT	GAT	TCA	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT	ACT	CAT		
9205	AGA	TAG	TGA	TCC	CAA	GTT	TTA	GCA	AAA	GTT	TCT	AGA	CTT	GAC	ATT	AAI	CGA	TGG	AGA	TAG	ACA	TGA	ACT	ACA		
9283	ACT	AAI	GTC	GAG	TTT	AOC	TGA	ATC	ATB	CTC	TAT	ACT	TTA	TCA	GAG	ATT	AAA	TTA	ACA	TTT	AAI	AAI	AAI	AAI		
9361	TAG	AGG	CAT	CAT	TCA	ATG	GCA	GTG	ATG	GCA	GTG	ATG	GCA	GTG	ATG	GCA	GTG	ATG	GCA	GTG	ATG	GCA	GTG	ATG		
9439	TTA	CTC	ATT	ATA	GAG	ATG	AAA	TGG	GAA	AGA	CTT	GCC	TOA	GAT	AGT	CTT	CTA	CTG	AAA	GGC	TGA	GTT	TCT	GCT		
9517	AAA	AIC	TTT	TAC	TTT	CAA	TAT	TTT	TAA	TGT	ATA	ATT	TTT	TTA	TTT	TTA	TTT	TTA	TTT	TTA	TTT	TTA	TTT	TTA		
9595	AGC	AAA	TAA	ATG	CAA	TAA	ACT	AAA	TAC	ATG	GAC	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA		
9673	AAA	GAA	AGA	AAA	AGT	CTT	TGA	TAA	GAT	TCA	ACA	TTT	CTT	TTT	TTA	TTA	TTT	TTT	TTT	TTT	TTT	TTT	TTT	TTT		
9751	GCT	ATC	CCC	AAA	GCC	CCC	TAT	ACC	TTT	CCC	TGC	TCT	GCT	CCC	CAA	ACC	CAC	TCC	TGC	TTT	CTG	GCC	CTG	ACA		
9829	CTC	TGT	ACT	GAG	GCA	TAT	GAT	CTT	GAA	AAA	BCC	AAA	GGC	CTC	TCC	TCT	CAT	TGG	TGG	CCG	ACT	ATT	AGG	CCA		
9907	GCT	ACA	TAT	GCA	ACT	AGA	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT	GAT		
9985	GCC	CTT	TAG	CTC	CTT	G																				

Figure 12 contd

11857 AAA TGC AAA AAT CCT CAA CCT AAG ACA TAG CAG TGA AAC ATT GAT GAC CAA ATA GGA AAT CCA TGT AGA GAC CTT CTA
 11935 TCT TCT GAT GGC TCC ACA GGC ACC ATC TTG CAA CAG AGT TCT ACT TTG CTA CCA GTA ATG AAT ACA GTG TCT CAA CTC
 12013 CTG CCA TTG AAT CTT CAG GAA GCC CCT GAA ATG ACT TGT ACT ACA CCA TTT CTT AAA GAC AGA AAA GCT AAG ACT TAG
 12091 AGG GAA TAA AGT TCA TGC CAG AAG TCA TGC AAT GGT TGC TGA TTC CCG AAG CAA AGT ACT AGT GAA TAT CCC TAG TGG GAA
 12169 AAT GTT GTT CTT CTA GCT CTT GTG TAT GGT TGC TGA TTC CCG AAG CAA AGT ACT AGT GAA TAT CCC TAG TGG GAA
 12247 AAG ACT TGG AAA TCA AAT GTC TCA TTT TAT AGA TTA GGA GAT GAA ACG GTA GAC TCT TAG TTG TAC ACC CTT GTG
 12325 ATC CCA TCG CTA GGA AGA CTG AGG CAG GTC CAG CTT AAG CCA GCT TAG GCT ACA CAG AGA AAC TAT CTA AAA
 12403 AAT AAT TAC TBA CTA CTT AAT AAG AGA TTG GAT GTT AAG AAT TGS TCA ATA AGA AGA ATT GAG AAT CCA AGC CAG
 12481 TAT TTT CTA CTT GGT ATG TTT TAA ATT GCA GTA AGG ATC TAA TAT AAT AAT AAG ATT CTA TTG ATC TCT
 12559 GCA ACA ACA CAG AGT GTT AGA TTT GTT TGG AAA AAA ATA TCA GCC AAC ATC TAC CAT TTC AGT ATA GCA CAG
 12637 AGT ACC CAC CCA TAT CTC CCC ACC CAT CCC CCA TAC CAG ACT GGT TAT TGA TTT TCA TGG TGA CTG GCC TGA GAA GAT
 12715 TAA AAA AAG TAA TGC TAC CTT ATT GGG AGT GTC CCA TGS ACC AAG ATA GCA ACT GTC CTA TCC TCC TCC AAC
 12793 TGA TCA AGA AGA CCC TTT GAG GAA CTG AAA ACA CAA CTT TAG GCA CAT CTG TTG CTT TCG CTA CCA TCC TCC AAC
 12871 AGC CTG GGT GGT GGA CTC CAC ACC CTT TCA AGT TTC CAA AGC CTC ATA CAC CTG CTT ACC CCA CCA CTT GGC CAA
 12949 GGC TGT ATC CAG CAC TGG GAT GAA AAT GAT AAT ACC CCA CTT CTA TGT TTG ATA TTA CTC TAT CTC AAG CCC CAG GTT
 13027 AGT CCC CAG TCC CAA TGC TTT TGC ACA GTC AAA ACT CAA CTT GGA ATA ATC AGT ATT CTA TGA TAT GGT
 13105 CAC TGG GCC CAT ATA CCA TGT AAG ACA TGT GGA AAA GAT GTT TCA TGG GGC CCA GAC ACG TTC TAG AAG TAC CTG AGA
 13183 GTG GCA AAA AAT AGT TGT GCT AAA TAG TTT GGC CAT CTT TAG GCT GAG AGA CTA GGA BAT ACA GCG ATG GAC TAT ATC
 13261 AGC ATT GCA GGA TAG TTG TCA GTA ABC ACC CCA CAA CCC ATA ACA GAA GTA TTC TCT TCT TTC TAT ATC CCT TTT CCA
 13338 TCC ATG TAG ATG GCT GTC TTC ATA TTT GTT CTA GAC GGC CCG CC

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1 GCG GCC GCA ATA AAA TAT CTT TAT TAT CAT TAG ATC TGT GTG TTG GTT TTT TGT GTG AAT CGT AAC TAA CAT ACG CTC
 79 TCC ATC AAA ACA AAA AAT CCA AAT AAG CTC TCC CCA GTG CAA GTG CAG GTG CCA GAA CAT TTC
 157 TCT ATC GAA GGA TCT GCG ATC GCT CCG GTG CTT AGT AGC GAG CCA CAT CCG CCA GAA GTG ATG TCG TGT ACT GGC
 235 GGG GAG GGG TCG GCA ATT GAA CCG GTG CTT AGA GAA GGT GGC GCG GAG TAA ACT GGG AAA GTG TCG TGT ACT GGC
 313 TCC GCC TTT TTC CCG AGG GTG GGG GAG AAC CGT AIA TAA GTG CAG TAG TCG CCG TTA ACG TTC TTT TTC GGA ACG GGT
 391 TTG CCG CCA GAA CAC AGC TGA AGC TTC GAG GGG CTC GCA TCT CTC CTT CAC CCG CCC GCC CTA OCT GAG GCC GCC
 469 ATC CAC GCC GGT TGA GTC GCG TTC TGC CCG CTT GTG CTT GGA GGC TCA GAC TCA GGC GGT CCA AGC TGT GAC CCG
 547 TAA AGC TCA GGT CCA GAC CCG GCG TTT GTC CCG GGC TCC CTT GGA GGC TAC CTA GAC TCA GGC GGT CCA AGC TGT GAC CCG
 625 GCG TGA CCC TGC TTG CTC AAC TCT ACG TCT TTG TTT CGT TTC TGC TCG CCG CCA GAT CCA AGC TGT GAC CCG
 703 CCG CTA CTT GAG ATC ACC GGC GTG TCG ACG CCA CCA TGG ACA TGA GAG TGC CCG CCG ACG TCC TGS GGC TCC TGC TAC
 781 TCT GGC TCC GAG GTA AGG ATG GAG AAC ACT AGG AAT TTA CTC AGC CAG TGT GCT CAG TAC TGA CTG GAA CTT CAC GGA
 859 AGT TCT CTG ATA ACA TGA TTA ATA GTA AGA ATA TTT GTT TTT ATG TTT CCA ATC TCA GGT GGC AGA TGT GAC ATC CAG
 937 ATG ACC CAG AGC CCC AGC AGC CTG AOC GCC AGC GTG GGC GAG AGA GTG ACC ATC TGC AGA GCC AGC CAG AGC ATC
 1015 AGC AGC TAC CTG AAC TGG TAT CAG CAG AAG CCC AAG CTG CTG ATC TAC GGC GGC GGC TCC CTG CAG
 1093 AGC GGC GTG CCC AGC AGA TTC AGC GGC AGC GGC TCC GCC ACC GAC TTC ACC CTG AGC AGC CTG CAG CCC GAG
 1171 GAC TTC GCC ACC TAC TAC TGC CAG CAG AGC TAC TCC ATC TTC CCC AGC ATG GAA CAG CTG ACC TCT GGC GGA ACC GTG
 1249 AGA GCC GAG CCG GCT CCC ACC GTG TCC ATC TTC CCC AGC ATG TGG AAG TGA AGT TGC AAG ACC AGC CAG AGC GTG
 1327 TGC TTC GTG AAC AAC TTC TAC CCG AGA GAT ACC TCC ACC TAC AGC ATG AGC AGC ACC CTG AGC CAG AGC GGC GTG
 1405 CTG GAC AGC CAC AAC CTG TAC ACC TGC GAG GTG CAC AAG ACC ATG TAC AGC ATG AGC AGC ACC CTG AGC CAG AGC GTG
 1483 TAC GAG TGT TGA GCT AGC TGG CCA GAC ATG ATA AGA TAC ATT GAT GAG TTT GGA CAA ACC ACA ACT AGA ATG CAG TGA
 1561 AAC GAG TGT TGA GCT AGC TGG CCA GAC ATG ATA AGA TAC ATT GAT GAG TTT GGA CAA ACC ACA ACT AGA ATG CAG TGA
 1639 AAA AAA TGC TTT ATT TGT GAA AAT GCT ATT GCT TTA TTT GTA ACC ATT ATA AGC TGC AAT AAA GAT AAC
 1717 AAC AAC AAT TGC ATT CAT TTT ATG TTT CAG GTG GAG GTT TTT TAA AGC AAG TAA AAC CTC TAC
 1795 AAA TGT GGT ATG GAA TTC TRA AAT ACA TAG CAA AAC TTT AAC CTC CAA ATC AAG CCT CTA CTT GAA TCC TTT TCT
 1873 GAG GGA TGA ATA AGG CAT AGG CAT CAG GGC CTG TTG CCA ATG TGC ATT AGC TGT TTG CAG CCT CAC CTT TCA TGG

Figure 12 contd

1951 AGT TTA AGA TAT AGT GTA TTT TCC CAA GGT TTG AAC TAG CTC TTC ATT TCT TTA TGT TTT AAA TGC ACT GAC CTC CCA
 2029 CAT TCC CTT TTT AGT AAA ATA TTC AGA AAT AAT TTA AAT ACA TCA TTG TAT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 2107 AAT DCA GAT GCT CAA GGC CCT TCA TAA TAT CCC CCA GTT TAG TTG GAC TTA GGG AAC AAA GGA ACC TTT TTT TTT TTT TTT
 2185 AAT TGG ACA GCA AGA AGG CGA GCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT TCT
 2263 TTT CCA CTA TCG GCG AGT ACT TCT ACA CAG CCA TCG GTC CAG AGC GGC CTT CTG CGG GCG ATT TGT GTA CGC CCG
 2341 ACA GTC CCG GCT CCG GAT CCG AGT ATT GCG TCG CCA CCC TCC GGC CAA GGT CTA TCG AAA TTG CCG TCA ACC
 2419 AAG CTC TGA TAG AGT TGG TCA AGA CCA ATG CCG AGC ATA TAC GGC CCG AGC GGC GAT CCT GCA AGC TCC GGA TGC
 2497 CTC CGC TCG AAG TAG CGC GTC TGC TGC CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG
 2575 TGG GAA TCC CCG AAC ATC GGC TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG
 2653 CCG AAA TCC GCG TGC ACG AGG TGC CCG ACT TCG GGG CAG TCC TCG GGC CAG TCC TCG GGC CAG TCC TCG GGC CAG
 2731 ACG GAC GCA CTG ACG GTG TCG TCC ATC ACA GTT TGC CAG TGA TAC ACA TGG GGA TCA TGC GCA ATC GCG CAT ATG AAA TCA
 2809 CCG CAT GTA GTG TAT TGA CCG ATT CCT TGC GGT CCG AAT GAG AGT GAG AGC GCG GGT TCG GGT TCG GGT TCG GGT TCG
 2887 ATC GCA TCC ATG AGC TCC GCG ACG GGT TGC AGA ACA GCG GGC AGT TCG GGT TCG GGT TCG GGT TCG GGT TCG GGT TCG
 2965 TGT GCA CCG CCG GAG ATG CAA TAG GTC AGC CTC TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG TCG CCG
 3043 GGC GAT GCA AAG TGC CGA TAA ACA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA TAA
 3121 CCG CTT CCT ACA TCG AAG CTG AAA GCA CCA GAT TCT TCT TCG CCG GAT TCT TCT TCG CCG GAT TCT TCT TCG CCG
 3199 TTT TCG ATC AUA AAC TTC TCG ACA GAC GTC CCG GTG AGT TCA GGC TTT TTC ATG AGC GCG CAT CAT TAT TAT TAT TAT
 3277 TTA TAC TAT GCT GAT ATA CTA TGC CCG TGA TTA ATT GTC AAA ACA GCG TCG ATG GCG TCT CCA GCT TAT CTG ACG GTT
 3355 CAC TAA ACG AGC TCT TAT ATA GAC CTC CCA CCG TAC ACG CCT ACC GCT CAT TTG CGT CAA TGG GGC GGA ACT TGG AAA
 3433 ACG ACA TTT TGG AAA GTC CCG CTA TCC ACG CCT ATT GAT GTA CTG CCA AAA CCG CAT ATA ATG CCA GGC GCG CCA TTT ACC GTC
 3511 TCC CCG TGA GTC AAA CCG CTA TCC ACG CCT ATT GAT GTA CTG CCA AAA CCG CAT ATA ATG CCA GGC GCG CCA TTT ACC GTC
 3589 TAC GTA GAT GTA CTG CCA AGT AGG AAA GTC CCA TAA GGT CAT GTA CTG TAC TGC CAA GGT GGC AGT TTA CCG TAA ATA CTC
 3667 ATT GAC GTC AAT AGG GGG GGT ACT TGG CAT ATG AGT CAC TAT GGG AAC ATA CTT CAT TAT TGA CGT CAA TGG GCG GCG
 3745 CAC CCA TTG ACG TCA ATG GAA AGT CCC CAT TGG GGT TAC TAT GGG AAC ATA CTT CAT TAT TGA CGT CAA TGG GCG GCG
 3823 GTC GTT GGG CCG TCA GGC AGG CCG GGT ATT TAC CGT AAG TTA TGT AAC GCG TGC AGC TTT TTC CAT AGC CTC CCG CCG GAC
 3901 AAA GGC CAG CAA AAG GCG AGG AAC CCG AGT CAG AGG TGG CCA AAC CCG ACA GGA CTA TAA TAC GAC GCG TTT CCG CCG
 3979 CAT CAC AAA AAT CCA CCG CCG TCA AGT CAG AGG TGG CCA AAC CCG ACA GGA CTA TAA TAC GAC GCG TTT CCG CCG
 4057 AGC TCC CTC GTG CCG TCT CCT GTC CCG ACC CTG CCG CTT ACC GGA TAC TCG GCG TTT CCG CCG TCG GCG TCG GCG TCG
 4135 GCG CTT TCT CAT AGC TCA CCG TGT AGG TAT CTC AGT TCG GTG TAG GTC GTT CCG TCC AAG CTG GGC TGT GTG CAC GAA
 4213 CCC CCG GTT CAG CCG GAC CCG TGC GGT TTA TCC GGT AAC TAT CGT CTT GAG TCC AAC CCG GGA AGA CAC GAC TTA TCG
 4291 CCA CTG GCA GCA GCG ACT GGT AAC AGG ATT AGC AGA CCG AGT TAT GTC GGC GGT GCT ACA GAG TTC TGG AAG TGG TGG
 4369 CCT AAC TAC GGC TAC ACT AGA AGA ACA GTA TTT GGT ATC TGC GCT CTG CTG AAG CCA GTT ACC TTC GGA AAA AGA GTT
 4447 GGT AGC TCT TGA TCG GCG AAA CAA ACC GCT GGT AGC GGT GGT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 4525 AAA AAA GGA TCT CAA GAA GAT CCT TTG ATC TTT TCT ACG GGG TCT GAC GCT CAG TCG AAC GAA AAC TCA CGT TAA GGG
 4603 ATT TTG GTC ATG GCT AGT TAA TTA ACA TTT AAA TCA

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1 GCG GCC GCA ATA AAA TAT CTT TAT TTT CAT TAC ATC TGT GTG TTG GTT TTT TGT GTG AAT CGT AAC TAA CAT ACG CTC
 79 TCC ATC AAA ACA AAA CCA AAC AAA ACA AAC TAG CAA AAT AGG CTG TCC CCA GTG CAA GTG CAG GTG CCA GAA CAT TTC
 157 TCT ATC GAA GGA TCT GCG ATC GCT CCG GTG CCG AGT AGT GGC CAG AGC CCA CAT CCG CCA GAG TCC CCG AGA AGT TGG
 235 GGG GAG GGG TCG GCA ATT GAA CCG GTG CCG CTT AGA GAA GGT GGC CCG GGG TAA ACT GCG AAA GTG ATG TCG TGT ACT GGC
 313 TCC GCC TTT TTC CCG AGG GTG GGG GAG AAC CGT ATA TAA GTG CAG TAG TCG CCG TGA ACG TTC TTT TTC GCA ACG GGT
 391 TTG CCG CCA GAA CAC AGC TGA AGC TTC GAG GGG CTC GCA TCT CTC CTT CAC GCG CCG GCG CTA CCT GAG GCG GCG
 469 ATC CAC GCC GGT TGA GTC GCG TTG TGC CCG CTC CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG CCG
 547 TAA AGC TCA GGT CCA GCG GCG TTT GTC GCG CCG TCC CTT GGA GCG TAC CTA GAC TCA GCG GCG TCT CCG TAA GTT
 625 GCG TGA CCC TGC TTG CTC AAC TCT ACG TCT TTG TTT CGT TTT CTG TTC TGC CCG GTT ACA GAT CCA AGC TGT GAC CCG
 703 CCG CTA CCT GAG ATC ACC GCG GTG TCG ACG CCA CCA TGG ACA TGA GAG TGC CCG CCG CCG TCG TCG TCG TCG TCG

Figure 12 contd

781 TCT GGC TCC GAG GTA AGG ATG GAG AAC ACT AGG AAT TTA CTC AGC CAG TGT GCT CAG TAC TGA CTG GAA CTT CAG GGA
 859 AGT TCT CTG ATA ACA TGA TTA ATA GTA AGA ATA TTT GTT TTT ATG TTT CCA ATC TCA GGT GGC AGA TGT CAG TCT GCC
 937 CTG ACC CAG CCC GCT TCT GTG TCT GGC AGC CCT GGC CAG AGC ATC ACC ATC AGC TGC ACC GXC ACC AGC AGC GAC GTG
 1015 GGC GGC TAC AAC TAC TCC TCG TAT CAG CAC CCC AAG CAG CCC AAG CAG TAC TAC TAC TAC TAC TAC TAC TAC TAC TAC
 1093 AGA CCC AGC GGC GTG AGC AAC TTA AGC GGC AGC AAG AGC GGC AAC TCC ACC CTG ACC ATC AGC GGC CTG CAG
 1171 GCT GAG GAC GAG GCT GAC TAC TGC AGC AGC TAC ACC AGC AGC TCC ACC CTG GTG TTT GGC GGC AGA ACA AAG CTG
 1249 ACC GTG CTG AGA GGC GAC GGC GCT CCC ACC GTG TCC ATC TTT CCC AGC ATG GAA CAG CTG ACC TCT GGC GGA GGC
 1327 ACC GTG GTG TGC TTT GTG AAC TTT CAC TAC CCC AGA GAC ATC AGC GTG AAG TGG AAG ATC GAC GGC AGC GAG CAG AGG
 1405 GAC GGC GTG CTG GAC AGC GTG ACC GAC CAG GAC AGC AAG GAC TCC ACC TAC AGC ATG AAG ACC CTG AGC CTG ACC
 1483 AAG GTG GAG TAC TAC GAG AGG CAG AAC CTG TAC ACC TGC GAG GTG GTG CAC AAG ACC AGC TCC AGC CTT GTG AAG TCC
 1561 TTC AAC CGG AAC GAG TGT TGA GCT AGC TGG CCA GAC ATG ATA AGA TAC ATT GAT GAG TTT GGA CAA ACC ACA ACT AGA
 937 CTG ACT CAG CCT GCC TCT GTC TCT GGC TCT CCT GGA CAG TCG ATC ACC ATC TCC TGC ACT GGA ACC AGC AGT GAC GTT
 1015 GGT GGT TAT AAC TAT GTC TCC TGG TAC CAA CAG CCA GGC AAA GGC CCC AAA CTC ATG ATT TAT GAG GTC AGT AAT
 1093 GCG CCC TCA GCG GTT TCT AAT GCG TTC TCT GGC TCC AAG TCT GGC AAC ACG SCC TCC CTG AGC ATC ATC TCT GGC CTC CAG
 1171 GCT GAG GAC GAG GCT GAT TAT TAC TGC AGC TCA TAT ACA AGC AGC AGC ACT CTC GTA TTC GGC GGA ACC AAG CTG
 1249 ACC GTC CTA GCG GCT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT
 1327 ACA GTC GTG TGC TTC GTG AAC AAC TTC TAT CCC AGA GAC ATC AGT GTC AAG TGG AAG ATT GAT GGC AGT GAA CAA CAA
 1405 GAT GGT GTC CTG GAC AGT GTT ACT GAT CAG GAC AGC AAG GAC GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT
 1483 AAG GTT GAA TAT GAA AGG CAT AAC CTC TAT ACC TGT GAG GTT GTT CAT AAG ACA TCA TCC TCA CCC GTC AGC AAG AGC
 1561 TTC AAC AGG AAT GAG TCT TAG GCT AGC TGG CCA GAC ATG ATA AGA TAC ATT GAT GAG TTT GGA CAA ACC ACA ACT AGA
 1639 ATG CAG TGA AAA AAA TGC TTT AAT TGT GAA AAT TGT GAT GCT AAT GCT TTA TTT GTA ACC ATT ATA AGC TGC AAT AAA
 1717 CAA GTT AAC AAC AAT TGC AAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT TAT
 1795 AAC CTC TAC AAA TGT GGT ATG AAG CAT AAC ACA GCA TAG CAA AAC TTT AAC CTC CAA ATC AAG CCT CTA CTT GAA
 1873 TCC TTT TCT GAG GGA TGA ATA AAG CAT AAC GGC GTG TGG CCA ATG TGC CCA ATG TGC CCA ATG TGC CCA ATG TGC
 1951 CTT TCA TGG AGT TTA AGA TAT AGT GTA TTT TCC CAA GGT TGG AAC TAG CTC TTC ATT TCT TTA TGT TTT AAA TGC ACT
 2029 GAC CTC CCA CAT TCC CTT TTT AGT AAT AAT TTA AAT ACA TCA TTT CAA TTT GAC TTA GGA AAA TAA ATG TTT TTT
 2107 ATT AGG CAG AAT CCA GAT GCT CAA GGC CCT TCA TAA TAT CCC CCA GTT TAG TGT GAC TTA GGC AAC AAA GGA ACC
 2185 TTT AAT AGA AAT TGG ACA GCA AGA AAT GAT TCT AGC GAA TTC TCG ACT CAT TCC TTT GGC CTC GGA CCA GTG CTG
 2263 GGG CGT CCG TTT CCA CTA TCG GCG AGT ACT TCT ACA CAG CCA TCG GTC CAG ACG SCC GCG CTT CTG GCG AGT TGT
 2341 GTA GCG CCG ACA GTC CCG GCT CCG GAT CCG AGC AAT GCG TCG CAT CCA CCC CCG CAA GGT GCA TCA TCG AAA TTG
 2419 CCG TCA ACC AAG CTC TGA TAG AAT TGG TCA AGA CJA ATG CCG AGC ATA TAC TAC CCG AGC CAG GAT CTT SCA AGC
 2497 TCC GGA TGC CTC GGC TCG AAG TAG CCG GTC TGC TCC ATA CAA GGC CAC CAC CAC CAC CAC CAC CAC CAC CAC CAC
 2575 ACC TCG TAT TGG GAA TCC CCG AAC ATC GGC TCG CTC CAG TCA ATG ACC GCT GTT AAG CCG CCA TTG TCC AGG ACA
 2653 TTG TTG GAG CCG AAA TCC GCG TGC ACG AGG TGC CCG ACT TCG GCG CAG TCC TCG SCC CAA AGC ATC AGC TCA TCG AGA
 2731 GGC TGC GCG ACG GAC GCA CTG ACG GTG TCG TCC ATC ACA GTT TGC CAG TGA TAC ACA TGG GGA TCA GCA ATC GCG CAT
 2809 ATG AAA TCA CCG CAT GTA GTG TAT TGA CCG AAT CTT TGC GGT CCG AAT GGC CCG AAC CCG CCG CCG CCG CCG CCG
 2887 GGC GCA CCG ATC GCA TCC ATG AGC TCC GCG ACG GGT TGC AGC ACA GGC AGC AGC AGC AGC AGC AGC AGC AGC AGC
 2965 GTG ACA CCC TGT GCA CCG CCG GAG ATG CAA TAG GTG CAG CTC TCG CTG CAG CAG CAG CAG CAG CAG CAG CAG CAG
 3043 GGG AGC CCG GCT GAT GCA AAG TGC CCA TTA ACA TAA CCA TCT TTG TAG AAA CCA TCG GCG CAG CTA TTT ACC CCG AGG
 3121 ACR TAT CCA CCG CCT CTT ACA TCG AAG CTG AAA GCA CCA GAT TCT TCG CCG GAG AGC TGC ATC AGG TCG GAG ACG
 3199 CTG TCG AAC TTT TCG ATC AGA AAC TTC TCC ACA GAT GCG GTG TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT TTT
 3277 TGA GTC GTA TTA TAC TAT GCT GAT ATA CTA TGC CCA TGA TTT GTG AAA ACA GCG TGG ATG GCG TCT CCA GCT TAT
 3355 CTG ACG GTT CAC TAA ACG AGC TCT GCT TAT ATA GAC CTC CCA CCG TAC ACG CCT ACC GGC CAT TTG CCA TGG GGC
 3433 GGA GTT GTT ACG ACA TTT TGG AAA GTC CCG TTG ATT TAC TAG TCA AAA CAA ACT CCC ATT GAC GTG CAT GGG GTG GAG
 3511 ACT TGG AAA TCC CCG TGA GTC AAA CCG CTA TCC ACC CCG CAT CAT CAT CAT CAT CAT CAT CAT CAT CAT CAT CAT
 3589 GAT GAC TAA TAC GTA GAT GTA CTG CCA AGT AAG AAG GTC CCA TAA GGT CAT CAT CAT CAT CAT CAT CAT CAT CAT
 3667 TTT ACC GTC ATT GAC GTC AAT AGG GGG GGT ACT TGG CAT ATG ATA CAC TTG ATG TAC TCG CAA GTG GGC AGT TTA CCG
 3745 TAA ATA CTC CAC CCA TTG ACG TCA ATG GAA AGT CCC TAT TGG CGT TAC TAT GGG AAC ATA CGT CAT TAT TGA CGT CAA

[illegible]

1	CTT	GAT	TTG	GGT	GAT	GGT	TCA	GCT	AGT	GGG	CCA	TGG	CCC	TGA	TAG	ACG	GTT	TTT	CGC	CCT	TTG	ACG	TTG	GAG	TCC	ACG	
79	TTT	ATT	AGT	GGA	CTG	TTG	TTC	CAA	ACT	GGA	ACA	ACA	CTC	AAT	GAG	TCT	ATC	TGG	GGC	TAT	TCT	TTT	GAT	TTA	TAA	GGG	
157	ATT	TTG	CCG	ATT	TCG	GTC	TAT	TGG	TTA	AAA	AAT	GAG	CTG	ATT	GAT	CAA	AAA	TTT	AAC	GCG	AAT	TTT	AAC	AAA	ATA	TTA	
235	ACG	TTT	ACA	ATT	TTA	TGG	TGC	ATC	ACT	ACA	ATT	TAA	TGC	TCT	GAT	GCC	TAG	TTA	AGC	CAC	CCC	ACG	CAC	CCC	CCA		
313	ACA	CCC	GCT	GAC	GCG	CCC	TGA	CGG	GCT	TGT	CTG	CTC	CCG	CCA	TCC	GCT	TAC	AGA	CAA	GCT	GTC	ACC	GTC	TCC	GGG	ACC	
391	TGC	ATT	TGT	GAG	AGG	TTT	TCA	CCG	TCA	CCG	AAA	CGC	CGC	AGA	CGA	GGC	CTC	GTG	ATC	CGC	CTA	TTT	TTA	TAG	TAG		
469	GTT	ATT	CTC	ATG	ATA	ATA	ATG	GTT	TCT	TAG	ACG	TCA	GGT	GGC	ACT	TTT	CGG	GGG	AAT	GTG	CGC	GGG	ACC	CCT	ATT	TGT	
547	TTA	TTT	TTA	ATA	ATA	ATA	CTA	ATT	ATG	ATC	CTA	CCG	CTC	ATG	AGA	CAA	TAA	CCC	TGA	ATA	ATG	CTT	CAA	TAA	TAT	TGA	AAA
625	AGG	AAG	AGT	ATG	AGT	ATT	CAA	CAT	TTT	CGT	GCC	CTT	ATT	CCC	TTT	TTT	GGG	GGG	AAA	GTG	CTT	CGC	CTT	CCT	GTT	TGT	GCT
703	ACC	CCA	GGA	ACG	CTG	GTC	AAA	GAT	GCT	GAA	GAT	CAG	TTG	GGT	GCC	CGA	GTG	GGT	TAT	ATC	GAA	CTT	GAT	GAA	CTC	CTC	
781	AAC	ACG	GGT	AGG	ATC	CTT	GAG	AGT	TTT	CGC	CCC	GAA	GAA	GGT	TTT	CCA	ATG	ATG	AGC	ACT	TTT	AAA	CTG	CTG	CTA	TGT	CTC
859	GAG	GCG	GTA	TTA	TCC	GCT	ATT	GAC	GCC	GGG	CAA	GAG	CAA	CTC	GGT	CGC	CGC	ATA	CAC	TAT	TCT	CAG	AAT	GAC	TTG	GTT	GTT
937	GAG	TAC	TCA	CCA	GTC	ACA	GAA	AAG	CAT	CTT	ACG	GAT	GGC	ATG	ACA	AGA	AAA	TTA	TGC	AGT	GCT	GCC	ATA	ACC	ATG	ATG	
1015	AGT	GAT	AAC	ACT	GCG	GCC	AAC	TTA	CTT	CTG	ACA	ACG	ATC	GGG	AGA	CGG	ABG	CYA	ACC	GCT	TTT	TTT	CAC	ACC	ATG	ATG	
1093	GGG	GAT	CAT	GTA	ACT	CGC	CTT	GAT	CGT	TGG	GAA	CGC	GAG	CTG	RAI	GAA	GCC	ATA	CAA	AAC	GAG	CGC	GAG	ACC	ACG	ACG	
1171	ATG	CCT	GTA	GCA	ATG	GCA	ACA	ACG	TTG	CGC	AAA	CTA	TTA	ACT	GGC	GAA	CTA	CTT	ACT	CTA	GCT	TCC	CGG	CAA	CAA	TTA	
1249	ATA	GAC	TGG	ATG	GAG	GCG	GAT	AAA	GTT	GCA	GGG	CCA	CTT	CTG	TCG	CGC	CTT	CGG	GCT	GGC	TGG	TTT	ATT	GCT	GAT	GAT	
1327	AAA	TCT	GGA	GCC	GGT	GAG	CGT	GAG	CTT	CGC	GAT	ATC	ATG	GCA	CGA	CGG	CGG	CGA	GAT	GGT	AGC	CCC	TCC	CGT	ATC	GTA	
1405	GTT	ATT	TAC	ACG	ACG	GGG	AGT	CAG	GCA	ACT	ATG	GAT	GAA	CGA	AAT	AGA	CAC	ATC	GCT	GAG	ATA	GCT	GCC	TCA	CTG	ATT	
1483	AAG	CAT	TGG	TAA	CTG	TCA	GAC	CAA	GTT	TAC	TCA	TAT	ATA	CTT	TAG	ATT	GAT	TTA	AAA	CTT	CAT	TTT	TAA	TTT	AAA	AGG	
1561	ATC	TAG	GAG	ABG	ATC	CTT	TTT	TAT	AAT	ATC	ATC	AAA	ATC	CTT	TAA	GCT	GAG	TTT	TGG	TTT	TCG	CTC	TGA	CGC	TCA	GAC	
1639	CCG	GTA	GAA	AAG	ATC	AAA	GGA	TCT	TCT	TGA	GAT	ACT	TTT	TTT	TCG	CGC	GTA	ATC	TTC	TTC	CTC	CAA	AAA	AAA	CCA	CCA	
1717	CCG	CTA	CCA	GCG	ATG	GTT	TGT	TNG	CCG	GAT	CAA	GAG	CTA	CCA	ACT	CTT	TTT	CCG	AAG	GTA	ACT	GGC					

[illegible]

Figure 12 contd

TTG CAG CAC ATC CCC CTT TCG CCA GCT GGC GTA ATA GCG AAG AGG CCC GCA CCG ATC GCC CTT CCC AAC AGT TGC GCA GCA
GCC TGA ATG GCG AAT GGC GCC TGA TGC GGT ATT TTC TCC TTA GCG ATC TGT GCG GTA TTT CAC ACC GCA TAC GTC AAA
GCA ACC ATA GCG CCG CTC TGC TCG CCG ATT AAG GCG GGC GGT GAT GAT TAC GCG GAT GAT GAT GAT GAT GAT GAT GAT GAT GAT
TGC CAG CCG CTT AGC CCG CCG TCC TCC TTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT CTT
TCT AAA TCG GAG GCT CCC TTT AGG GTT CCG ATT TAG TGC TTT ACG GCA CCG CAC GTC CCG CAC AAA A

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1.	TAC	TCT	TCC	TTT	TTT	CAAT	AAT	ATT	ATT	GAA	GCA	TTT	ATC	AGG	GTT	ATT	GTC	TCA	TGA	GCG	GAT	ACA	TAT	TTG	AAT	GTA	TTT
79	AGA	AAA	ATA	AAA	TAG	GGG	TTT	CGC	GCA	CAT	TTT	CCC	GAA	AAG	TGC	TGA	TGC	CTG	AGC	TCG	ACG	GAT	CGG	GAG	ATC	TCC	
157	GCA	TTC	CTT	ATG	GTG	GAC	TCT	CGC	TAC	AAT	CTG	TTA	TGC	CGC	ATA	CTT	GCT	CGC	GAT	ACA	GTA	TCT	GCT	CGC	TTG	TGT	
235	GTT	GGA	GCT	CGC	TGA	GTG	CGC	GAG	CAA	AAT	CTT	AGC	TAC	AAC	AAG	GCA	AGG	CTT	GAC	GCA	CTA	TTG	CAT	GAA	GAA		
313	TCT	GCT	TAG	GGT	TAG	GCG	TTT	TGC	GCT	TGC	CTA	GCT	GST	CAA	TAT	TGG	CCA	TTA	GCC	ATA	TTA	TTT	ATT	GGT	TAT		
391	ATA	GCA	TAA	ATC	AAT	AGT	GGC	TAT	TGG	CCA	TTG	CAAT	AGT	TTG	TAT	CCA	TAT	CAT	ATP	ATG	TAT	ATP	ATP	GGC	TCA		
469	TGT	CCB	ACA	TTA	CCG	CCA	TGT	TGA	CAT	TGA	TTA	TTG	ACT	AGT	TAT	TAA	TAG	TBA	TCA	ATT	ACG	GGG	TCA	TTA	GTT	CAT	
547	AGC	CCA	TAT	ATG	GAG	TTT	CGC	GTT	ACA	TAA	CTT	ACG	GTA	AAT	GGC	CCG	CTG	TGA	CCG	ACA	CGC	GAC	CCC	GTC	CGC	CCA	
625	TTG	ACG	TCA	ATA	ATG	ACG	TAT	GTT	CCC	ATA	GTA	ACG	CCA	ATA	GGG	ACT	TTT	CAT	TGA	CGT	CAA	TGG	GTG	GAG	TAT	TTA	
703	CGG	TAA	ACT	GCC	CAC	TTG	GCA	TAT	CAA	GTG	TAT	CAT	ATA	CTT	AGT	ACG	CCC	CTT	ATP	GAC	GTG	ACT	GAC	GAT	GAC	AAA	
781	TGG	CCC	GCC	TGG	CAI	TAT	GCC	CAG	TAC	ATG	ACC	TTA	TGG	GAC	TTT	CGT	ACT	TGG	TAC	ATC	TAC	GTA	TTA	GTG	ATG	ATA	
859	GCT	ATT	ACC	ATG	GTG	ATG	CGG	TTT	TGG	CAG	TAC	AAAT	GGG	CGT	GGA	TAG	CCG	TAT	GAC	TCA	CGG	GGA	TTT	CCA	AGT		
937	CTT	CAC	CCC	ATT	GAC	GTG	AAT	GGG	AGT	TTG	TTT	TGG	CAC	CAA	AAT	CAA	CGG	GAC	TTT	CCA	AAA	TGT	CGT	AAC	AAC	TCC	
1015	GCC	CCA	TTG	ACG	CAA	ATG	GGC	GGT	AGG	CGT	GTA	CGC	TGG	GAG	GTG	TAT	ATA	AGC	AGA	GCT	CGT	TTA	GTG	AAC	CGT	CAG	
1093	ATC	GCC	TGG	AGA	CGC	CAT	CCA	CGC	TGT	TTT	TGT	GAC	CTA	CAF	AGA	ACA	CAC	CGG	ACA	TCC	ACG	CTC	CGC	GGC	GGC	GAA	
1171	GCG	TGC	ATT	GGG	AGC	TTG	GTA	CGC	GTG	AAT	TGG	CCG	GCC	GCC	GAT	ATC	GAT	CGG	GTG	ATC	CGC	ACC	GAC	GCG	TTG	GCG	
1249	AGA	GGC	CGC	AAT	TCC	CTA	GCC	ACC	ATG	GGA	TGG	AGC	TGT	ATC	ATC	CTC	TTT	TTG	GTA	CTG	CTG	CTG	CGC	CAG	CGC	GCC	
1327	ATG	GCG	CGG	AGA	ATG	GAG	GGA	ACT	GGG	CGC	AGT	TAG	GGG	CGG	GAT	GGG	AAA	CGC	GGC	AGT	GAG	CGG	AAC	GCA	ATP	ATG	GTG
1405	CTA	ATT	GAG	ATG	CGG	ATC	CGC	TGG	CAC	AGG	TAT	CCC	GAG	TGG	AAA	CGC	TGG	AAA	CGC	GGC	AGT	GAG	CGC	AAC	ATP	ATG	GTG
1483	AGT	TAG	CTC	CAI	TAT	TAG	GCA	CCC	CAG	GCT	TTA	CAC	TTT	ATG	CTT	CGG	GCT	CGT	ATG	TTG	TGT	GGA	ATP	GTG	AGC	GGA	
1561	TAA	CAA	TTT	CAC	ACA	GGA	AAC	AGC	TAT	GAC	CAT	GAT	TAC	GCC	AAG	CTT	GGG	CTG	CAG	GTT	CTT	TCC	GCC	TCA	GAA	GCC	
1639	ATA	GAG	CCC	ACC	GCA	TTC	CCA	GCA	TGC	CTG	CTA	TTG	TCT	TCC	CAA	TCC	TCC	CTG	CTG	CTG	TCC	TGC	CGC	ACC	CCA	CCC	
1717	CCC	AGA	ATA	GAA	TGA	CAA	CTA	CTC	AGA	CAA	TGC	GAT	GCA	ATP	TCC	TCA	TTT	TAT	TAG	GBA	AGG	ACA	GTG	GGA	GTG</		

3121	GTG	ACA	AAA	CAC	ACA	CAT	GCC	CAC	GCT	GCC	CAG	CAC	CTG	AAC	TCC	TGG	GGG	GAC	GCT	CAG	TCT	TCC	TCT	TTC	CCC	CAG
3122	AAC	CCA	AGG	ACA	CCC	TCA	TGG	TCT	CCC	GGA	CCC	CTG	AGG	TCA	CAT	CAT	TGG	TGG	ACG	TGA	GCC	AGC	AGC	ACC	CTC	
3123	AGG	TCA	ACT	TCA	ACT	GGT	ACG	TGG	ACG	GCG	TGG	TGG	TGG	TGC	ATA	ATG	CCA	AGA	CAA	AGC	AGC	AGC	AGT	ACA	ACA	
3124	GCA	GCT	AGT	CTG	TGG	TCA	GCG	TCC	TCA	CGC	TCC	TGC	ACC	AGG	ACT	GGC	TGA	ATG	ACA	AGG	AGT	ACA	AGT	GCA	TCT	
3125	CCA	ACA	AAG	CCC	TCC	CAG	CCC	CCA	TCG	AGA	AAH	CCA	TCT	CCA	AAG	CCA	AAG	GSC	AGC	CCC	GAG	RAC	CAC	AGG	TGT	
3126	CCC	TCG	CCC	CAT	CCC	AGG	AGG	TGA	TGA	AGA	AGA	AGA	AGC	AGG	TCA	GCC	TGA	CCC	TGG	TCA	AGC	GCT	ATC	CAG	GCG	
3127	CCG	CCT	TCT	TCC	TCT	ATA	GGA	AGC	TCA	CCG	TCA	CCG	TGG	ACA	AGA	GCA	GGT	GGC	AGC	AGG	GGG	ACT	CCG	CGG	TGA	
3128	TGC	ATG	AGG	CTC	TGC	ACA	ACC	ACT	ACA	CGC	AGA	GCC	TCT	CCC	TGT	CTC	CGG	GTA	AAT	GAG	TAT	AAA	GGA	TCT	TAA	
3129	TTA	ATC	CBA	GCT	CGG	TAC	CHA	GCT	TAA	GTA	TAA	ACC	GCT	GAT	CAG	CCT	CGA	CTG	TGC	CTT	CHA	GTY	GCC	AGC	CAT	
3130	TTG	TTT	GCC	GCT	CCC	CTG	TGC	CTT	CCG	TGG	CTT	TTA	TTC	TGG	GGG	GTG	GGG	TGG	GCC	AGG	ACA	SCA	AGG	AGG	ATT	
3131	TTG	CAT	CGC	ATT	GTC	TGA	GTA	GGT	GTC	ATT	CTA	TTC	TGG	GGG	GTG	GGG	TGG	GCC	AGG	ACA	SCA	AGG	AGG	AGT	GCG	
3132	AAG	ACA	ATA	GCA	GAC	ATG	CTG	GCG	ATG	CGG	TGG	CTT	CTA	TGG	CTT	CTG	AGG	CGG	AAA	AAA	GAA	GAA	GCT	CTA	GGG	
3133	GCT	ATC	CCC	CCG	ACG	CGC	CCT	GTA	GCG	GCG	CTA	GCG	CGG	CGT	GTA	GCG	TGG	TGA	CTA	CGG	TGA	CTA	CAC	CTG	TGG	
3134	GGT	ATC	CGC	CCG	ACG	CGC	CTC	GTA	GCG	GCG	CTA	GCG	CGG	CGT	GTA	GCG	TGG	TGA	CTA	CGG	TGA	CTA	CAC	CTG	TGG	
3135	AAA	TCG	GGG	GCT	CCC	TTT	AGG	GTT	CCG	ATT	TAG	TGC	TTT	ACG	GCA	CCT	GGA	CCC	CAA	AAA	ACT	TGA	TGA	GCG	TGA	
3136	TTT	ACG	TAG	TGG	GCC	ATC	GCC	ATA	GCC	ACT	CAA	CCC	TAT	CTC	GGT	CTA	TTC	TGA	TTT	AGA	AGG	GAT	TTT	GCC	GAT	
3137	CTT	GTT	CCA	AAC	TGG	ABC	ACT	CAA	CCC	TAT	CTC	GGT	CTA	TTC	TTC	GAC	TTA	TGA	TTT	GAA	AGG	GAT	TTT	GCC	GAT	
3138	CTA	TTG	GTT	AAA	TGA	GCT	GAT	TTA	ACA	AAA	ATT	TAA	CGC	GAA	TTA	ATT	CTG	TGG	AAH	GGG	TGT	CAG	TTA	GGG	TGT	
3139	GGA	AAG	TCC	CCA	GAC	TCC	CCA	GCA	GGC	AGA	AGT	ATG	CAA	AGC	ATG	CAT	CTC	AAT	TAG	TCA	GCA	ACC	AGG	TGT	GGA	
3140	TCC	CCA	GGC	TCC	CCA	GCA	GGC	AGA	AGT	ATA	AGC	ATG	CAT	CTC	AAT	CTC	AAT	TAG	TCA	GCA	ACC	AGG	TGT	GGA		
3141	CCG	CCC	ATC	CGC	CCC	CTA	AGC	AGT	ATA	AGC	ATG	CAT	CTC	AAT	CTC	AAT	CTC	AAT	TAG	TCA	GCA	ACC	AGG	TGT	GGA	
3142	GAG	CCC	GAG	GCC	GCC	TCT	GCC	TCT	GCC	CTA	TTC	CAG	AG	TAG	TGA	GGA	GSC	TTT	TTC	GAA	GGC	CTA	GGC	TTT	TGC	
3143	AAG	CTC	CTG	GGA	GTT	TGG	ATA	TCT	TTC	GGA	TCT	GAT	CAA	GAG	ACA	GGA	TGA	GGA	TGA	TGG	TTC	TTC	CGC	CTA	GAC	
3144	GAT	GGA	TTG	CAC	GCA	GGT	TCT	CCG	GCT	CTC	TGG	TGG	GAG	AGA	CTA	TTC	GAC	TAT	GAC	TGG	GCA	CAA	CAG			

Figure 12 contd

6865 AGC GGT TTG ACT CAC GGG GAT TTC CAA GTC TCC ACC CCA TTG ACG TCA ATG GGA GTT TGT TTT GGC ACC AAA ATC ABC
 6943 GGG ACT TTC CAA AAT GTC GTA ACA ACT CCG CCC CAT TGA CGC AAA TGG GCG GTA GGC GTG TAC GAT GGG AGG TCT ATA
 7021 TAA GCA GAG CTC GTT TAG TGA ACC GTC AGA TCG CCT GGA GAC GGC ATC CAC GCT GTT TTG ACC TCC ATA GAA GAC ACC
 7099 GGG ACC GAT CCA GCC TCC GCG AAC GGC CCG AAT TGG GAA GCT TAC TAC CCG TGA ATT AGG GCG GTC GAG GTT
 7177 ATC GAT CCG ACC GAC GCG TTC GCG AGA GGC CCG AAT TCG GAA TGC ACC ATG TCA TGC CTT GGC TFC TGG GCA GTT
 7255 GTG ATC TCC ACC TGT CTT GAA TTC TCC ATG GGT GAG ATC CAG ATG ACC CAG TCT CCA TCC TCC CTG TCT GCA TCT GTA
 7333 GGA GAC AGA GTC ACC ATC ACT TGC CCG GCA ACT AGC AGC AAT AGC AGT TAC TTA AAT TGG TAT CAG CAG AAA CCA GCG
 7411 AAA GCC CCT AAG CTC CTG ATC TAT GCT GCA TCC AGT TTG GCA AGT GGG GTC CCA TCA ACG TTC AGT GGC AGT GSA TCT
 7489 GGG ACA GAT TTC ACT CTC ACC ATC AGC AGT TCG CAA CCT GAA GAT TTT GCA ACT TAC TGT CAA CAG AGT TAC AGT
 7567 ACC CCT CCA ACG TTC GGC CAA GGG ACC AAG GTG GAG AYC AAA CGT AAG TGC ACT TTG CCG CCG CTA GGA AGA AAC TCA
 7645 AAA CAT CAA GAT TTT AAA TAC GCT TCT TGG TCT CTT TGC TAT AAT TAT CTG GGA TAA GCA TGC TGT TTT CTG TCT GTC
 7723 OCT ABC ATG CCC TGT GAT TAT CCG CAA ACA ACA CAC CCA AAG GCA GAA CTT TGT TAC TTA AAC ACC ATC CTG TTT GCT
 7801 TCT TTC CTC AGG AAC TGT GGC TGC ACC ATC TGT CTT CAT CTT CCC GGC ATC TGA TGA GCA GTT GAA ATC TGG AAC TGC
 7879 CTC TGT TGT GTG CCT GCT GAA TAA CTT CTA TCC CAG AGA GGC CAA AGT ACA GTG GAA GGT GGA TAA CCG CTT CCA AUC
 7957 GGG TAA CTC CCA GGA GAG TGT CAC AGA GCA GGA CAG CAC CTA GAG CCA CCA TCA GCG CCA CAG CCA CCA AUC
 8035 CAA AGC AGA CTA CGA GAA ACA CAA AGT CTA CCG CTC CGA AGT CAC CCA TCA GCG CCA TCA GCG CCA AAA GAG
 8113 CTT CAA CAG GGG AGA GTG TTA GGT TTA ACG GAT CCG AGC TCG GTA COA AGC TCA AGT TTA AAC CCG TGA TCA GCG TCG
 8191 ACT GTG CCT TCT AGT TGC CAG CCA TCT GTT GTT TGC CCG TCC CCG GTG CCG TGT CAT TCT ATT CTG GGG GGT GGG GTG
 8269 ACT GTC CTT TCC TAA TAA AAT GAG GAA AAT GCA TCG CAT TGT CTG AGT AGG TGT TGT TGC GTG GGT GGG GTG
 8347 GGG CAG GAC AGC AAG GGG GAG GAT TGG GAA GAC AAT AGC AGG CAT GCT GGG GAT GCG GTG GGT TGC GTG GGT TGT GAG
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Figure 13

A

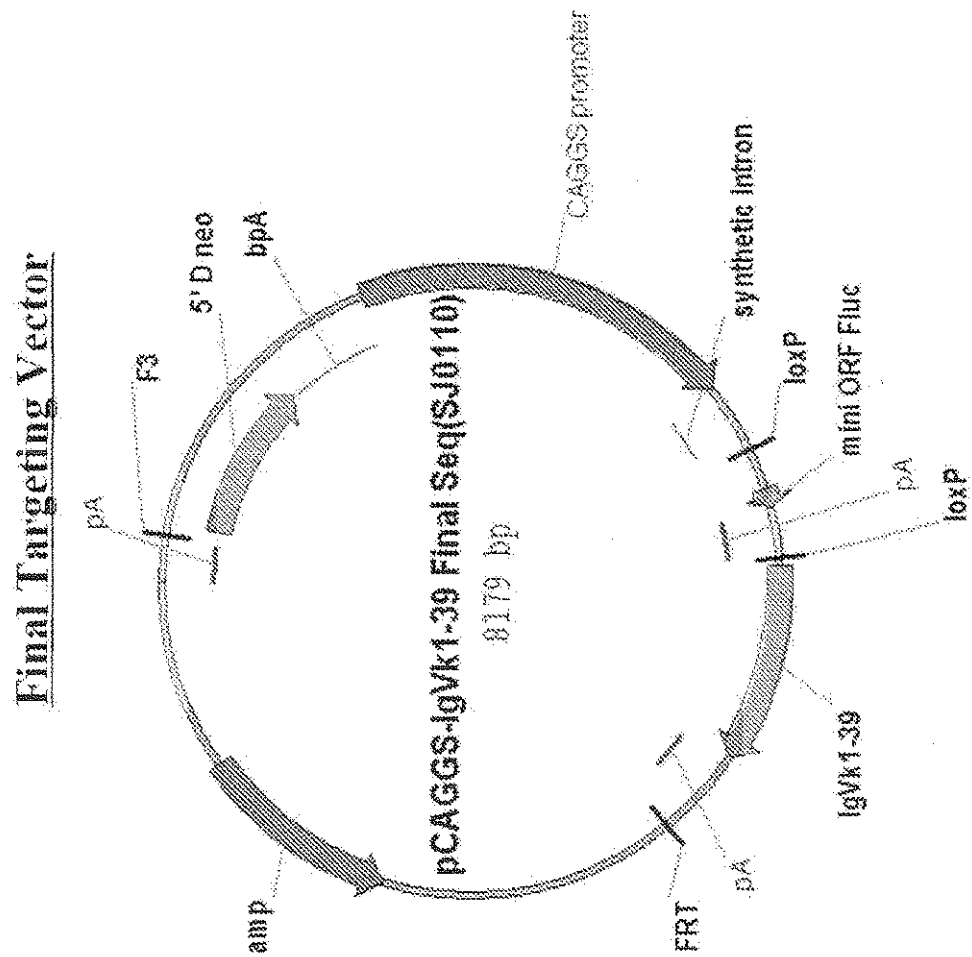


Figure 13 contd

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Figure 13 contd

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Figure 13 contd

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Figure 13 contd

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Figure 13 contd

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Figure 13 contd

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Figure 13 contd

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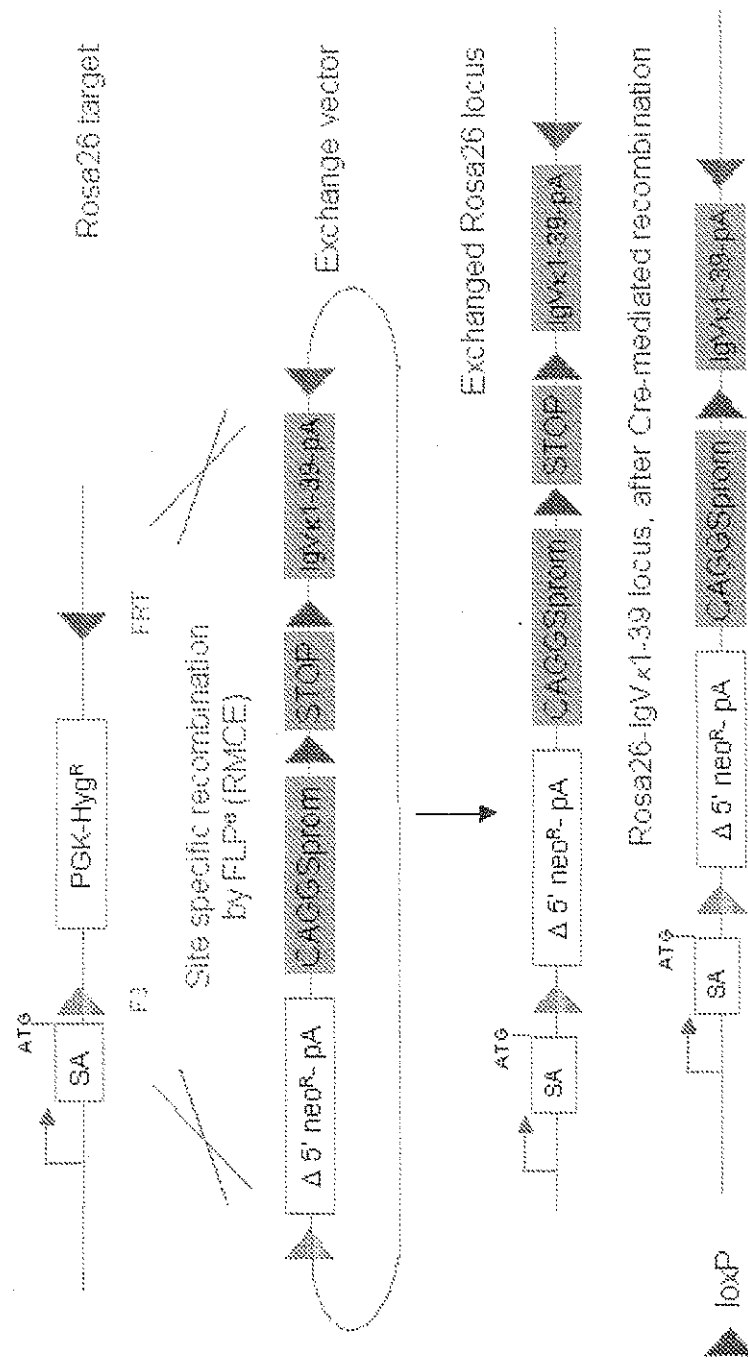
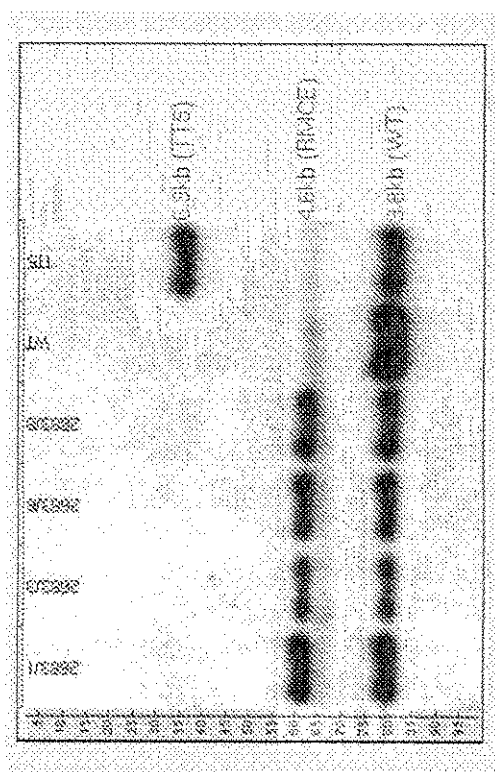


Figure 14

A



B

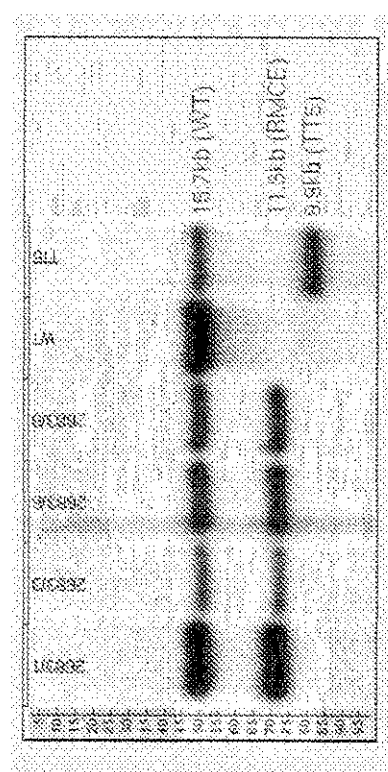


Figure 15

A

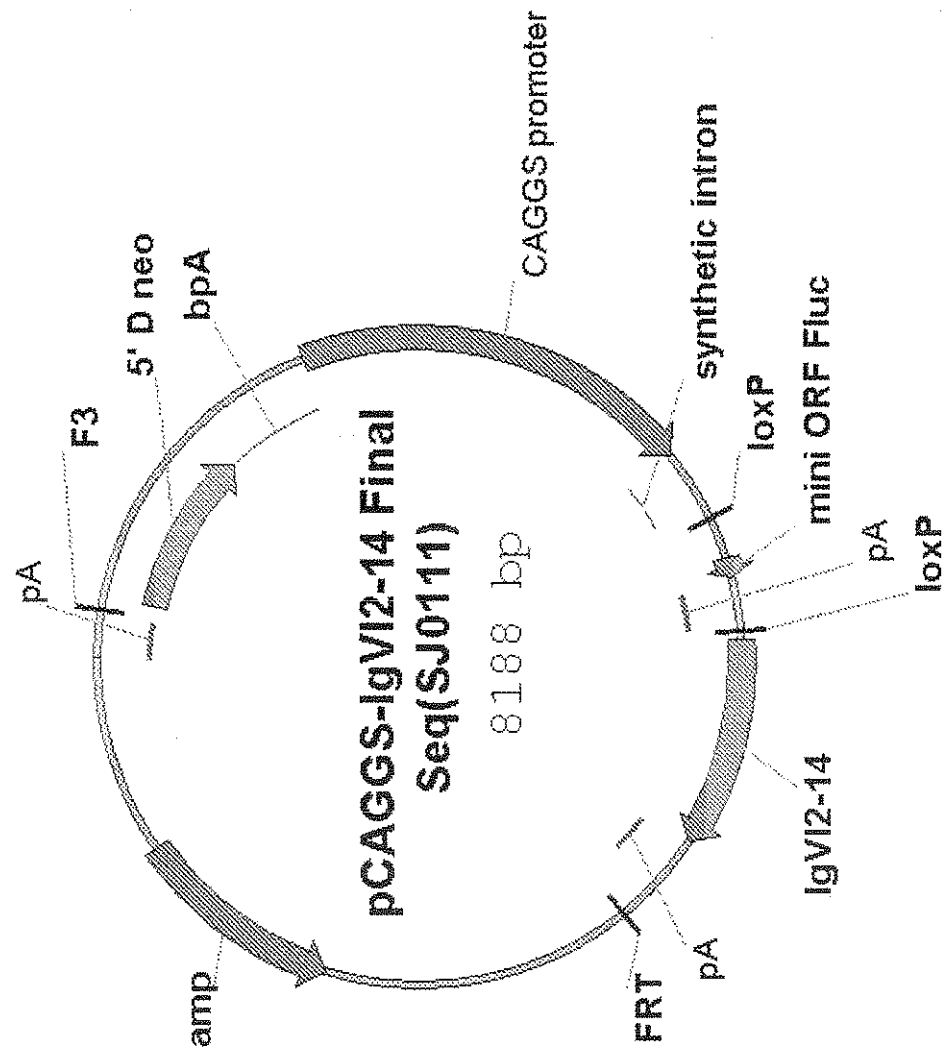


Figure 15 contd

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Figure 15 contd

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 2401 ggtccggga gggccctttg tgccgggggg agcggtctcg ggggtgcgtg cgtgtgtgtg
 2461 tgcgtggga gcgccgctg cggcccgcg tgcccgggcg ctgtgagcgc tgcggggcg
 2521 gcgcggggct ttgtgcgct cgcgtgtgc cyaggggagc gcggccgggg gcggtgccc
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 2641 tgagcagggg gtgtggggcg ggcggtcggt ctgtaacccc cccctccccg
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Figure 15 contd

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 3121 tgccttcggg ggggacggg caggggcggg ttcggcttct ggcgtgtgac cggcggtctct
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 3241 cagtttccaa aaacgaggag gatttgatat tcacctggcc cgcggtgatg cctttgaggg
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Figure 15 contd

-48/72-

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 5941 ggaagcgtgg cgttttctca tagctcagc tgtaggatc tcagttcggg taggtcgtt
 6001 cgtcccaagc tggggtgtgt gcacgaacc cccgttcagc ccgaccgctg cgccttatcc

Figure 15 contd

-49/72-

6061 ggtaactatc gtcttgagtc caaccggta agacacgact tategcaact ggcagcagcc
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 6181 tggcctaact acggctacac tagaaggaca gtatttggta tctgcgctct gctgaagcca
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Figure 15 contd

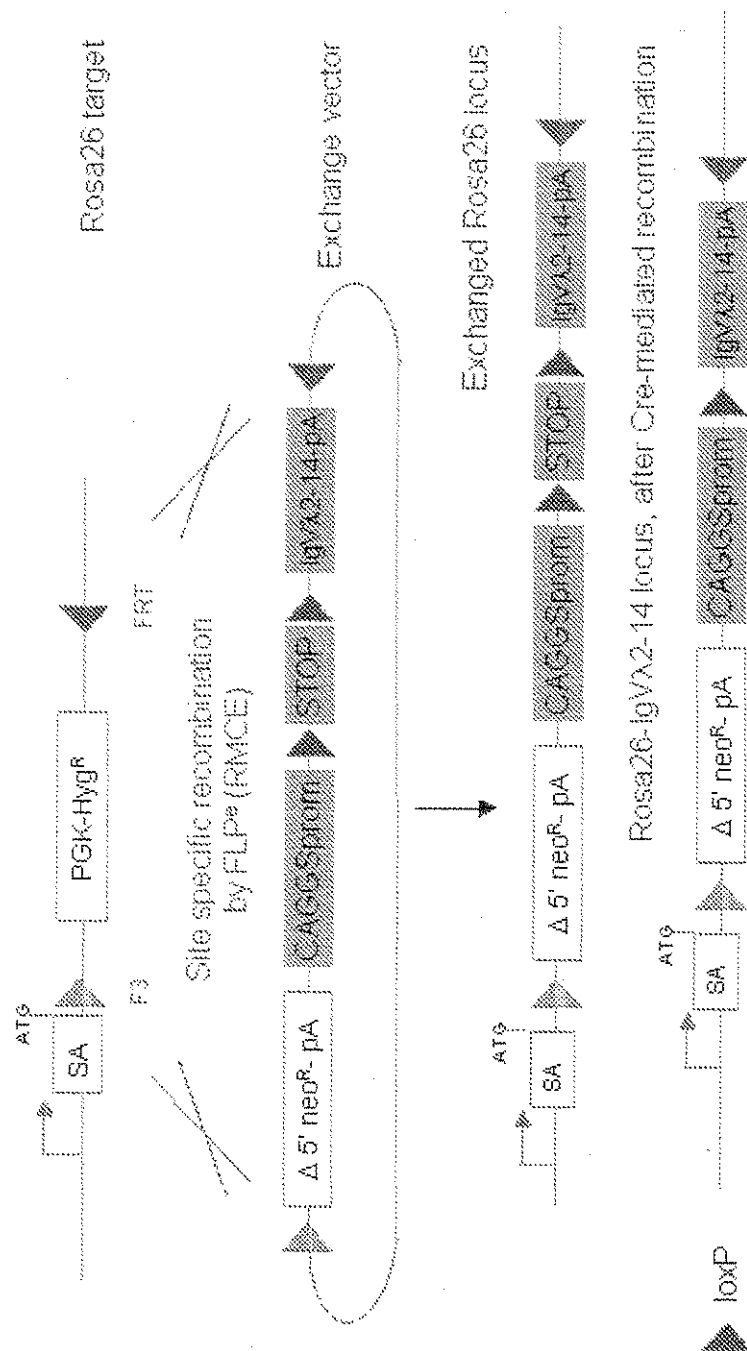
-50/72-

7621 aagaatagac cgagataggg ttgagtgttg ttccagtttg gaacaagagt ccactattaa
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8161 aattgggggt aactaagtaa ggatcgag

Figure 15 contd

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C



Enrico

~~52172~~

A.

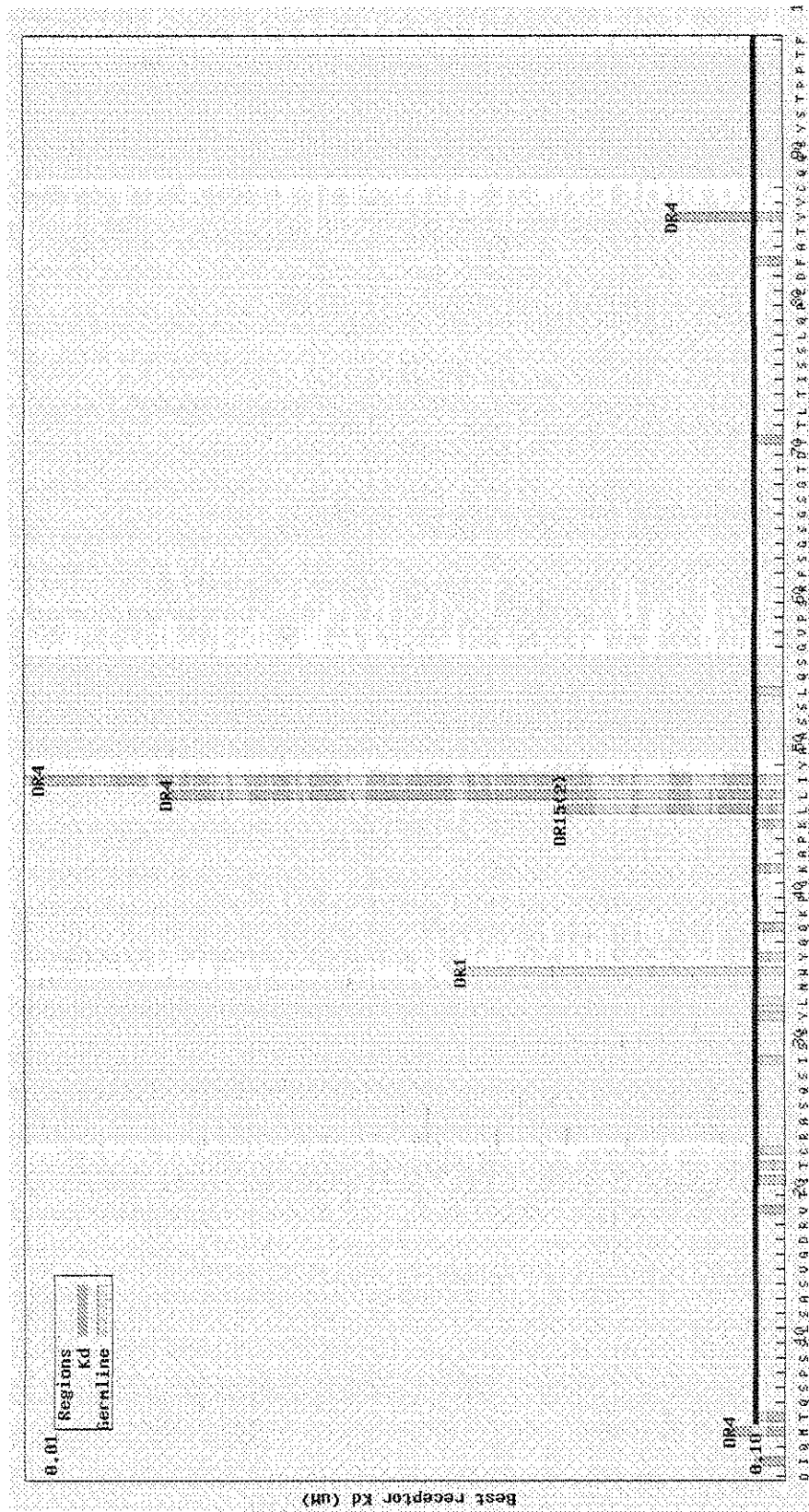


Figure 16 contd

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B

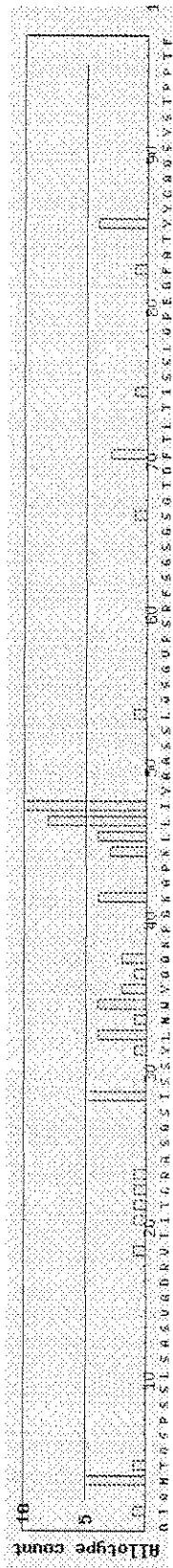
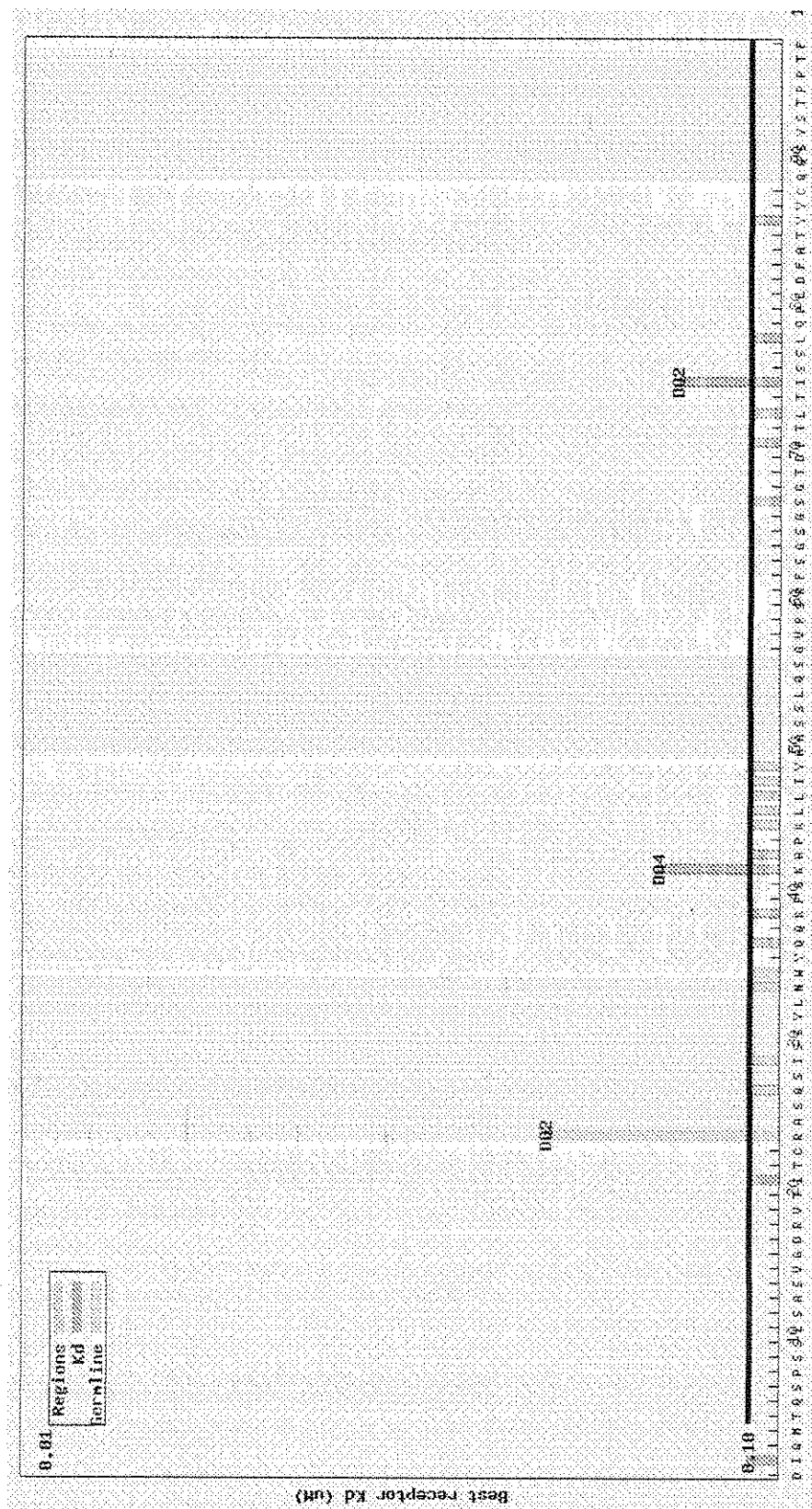


Figure 16 contd

~~54172~~



File 17

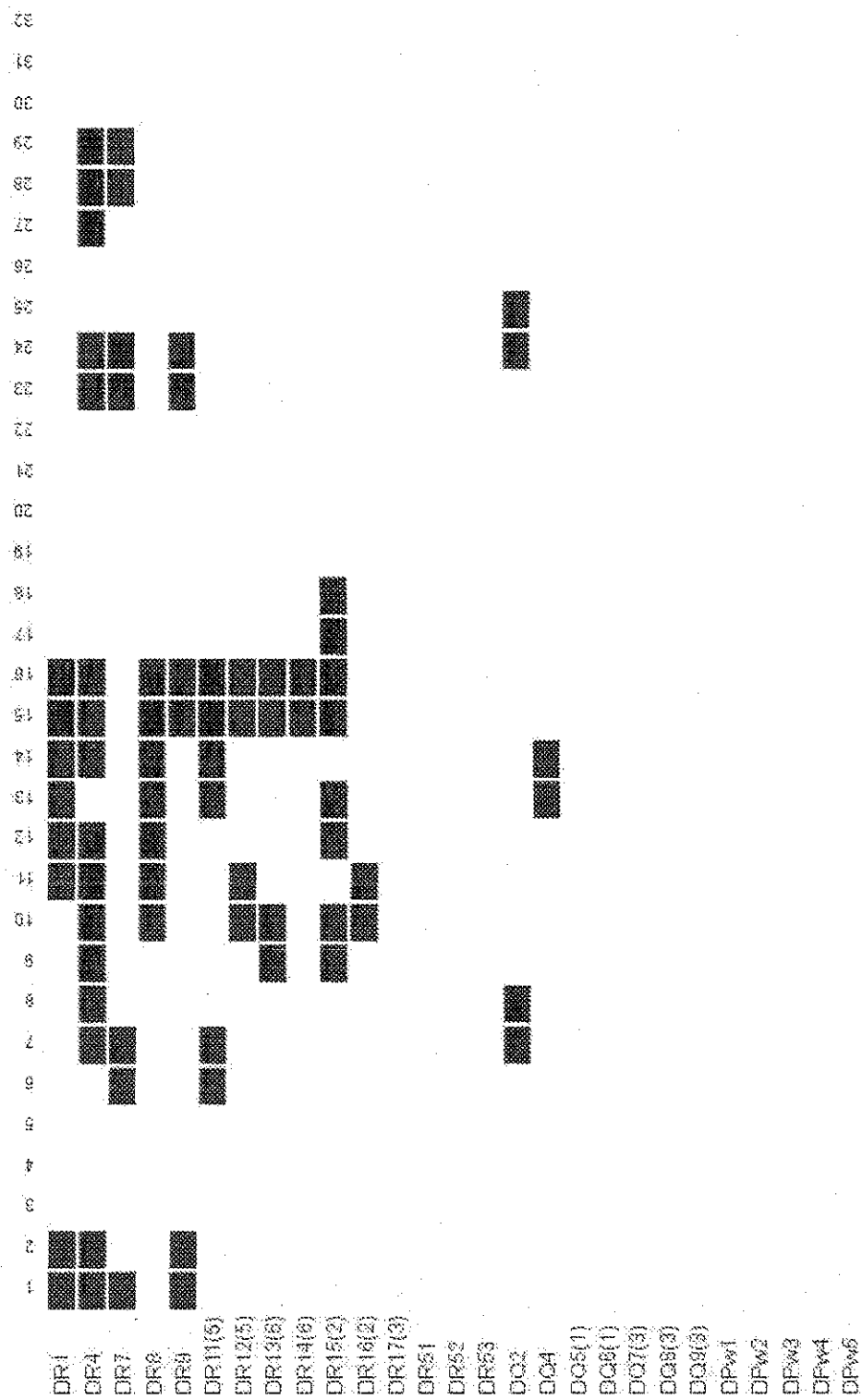
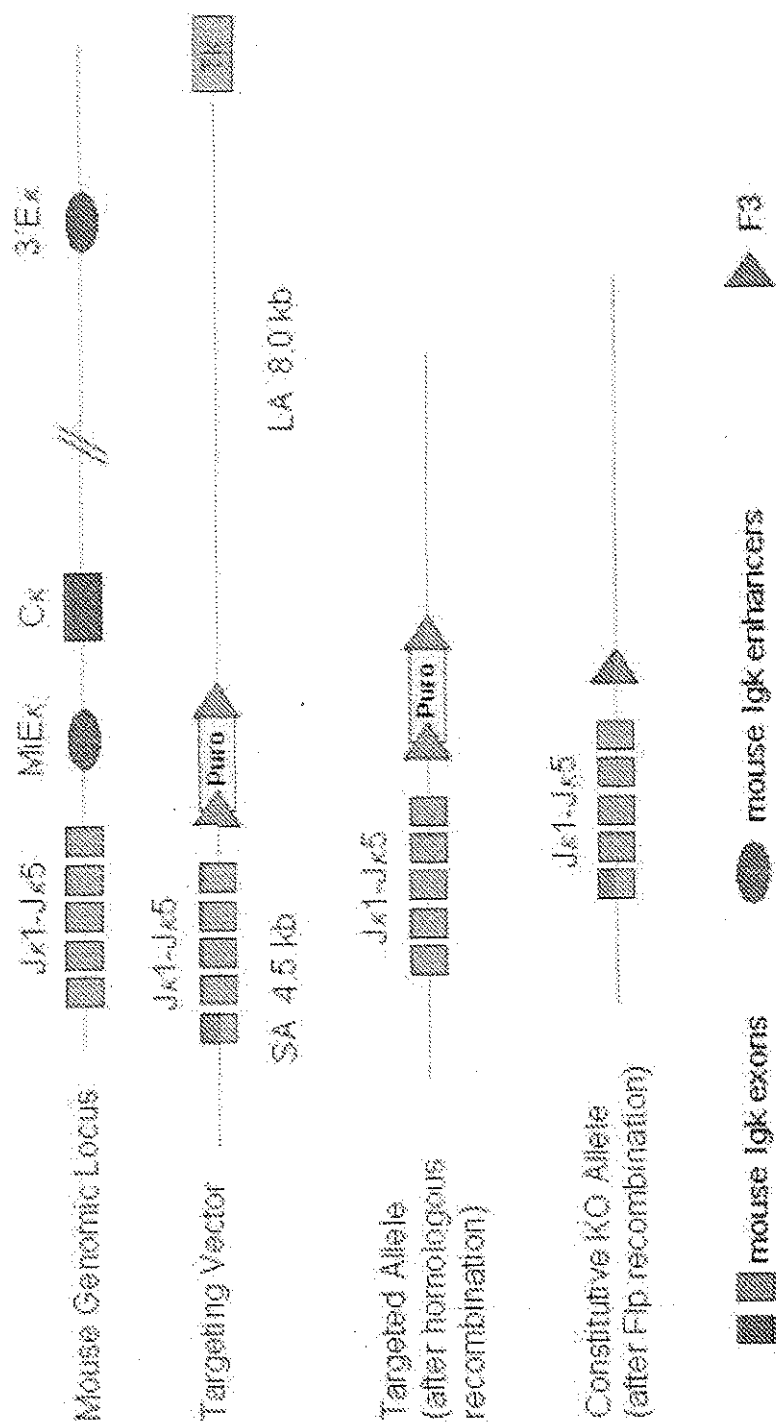


Figure 18

-56/72-

A



-57/72-

Figure 18 contd

B

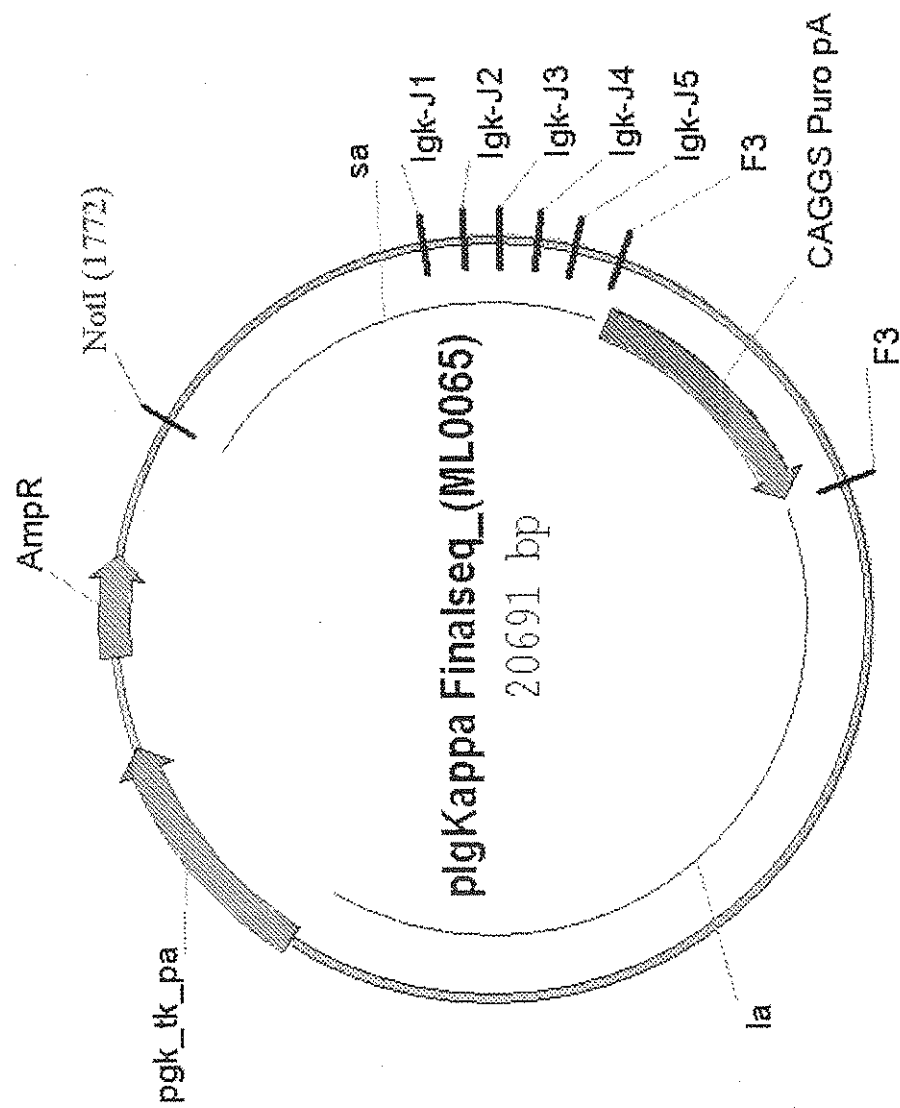


Figure 19

-58/72-

A

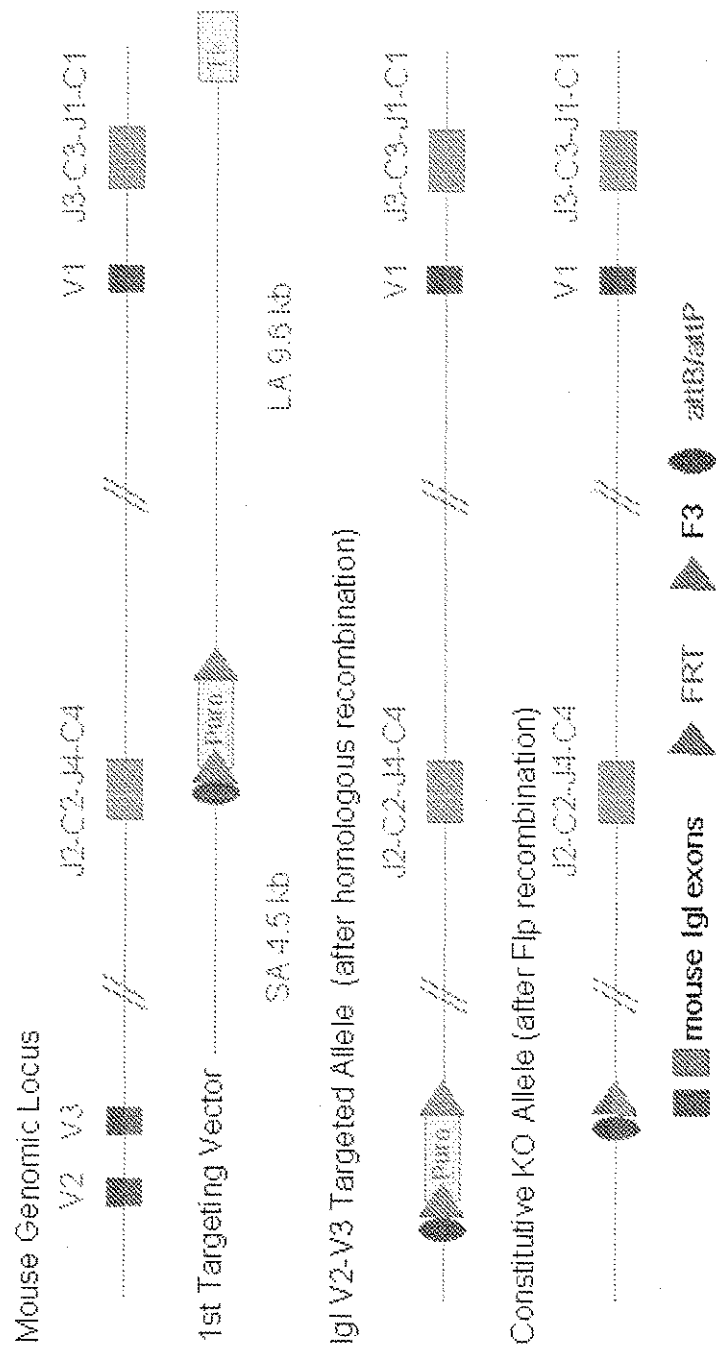


Figure 19 contd

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B

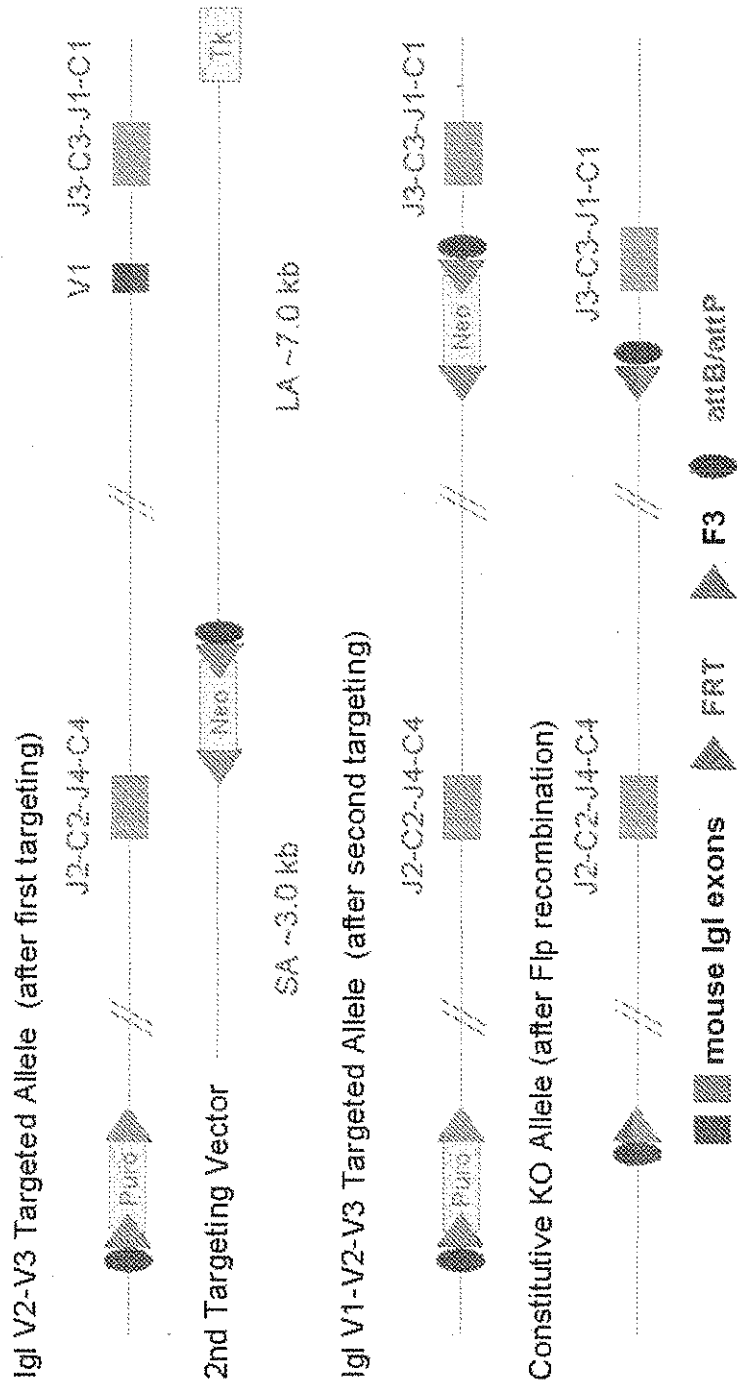
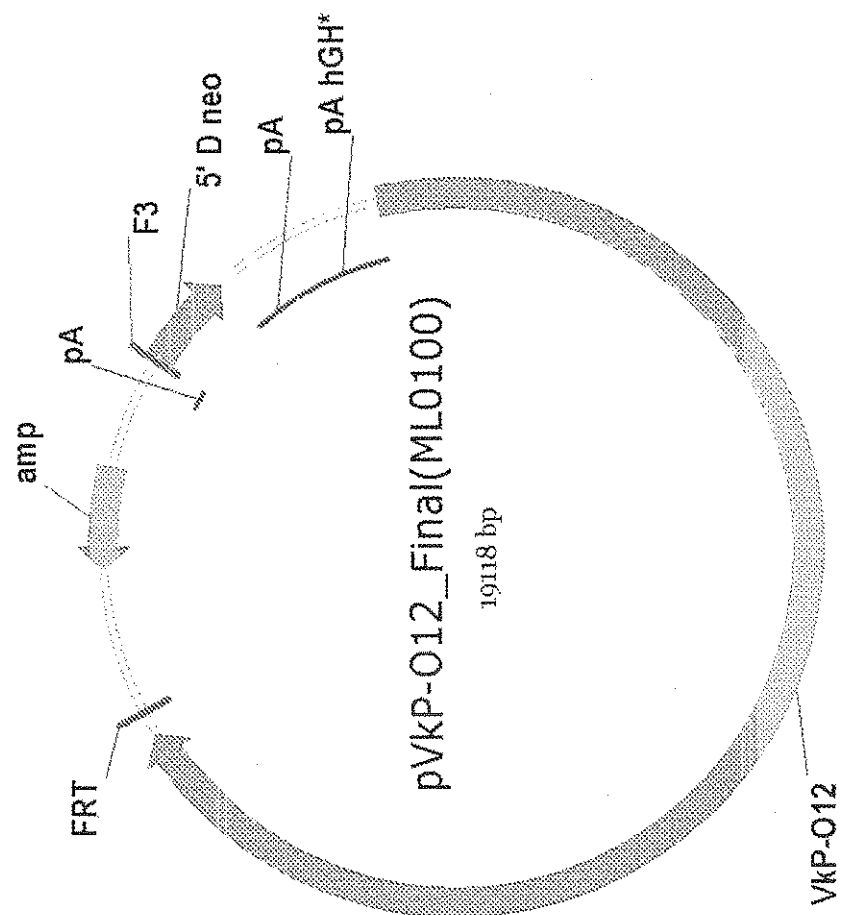


Figure 20

A



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Figure 20 contd

B

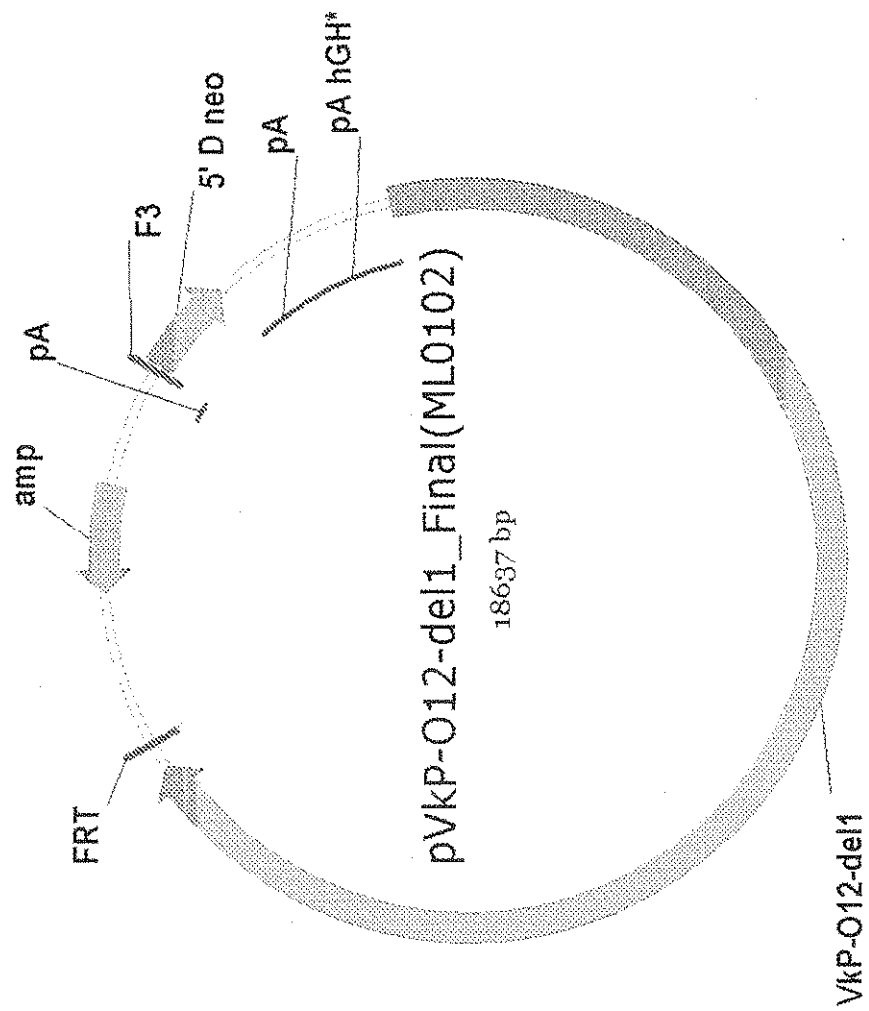


Figure 20 contd

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C

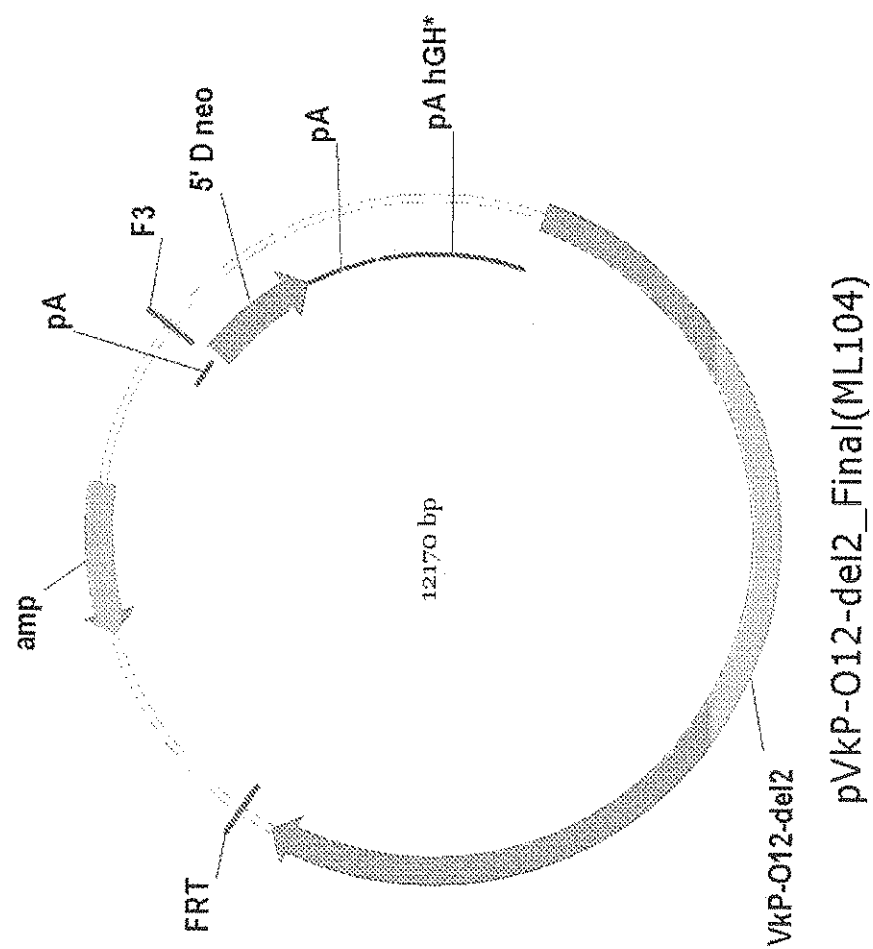


Figure 21
-63/72-

A

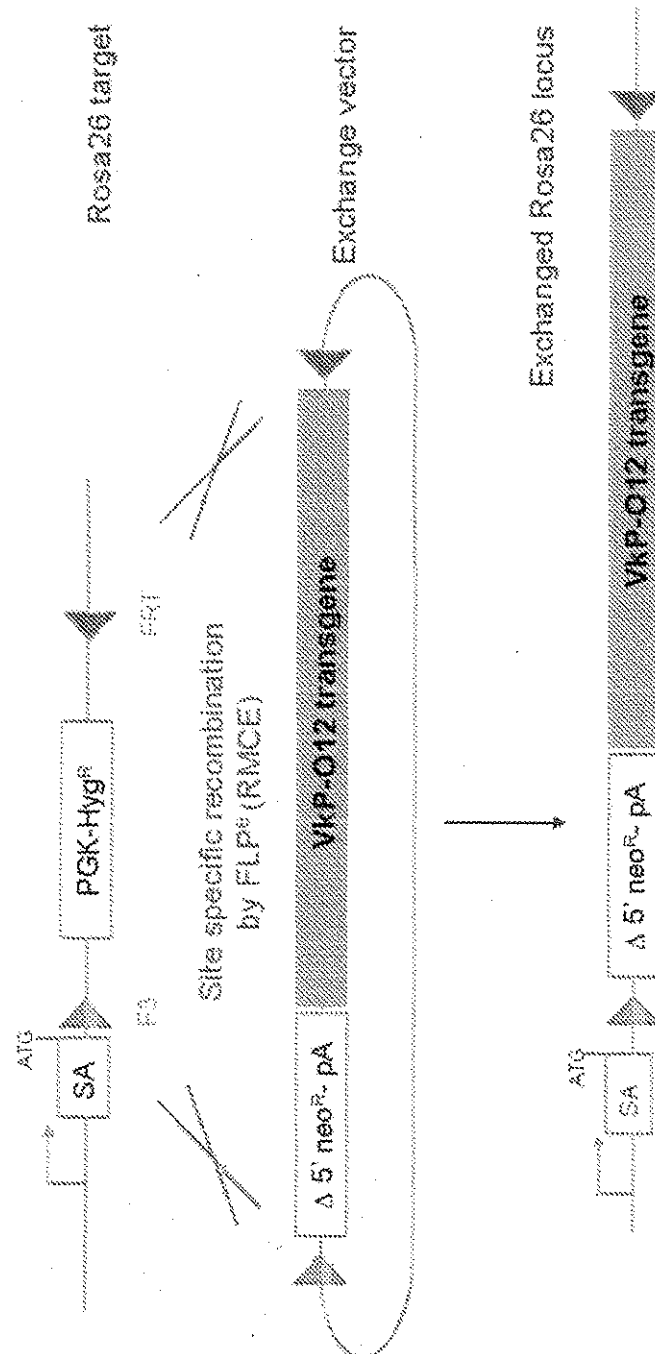


Figure 21 contd

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B

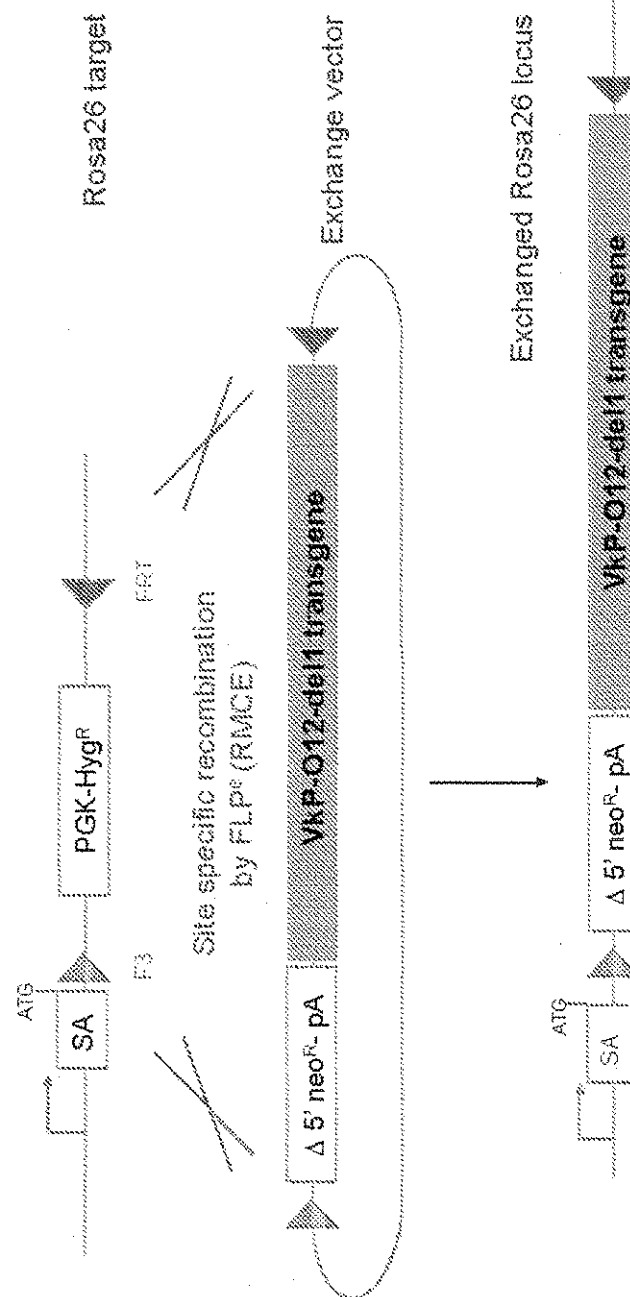


Figure 21 contd

C

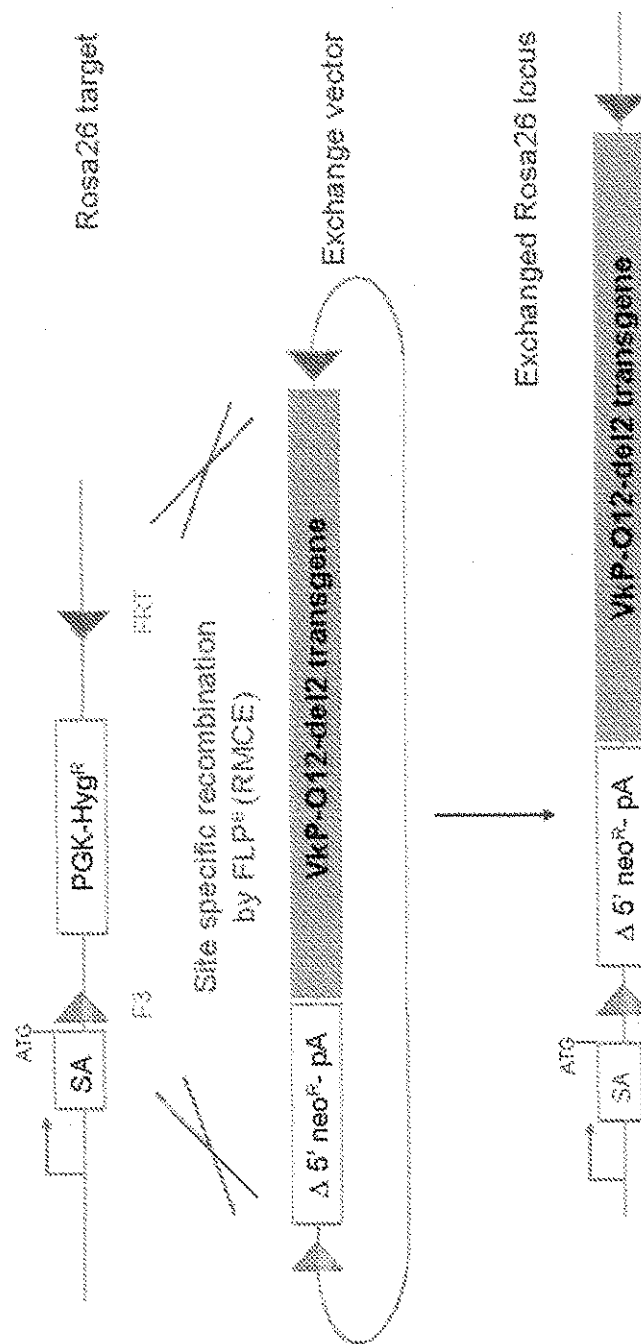


Figure 22

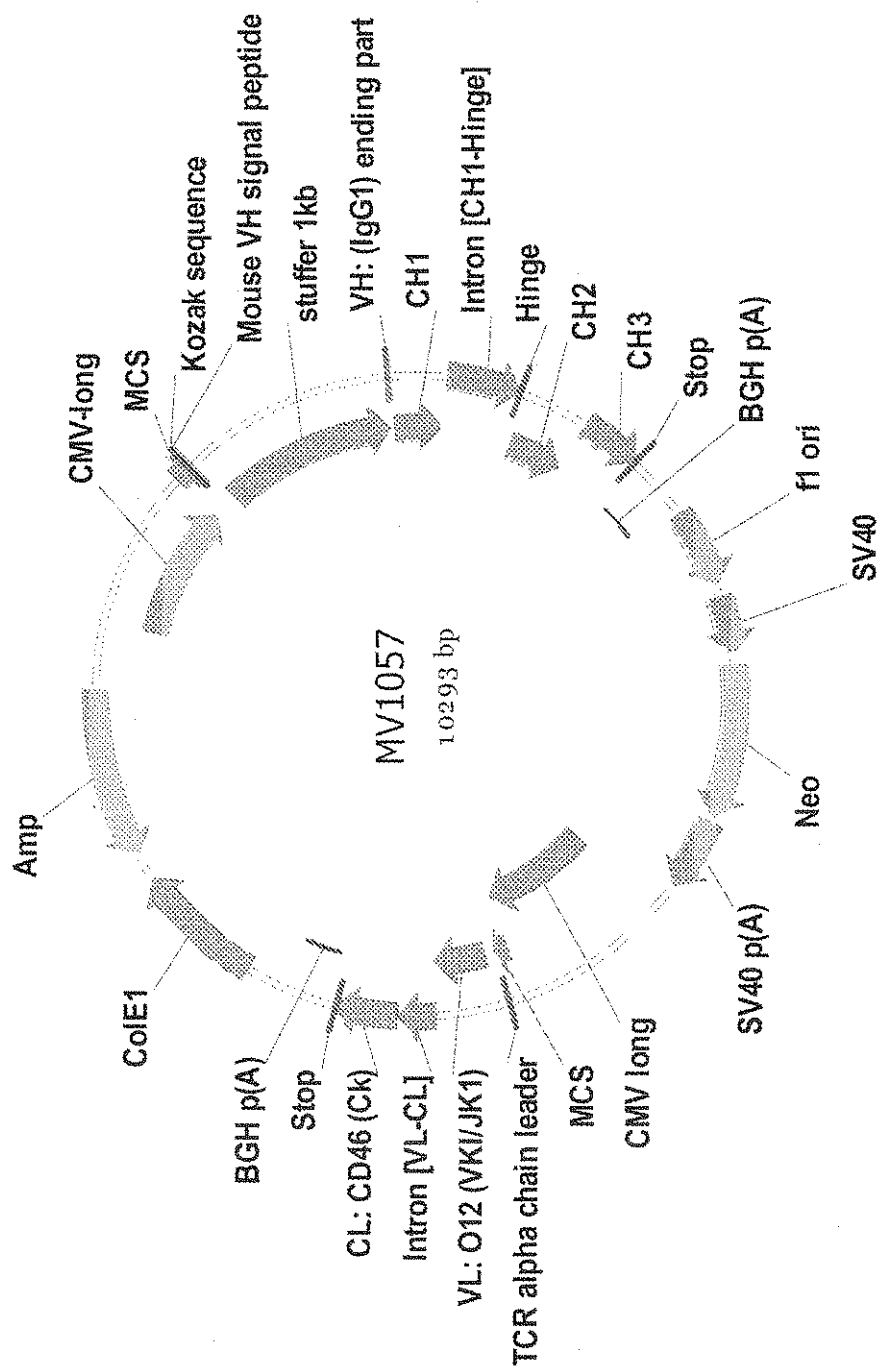


Figure 23

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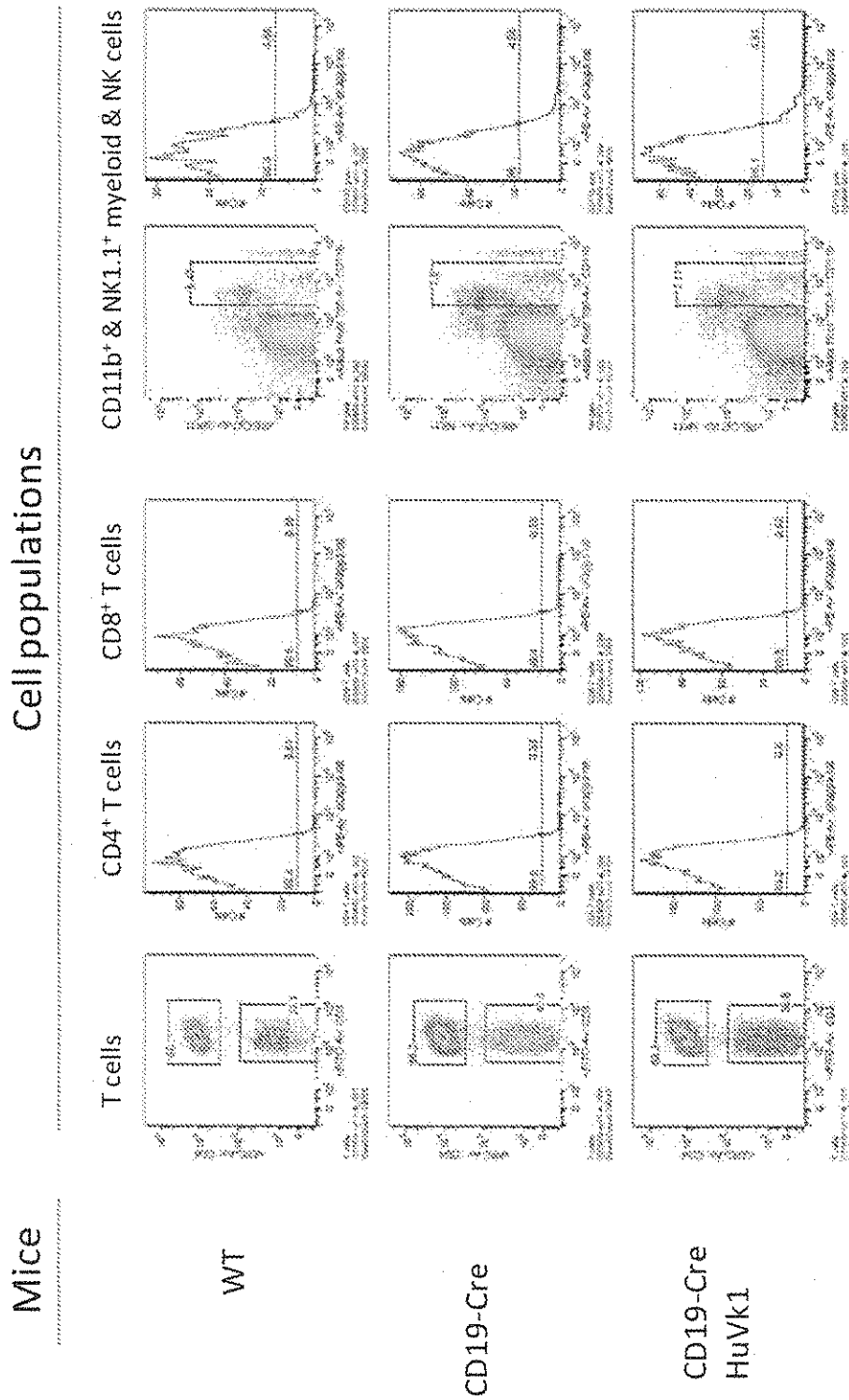


Figure 24

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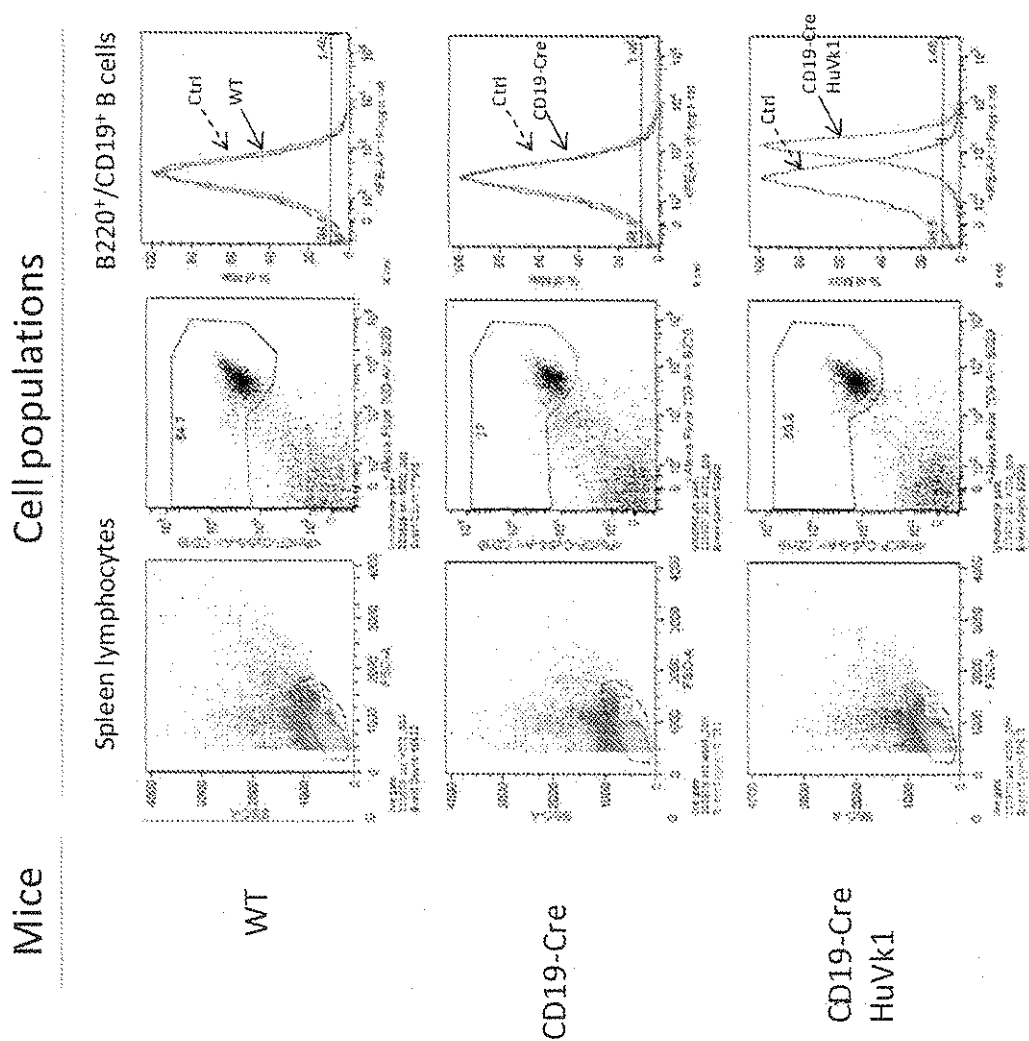


Figure 25

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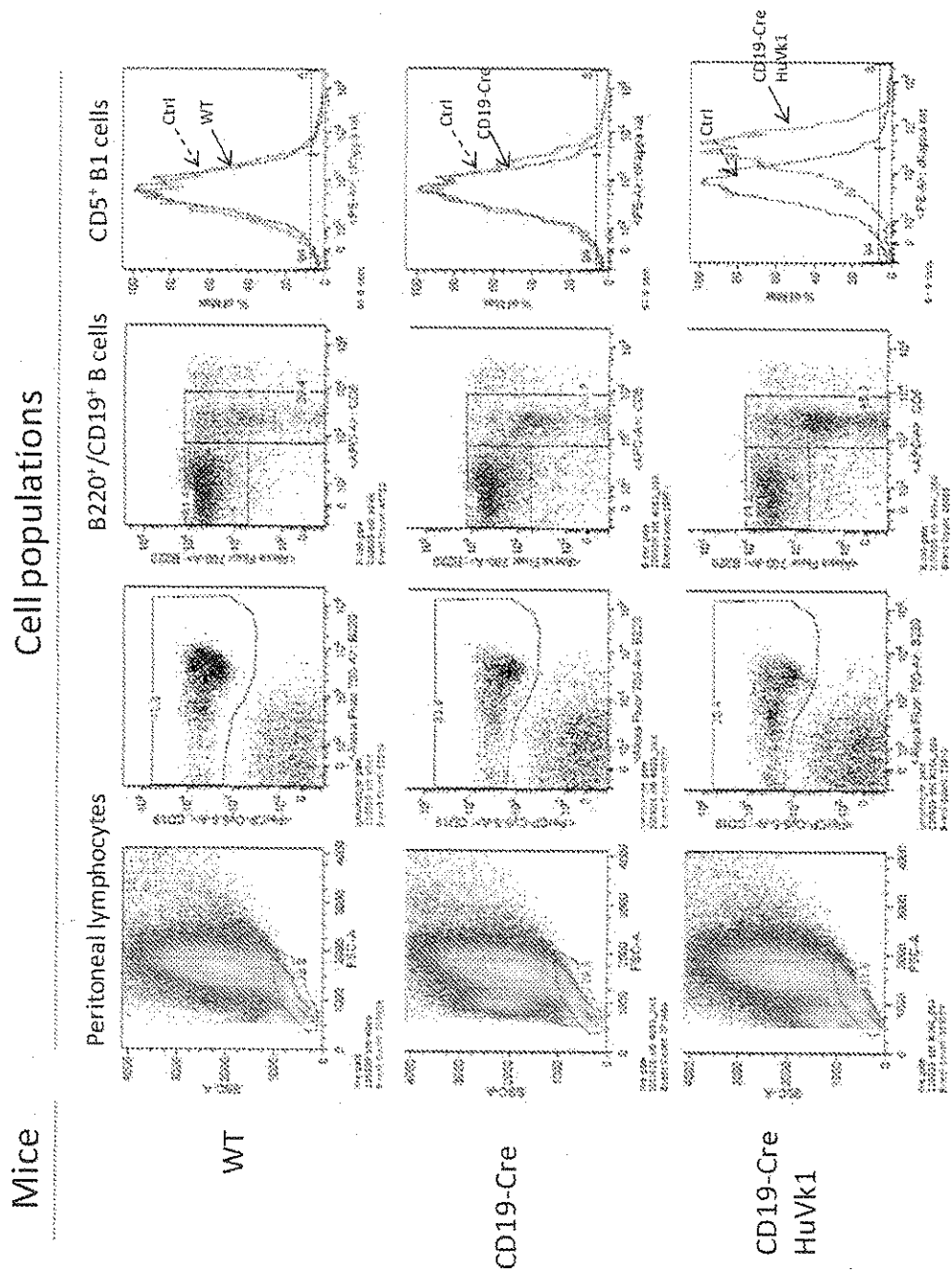


Figure 26

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A

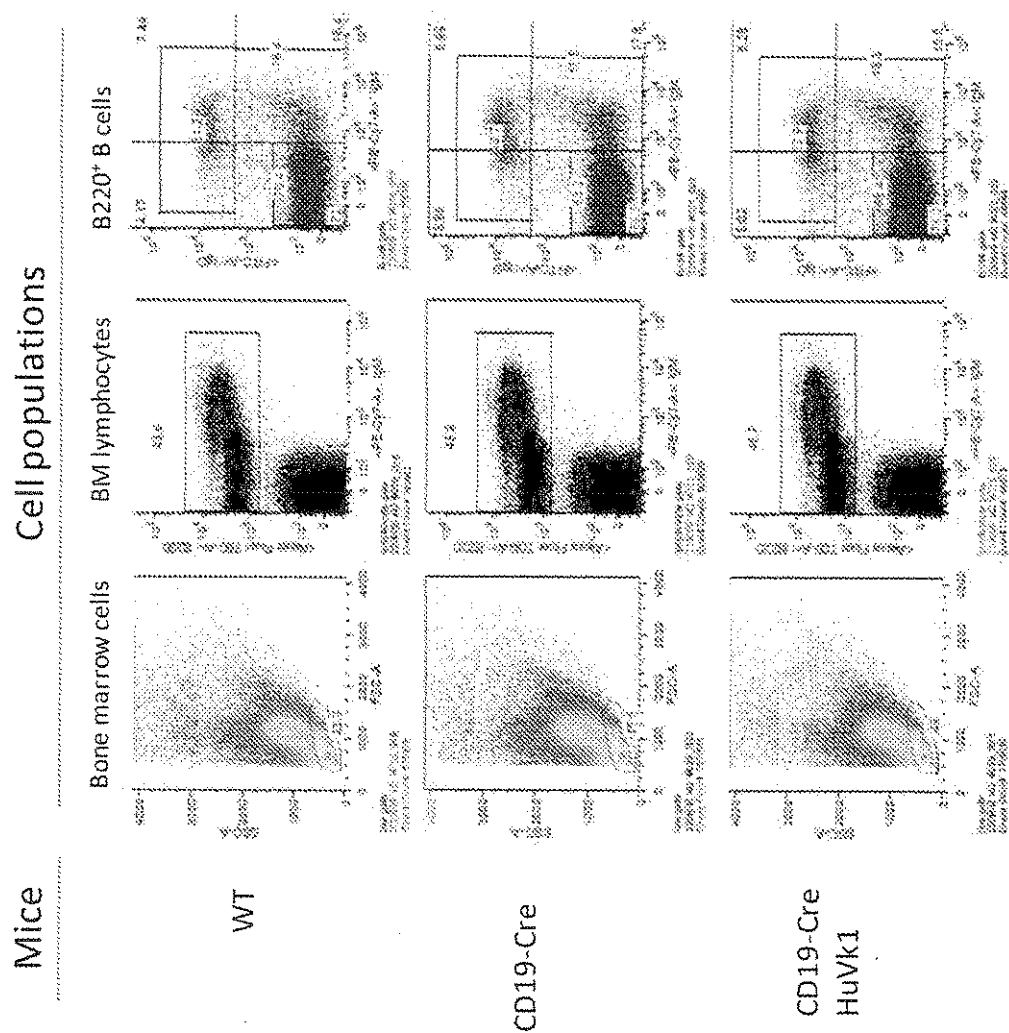


Figure 26 CONTD

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B

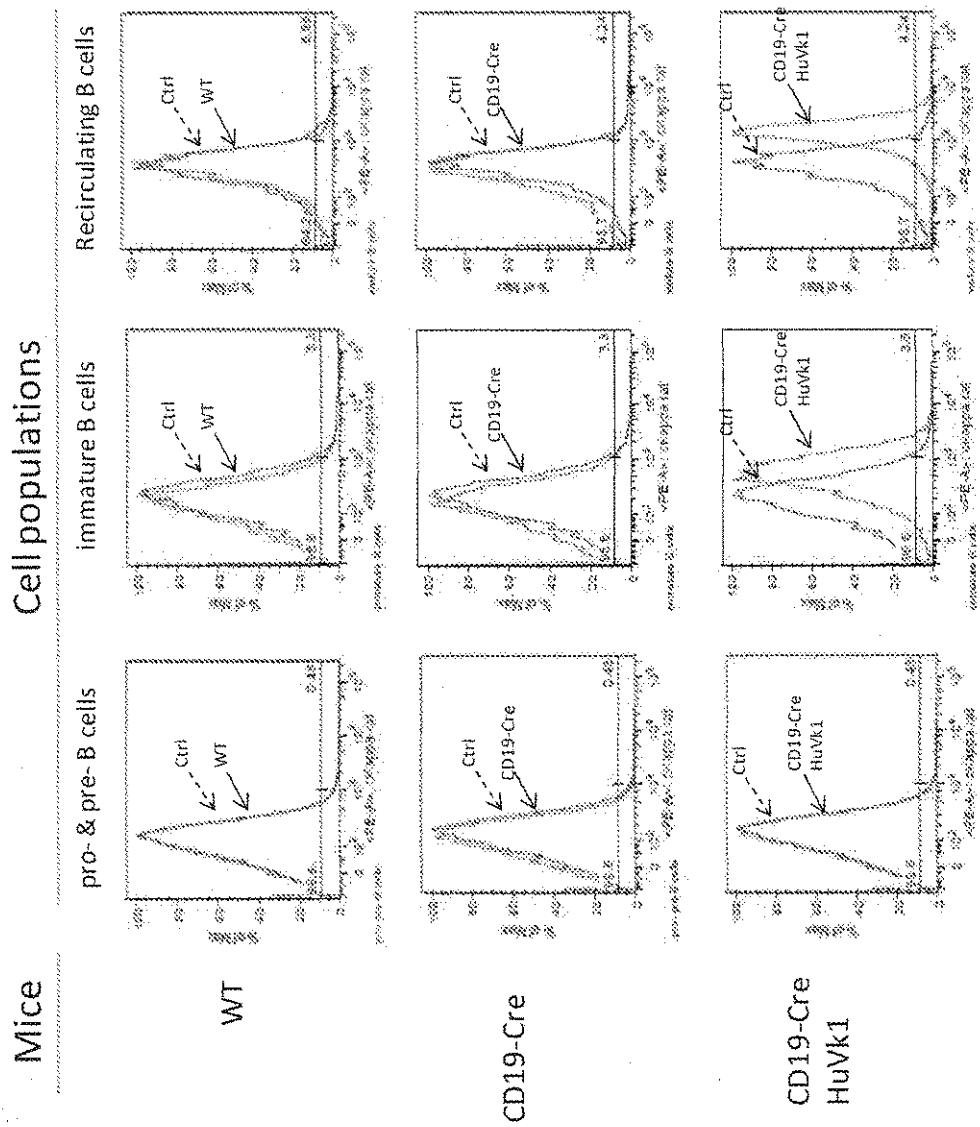


Figure 27

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vice

Cell populations

