

Supporting Information S1. The benchmark dataset used to train and test the model for predicting the sites of multiple K-PTM types in proteins. It contains 6,394 samples of 27-tuple peptides. The 1st column in the table below is for the code of a sample. The 2nd and 3rd columns for the protein and its site where the sample is extracted. The 4th column for the sample's detailed sequence. Columns 5-8 indicate the PTM attributes, with "+" or "-" under S(1), S(2), S(3) or S(4) meaning the corresponding sample belonging or not belonging to "acetylation", "crotonylation", "methylation", or "succinylation", respectively. As indicated by the marks in columns 5-8, there are 1,750 samples not belonging to any of the four K-PTM types, 3,895 samples belonging to one type of K-PTM, 740 to two types, 9 to three types, and none to all the four types. See the main text for further explanation.

Sample #	Protein ID	Site	Sequences	S(1)	S(2)	S(3)	S(4)
1	P31327	1008	CAVSSIRTLRQLGKKTVVVNCNPETVS	-	-	-	-
2	P31327	55	KAQTAHIVLEDGTMKMGYSFGHPSSVA	+	-	-	+
3	P31327	57	QTAHIVLEDGTMKMGYSFGHPSSVAGE	+	-	-	+
4	P31327	119	APDTTALDELGLSKYLESNGIKVSGLL	+	-	-	+
5	P31327	157	LATKSLGQWLQEEKVPAIYGVDTRMLT	+	-	-	+
6	P31327	171	VPAIYGVDTRMLTKIIRDKGTMGLKIE	+	-	-	-
7	P31327	182	LTKIIRDKGTMGLKIEFEGQPVDVDP	+	-	-	-
8	P31327	197	EFEGQPVDVDPNKKQNLIAEVSTKDVK	+	-	-	-
9	P31327	207	DPNKKQNLIAEVSTKDVKVYKGKNPTKV	+	-	-	+
10	P31327	210	KQNLIAEVSTKDVKVYKGKNPTKVAV	+	-	-	-
11	P31327	214	IAEVSTKDVKVYKGKNPTKVAVDCGI	+	-	-	+
12	P31327	219	TKDVKVYKGKNPTKVAVDCGIKNNVI	+	-	-	-
13	P31327	228	GNPTKVAVDCGIKNNVIRLLVKRGAE	+	-	-	-
14	P31327	280	NPALAEPLIQNVRKILESDDRKEPLFGI	+	-	-	-
15	P31327	287	LIQNVRKILESDDRKEPLFGISTGNLIT	+	-	-	+
16	P31327	307	STGNLITGLAAGAKTYKMSMANRGQNQ	+	-	-	+
17	P31327	310	NLITGLAAGAKTYKMSMANRGQNQPVL	+	-	-	-
18	P31327	400	TEYLFDSFFSLIKKGKATTITSVLPKP	-	-	-	+
19	P31327	402	YLFDSFFSLIKKGKATTITSVLPKPAL	-	-	-	+
20	P31327	412	KKGKATTITSVLPKPAVASRVEVSKV	+	-	-	+
21	P31327	453	EFDYSGSQAVKAMKEENVKTVLMNPNI	+	-	-	-
22	P31327	458	GSQAVKAMKEENVKTVLMNPNIASVQT	+	-	-	+
23	P31327	522	GGQTALNCGVELFKRGVLKEYGVKVLG	+	-	-	+
24	P31327	527	LNCGVELFKRGVLKEYGVKVLGTSVES	+	-	-	+
25	P31327	532	ELFKRGVLKEYGVKVLGTSVESIMATE	+	-	-	-
26	P31327	553	SIMATEDRQLFSDKLNEINEKIAPSFA	+	-	-	+
27	P31327	560	RQLFSDKLNEINEKIAPSFIVESIEDA	+	-	-	+
28	P31327	575	APSFIVESIEDALKAADTIGYPVMIRS	+	-	-	+
29	P31327	612	ICPNRETLMDLSTKAFAMTNQILVEKS	+	-	-	+
30	P31327	630	TNQILVEKSVTGWKEIEYEVVRDADDN	+	-	-	-
31	P31327	751	AAKIALGIPLPEIKNVVSGKTSACFEP	+	-	-	+
32	P31327	757	GIPLPEIKNVVSGKTSACFEPGLDYMV	+	-	-	+
33	P31327	772	SACFEPGLDYMVTKIPRWDLDRFHGTS	+	-	-	-
34	P31327	793	RFHGTSSRIGSSMKSVGEVMAIGRTFE	+	-	-	+
35	P31327	811	VMAIGRTFEESFQKALRMCHPSIEGFT	+	-	-	-
36	P31327	831	PSIEGFTPRPLPMNKWPSNLDLRKELS	+	-	-	+
37	P31327	841	PMNKWPSNLDLRKELSEPSSTRIYAI	+	-	-	-
38	P31327	856	LSEPSSTRIYAIKAIIDNMSLDEIEK	+	-	-	-

39	P31327	875	MSLDEIEKLTYIDKWF	LYKMRDILNME	+	-	-	+
40	P31327	889	WFLYKMRDILNMEK	TLKGLNSESMTEE	+	-	-	+
41	P31327	892	YKMRDILNMEKTL	KGLNSESMTEETLK	+	-	-	+
42	P31327	908	NSESMTEETLKRA	KEIGFSDKQISKCL	+	-	-	-
43	P31327	915	ETLKRAKEIGFSD	KQISKCLGLTEAQT	+	-	-	+
44	P31327	919	RAKEIGFSDKQIS	KCLGLTEAQTREL	+	-	-	+
45	P31327	935	GLTEAQTRELRL	KNIHPWVKQIDTLA	+	-	-	-
46	P31327	1074	PNNLAVPLYKNG	VKIMGTSPLQIDRAE	+	-	-	+
47	P31327	1100	EDRSIFSavlDEL	KVAQAPWKAVNTLN	+	-	-	+
48	P31327	1149	GSAMNVVfSEDE	MKFLLEATRVSQEH	-	-	-	+
49	P31327	1168	ATRVSQEHpVLT	KFVEGAREVEMDAV	+	-	-	+
50	P31327	1183	VEGAREVEMDAV	GKGRVISHAISEHV	+	-	-	+
51	P31327	1222	MLPTQTISQGA	IEKVKDATRKIAK	+	-	-	-
52	P31327	1232	AIEKVKDATRKIA	KAFaISGPFNVQFL	+	-	-	+
53	P31327	1269	CNLRASRSFPFV	SKTLGVDFIDVATKV	+	-	-	+
54	P31327	1291	VATKVMIGENVDE	KHLPTLDHPIIPAD	+	-	-	+
55	P31327	1356	HTAFLKAMLSTG	FKIPQKGILIGIQQS	+	-	-	+
56	P31327	1360	LKAMLSTGFKIP	QKGILIGIQQSFRPR	-	-	-	+
57	P31327	1444	SIDLVINLPNNNT	KFVHDNYVIRRTAV	+	-	-	+
58	P31327	1471	DSGIPLLTNFQV	TKLFAEAVQKSRKVD	+	-	-	+
59	P31327	1479	NFQVTKLFAEAV	QKSRKVDSKSLFH	+	-	-	+
60	P31327	1486	FAEAVQKSRKVDS	KSLFHRYQYSAGKA	+	-	-	+
61	P04637	291	PGRDRRTEENLR	KKGEPHHELPPGST	-	-	-	-
62	P04637	120	YGFRLGFLHSGT	AKSVTCTYSPALNKM	+	-	-	-
63	P04637	305	KGEPHHELPPGST	KRALPNNTSSSPQP	+	-	-	-
64	P04637	321	LPNNTSSSPQPK	KPLDGEYFTLQIRG	+	-	-	-
65	P04637	370	KEPGGSRAHSSHL	KSKKGQSTSRHKKL	-	-	+	-
66	P04637	372	PGGSRAHSSHLKS	KKGQSTSRHKKLMF	-	-	+	-
67	P04637	373	GGsRAHSSHLKS	KKGQSTSRHKKLMFK	+	-	+	-
68	P04637	381	HLKSKKGQSTSRH	KKLMFKTEGPDSD	+	-	-	-
69	P04637	382	LKSKKGQSTSRHK	KLMFKTEGPDSDDD	+	-	+	-
70	P62805	60	ISGLIYEETRGV	LKVFLENVIRDAV	-	-	-	-
71	P62805	6	MMMMMMMMSGRG	KGGKGLGKGGA	+	+	-	-
72	P62805	9	MMMMMSGRGKG	GKGLGKGGA	+	+	-	-
73	P62805	13	MMSGRGKGKGL	GKGA	+	+	-	-
74	P62805	17	RGKGKGLGKGGA	KRHRKVLRDNIQGI	+	+	-	-
75	P62805	21	GKGLGKGGA	KRHRKVLRDNIQGITKPA	-	-	+	-
76	P62805	32	HRKVLRDNIQGIT	KPAIRRLARRGGVK	+	-	-	-
77	P62805	92	RKTVTAMDVVYA	LKRQGRtLYGFGGGG	+	-	-	+
78	P02545	420	SQTQGGGSVTKKR	KLESTESRSSFSQH	-	-	-	-
79	P02545	32	TPLSPTRITRLQ	EKEDLQELNDR	+	-	-	+
80	P02545	108	VAKERARLQLELS	KVREEFKELKARNT	+	-	-	-
81	P02545	123	REEFKELKARNTK	KEGDLIAAQARLKD	+	-	-	-
82	P02545	135	KKEGDLIAAQARL	KDLEALLNSKEAAL	+	-	-	-
83	P02545	155	NSKEAALSTALSE	KRTLEGELHDLRGQ	+	-	-	-
84	P02545	171	LEGELHDLRGQVA	KLEAALGEAKQLQ	+	-	-	+
85	P02545	201	LRRVDAENRLQTM	KEELDFQKN	+	-	-	-
86	P02545	260	ELRAQHEDQVEQY	KKELEKTYSAKLDN	+	-	-	-
87	P02545	270	EQYKKELEKTYSA	KLDNARQSAERNSN	+	-	-	-
88	P02545	311	RIDSLSAQLSQLQ	KQLAAKEAKLRDLE	+	-	-	-
89	P02545	450	SGRVAVEEVDEEG	KFVRLRNKSNEDQS	+	-	-	-
90	P02545	457	EVDEEGKFVRLRN	KSNEDQSMGNWQIK	+	-	-	-
91	P10809	233	DRGYISPYFINTS	KGQKCEFQDAYVLL	-	-	-	-
92	P10809	31	LAPHLTRAYAKDV	KFGADARALMLQGV	-	-	-	+
93	P10809	75	VIIEQSWGSPKVT	KDGVTVAKSIDLKD	+	-	-	-
94	P10809	82	GSPKVTKDGVTVAK	SIDLKDKYKNIGA	+	-	-	+
95	P10809	87	TKDGVTVAKSIDL	KDKYKNIGAKLVQD	+	-	-	-
96	P10809	91	VTVAKSIDLKDKY	KNIGAKLVQDVANN	+	-	-	-

97	P10809	125	GTTTATVLRARIAKEGFEEKISGANPV	+	-	-	+
98	P10809	130	TVLRARIAKEGFEEKISGANPVEIRRG	+	-	-	-
99	P10809	133	ARSIAKEGFEEKISGANPVEIRRGVML	+	-	-	+
100	P10809	156	GVMLAVDAVIAELKKQSKPVTTPPEIA	+	-	-	-
101	P10809	191	GDKEIGNIISDAMKKVGRKGVITVKDG	+	-	-	+
102	P10809	202	AMKKVGRKGVITVKGDKTLNDELEIE	+	-	-	+
103	P10809	205	KVGRKGVITVKDGTKTLNDELEIEGKM	+	-	-	+
104	P10809	218	KTLNDELEIEGKMKFDRGYISPYFINT	+	-	-	+
105	P10809	236	YISPYFINTSKGQKCEFQDAYVLLSEK	+	-	-	+
106	P10809	249	KCEFQDAYVLLSEKKISSIQSIVPALE	+	-	-	-
107	P10809	250	CEFQDAYVLLSEKKISSIQSIVPALEI	+	-	-	+
108	P10809	269	SIVPALEIANAHRKPLVIAEDVDGEA	+	-	-	-
109	P10809	292	DGEALSTLVNRLKVGQLQVAVKAPGF	+	-	-	-
110	P10809	301	LNRLKVGLQVAVKAPGFGDNRKNQLK	-	-	-	+
111	P10809	314	KAPGFGDNRKNQLKDMAIATGGAVFGE	+	-	-	-
112	P10809	352	PHDLGKVGEVIVTKDDAMLLKGKGDKA	+	-	-	+
113	P10809	359	GEVIVTKDDAMLLKGKGDKAQIEKRIQ	+	-	-	-
114	P10809	389	EQLDVTTSYEKEKLNERLAKLSDGVA	+	-	-	-
115	P10809	396	SEYEKEKLNERLAKLSDGVAVLKVGGT	+	-	-	+
116	P10809	469	PANEDQKIGIEIIRTKLIPAMTIAKN	+	-	-	-
117	P10809	481	IKRTLKIPAMTIAKNAGVEGSLIVEKI	+	-	-	+
118	P21333	43	ATEKDLAEDAPWKIQQNTFTTRWCNEH	-	-	-	-
119	P21333	376	QHIAKSPFEVYVDKSQGDASKVTAQGP	+	-	-	-
120	P21333	508	VRVKETADFKVYTKGAGSGELKVTVKG	+	-	-	-
121	P21333	700	VAVNKPAEFTVDAKHGGKAPLRVQVQD	+	-	-	-
122	P21333	781	HPNKVKVYGPVAKTGLKAHEPTYFTV	+	-	-	-
123	P21333	837	FDIIRNDNDTFTVKYTPRGAGSYTIMV	+	-	-	-
124	P21333	865	FADQATPTSPIRVKVEPSHDASKVKA	+	-	-	-
125	P21333	906	THFTVNAKAAGKGLDVQFSGLTGKDA	+	-	-	-
126	P21333	1071	PLEAVAPTKPSKVAFGPGLQGSAGS	+	-	-	+
127	P21333	1372	RVHGPQIQSGTTNKPKNFTVETRAGT	+	-	-	-
128	P21333	1538	YGDEEVPRSPFKVKVLPTHDASKVKAS	+	-	-	-
129	P21333	2569	DASKVVAKGLGLSKAYVGQKSSFTVDC	+	-	-	+
130	P21333	2575	AKGLGLSKAYVGQKSSFTVDCSKAGNN	+	-	-	-
131	P21333	2607	VHGPRTPCEEILVKHVGSRLYSVSYLL	+	-	-	-
132	P21333	2621	HVGSRLYSVSYLLKDKGEYTLVVKWGD	+	-	-	-
133	P35579	373	TDQASMPDNTAAQKVSHLLGINVTDFT	-	-	-	-
134	P35579	8	MMMMMMMAQQAADKYLYVDKNFINNPL	+	-	-	-
135	P35579	102	LTCLEASVLHNLKERYYSGLIYTYSG	+	-	-	-
136	P35579	299	EHLKTDLLLEPYNKYRFLSNGHVTIPG	+	-	-	-
137	P35579	613	LHQSSDKFVSELWKDVDRIIGLDQVAG	+	-	-	-
138	P35579	850	LLQVSRQEEEMMAKEEELVKVREKQLA	-	-	-	+
139	P35579	860	MMAKEEELVKVREKQLAAENRLTEMET	+	-	-	-
140	P35579	975	LQLEKVTTEAKLKKLEEEQIILEDQNC	+	-	-	-
141	P35579	1024	EEKSKSLAKLKNKHEAMITDLEERLR	+	-	-	-
142	P35579	1249	LLQGKGDSSEHKRKKVEAQLQELQVKFN	+	-	-	-
143	P35579	1357	QLEEEEEEAKHNLEKQIATLHAQVADMK	+	-	-	-
144	P35579	1392	CLETAEEVKRKLQKDLGLSQRHEEKV	+	-	-	-
145	P35579	1404	QKDLGLSQRHEEKVAAYDKLEKTKTR	+	-	-	-
146	P35579	1410	LSQRHEEKVAAYDKLEKTKTRLQQELD	+	-	-	-
147	P35579	1459	FDQLLAEEKTISAKYAEERDRAEAER	+	-	-	-
148	P35579	1638	HIDSANKNRDEAIKQLRKLQAQMKDCM	+	-	-	-
149	P35579	1669	DTRASREEILAQAKENEKKLKSMEAEM	-	-	-	+
150	P35579	1793	RQQLERQNKELKVQLQEMEGTVKSKYK	+	-	-	-
151	P35579	1802	ELKVKLQEMEGTVKSKYKASITALEAK	+	-	-	-
152	P35579	1845	AACKQVRRTEKKLKDVLQVDDERRNA	+	-	-	-
153	P00480	210	GNNILHSIMMSAAKFGMHLQAATPKGY	-	-	-	-
154	P00480	70	LWLSADLKFRIKQKGEYLLPLQKSLG	+	-	-	+

155	P00480	80	IKQKGEYLPLLQGKSLGMIFEKRSTR	-	-	-	+
156	P00480	88	PLLQGKSLGMIFEKRSTRTRLSTETGF	+	-	-	+
157	P00480	144	LSSMADAVLARVYKQSDLDTLAKEASI	+	-	-	+
158	P00480	221	AAKFGMHLQAATPKGYEPDASVTKLAE	+	-	-	+
159	P00480	231	ATPKGYEPDASVTKLAEQYAKENGTKL	+	-	-	+
160	P00480	238	PDASVTKLAEQYAKENGTKLLLTNDPL	+	-	-	+
161	P00480	243	TKLAEQYAKENGTKLLLTNDPLEAAHG	+	-	-	-
162	P00480	274	ITDTWISMGQEEEKKKRLQAFQGYQVT	-	-	-	+
163	P00480	289	KRLQAFQGYQVTMTAKTAKVAASDWTFLH	-	-	-	+
164	P00480	292	QAFQGYQVTMTAKVAASDWTFLHCLP	+	-	-	+
165	P00480	307	AASDWTFLHCLPRKPEEVDDEVFYSR	+	-	-	+
166	P68431	5	MMMMMMMMMMARTKQTARKSTGGKAPR	+	+	+	-
167	P68431	10	MMMMMARTKQTARKSTGGKAPRKQLAT	+	+	+	-
168	P68431	15	ARTKQTARKSTGGKAPRKQLATKAARK	+	-	-	-
169	P68431	19	QTARKSTGGKAPRKQLATKAARKSAPA	+	+	+	-
170	P68431	24	STGGKAPRKQLATKAARKSAPATGGVK	+	+	+	-
171	P68431	28	KAPRKQLATKAARKSAPATGGVKKPHR	+	+	+	-
172	P68431	37	KAARKSAPATGGVKKPHRYRPGTVALR	+	-	+	-
173	P68431	38	AARKSAPATGGVKKPHRYRPGTVALRE	-	-	+	-
174	P68431	57	PGTVALREIRRYQKSTELLIRKLPFQR	+	+	+	-
175	P68431	65	IRRYQKSTELLIRKLPFQRLVREIAQD	-	-	+	-
176	P68431	80	PFQRLVREIAQDFKTDLRFQSSAVMAL	+	-	+	-
177	P68431	116	GLFEDTNLCAIHAKRVTIMPKDIQLAR	+	-	-	-
178	P68431	123	LCAIHAKRVTIMPKDIQLARRIRGERA	+	-	+	-
179	P00441	129	RTLVVHEKADDLGKGGNEESTKTGNAG	-	-	-	-
180	P00441	4	MMMMMMMMMMMATKAVCVLKGDPVQG	-	-	-	+
181	P00441	10	MMMMMATKAVCVLKGDPVQGIINFEQ	-	-	-	+
182	P00441	92	ERHVGDLGNVTADKGDVADVSIEDSVI	-	-	-	+
183	P00441	123	DHCIIGRTLNVHEKADDLGKGGNEEST	+	-	-	+
184	P00441	137	ADDLGKGGNEESTKTGNAGSRLACGVI	+	-	-	+
185	P00367	444	NAGGVTVSYFEWLKNLNVHSYGRITFK	-	-	-	-
186	P00367	68	EAVADREDDPNFFKMVEGFFDRGASIV	-	-	-	+
187	P00367	84	EGFFDRGASIVEDKLVEDLRTRESEEQ	+	-	-	+
188	P00367	110	QKRNRVRGILRIIKPCNHVLSLSFPIR	+	-	-	+
189	P00367	162	GIRYSTDVSDEVKALASLMTYKCAVV	+	-	-	+
190	P00367	171	VDEVKALASLMTYKCAVVDVPFGGAKA	+	-	-	-
191	P00367	183	YKCAVVDVPFGGAKAGVKINPKNYTDN	+	-	-	+
192	P00367	187	VVDVPFGGAKAGVKINPKNYTDNELEK	+	-	-	-
193	P00367	191	PFGGAKAGVKINPKNYTDNELEKITRR	+	-	-	+
194	P00367	200	KINPKNYTDNELEKITRRFTMELAKKG	-	-	-	+
195	P00367	211	LEKITRRFTMELAKKGFIGPGIDVPAP	+	-	-	-
196	P00367	326	GLHSMRYLHRFGAKCIAVGESDGSIN	+	-	-	-
197	P00367	346	SDGSINPDGIDPKLELEDFKLQHGSIL	+	-	-	+
198	P00367	352	NPDGIDPKLELEDFKLQHGSILGFPKAK	+	-	-	+
199	P00367	363	DFKLQHGSILGFPKAKPYEGSILEADC	+	-	-	+
200	P00367	365	KLQHGSILGFPKAKPYEGSILEADCDI	+	-	-	+
201	P00367	386	EADCDILIPAASEKQLTKSNAPRVKAK	+	-	-	-
202	P00367	390	DILIPAASEKQLTKSNAPRVKAKIIAE	+	-	-	+
203	P00367	399	KQLTKSNAPRVKAKIIAEGANGPTTPE	+	-	-	-
204	P00367	415	AEGANGPTTPEADKIFLERNIMVIPDL	+	-	-	+
205	P00367	457	KNLNVHSYGRITFKYERDSNYHLLMSV	+	-	-	+
206	P00367	477	YHLLMSVQESLERKFGKHGGTIPIVPT	+	-	-	+
207	P00367	480	LMSVQESLERKFGKHGGTIPIVPTAEF	+	-	-	+
208	P00367	503	TAEFQDRISGASEKDIVHSGLAYTMER	+	-	-	+
209	P00367	527	MERSARQIMRTAMKYNLGLDLRTAAYV	+	-	-	+
210	P00367	545	LDLRTAAYVNAIEKVFVYNEAGVTFT	+	-	-	+
211	P00367	548	RTAAYVNAIEKVFVYNEAGVTFTTTT	+	-	-	-
212	Q09472	1468	QKIPKPKRLQEWYKMLDKAVSERIVH	-	-	-	-

213	Q09472	418	NCTRHDCPVCLPLKNAGDKRNQQPILT	+	-	-	-
214	Q09472	423	DCPVCLPLKNAGDKRNQQPILTGAPVG	+	-	-	-
215	Q09472	636	ANNRAEYYHLLAEKIYKIQKELEEKRR	+	-	-	-
216	Q09472	977	SQAIAEKQPSQEVKMEAKMEVDQPEPA	+	-	-	-
217	Q09472	1020	MESTETEERSTELKTEIKEEEDQPSTS	+	-	-	-
218	Q09472	1024	ETEERSTELKTEIKEEEDQPSTSATQS	+	-	-	-
219	Q09472	1180	KLEFSPQTLCCYGKQLCTIPRDATYYS	+	-	-	-
220	Q09472	1336	VRVVHASDKTVEVKPGMKARFVDSGEM	+	-	-	-
221	Q09472	1473	PKRLQEWYKKMLDKAVSERIVHDYKDI	+	-	-	-
222	Q09472	1499	IFKQATEDRLTSAKELPYFEGDFWPNV	+	-	-	-
223	Q09472	1542	REENTSNESTDVTKGDSKNAKKKNNKK	+	-	-	-
224	Q09472	1546	TSNESTDVTKGDSKNAKKKNNKKTSKN	+	-	-	-
225	Q09472	1549	ESTDVTGDSKNAKKKNNKKTSKNKSS	+	-	-	-
226	Q09472	1554	TKGDSKNAKKKNNKTSKNKSSLSRGN	+	-	-	-
227	Q09472	1555	KGDSKNAKKKNNKTSKNKSSLSRGNK	+	-	-	-
228	Q09472	1558	SKNAKKKNNKKTSKNKSSLSRGNKKKP	+	-	-	-
229	Q09472	1560	NAKKKNNKKTSKNKSSLSRGNKKKPGM	+	-	-	-
230	Q09472	1583	KPGMPNVSNDSLQKLYATMEKHKEVFF	+	-	-	-
231	Q09472	1699	CEDYDLCITCYNTKNHDKMEKLGGL	+	-	-	-
232	Q09472	1704	LCITCYNTKNHDKMEKLGGLDDESN	+	-	-	-
233	Q09472	1707	TCYNTKNHDKMEKLGGLDDESNQQ	+	-	-	-
234	P11142	325	GTLDPVEKALRDAKLDKSQIHDIVLVG	-	-	-	-
235	P11142	108	VNDAGRPKVQVEYKGETKSFYPEEVSS	+	-	-	-
236	P11142	246	FDNRMVNHFAEFKRKHKKDISENKRA	+	-	-	-
237	P11142	319	NADLFRGTLDPVEKALRDAKLDKSQIH	+	-	-	+
238	P11142	328	DPVEKALRDAKLDKSQIHDIVLVGGST	+	-	-	-
239	P11142	512	NKITITNDKGRLSKEDIERMVQEAKEY	+	-	-	+
240	P11142	524	SKEDIERMVQEAKEYKADEKQRDKVS	+	-	-	-
241	P11142	561	NMKATVEDEKLQKINDEDKQKILDKC	-	-	+	-
242	P11142	589	EIINWLDKNQTAEKEEFEHQKLEKLV	+	-	-	-
243	P11142	597	NQTAEKEEFEHQKLEKVCNPIITKL	+	-	-	-
244	P11142	601	EKEEFEHQKLEKVCNPIITKLYQSA	+	-	-	-
245	P84243	19	QTARKSTGGKAPRQLATKAARKSAPS	+	+	+	-
246	P84243	24	STGGKAPRKQLATKAARKSAPSTGGVK	+	+	+	-
247	P84243	28	KAPRKQLATKAARKSAPSTGGVKKPHR	+	+	+	-
248	P84243	37	KAARKSAPSTGGVKPHRYRPGTVALR	+	-	+	-
249	P84243	38	AARKSAPSTGGVKPHRYRPGTVALRE	-	-	+	-
250	P84243	80	PFQRLVREIAQDFKTDLRFQSAAGAL	+	-	+	-
251	P14618	151	ATLKITLDNAYMEKCDENILWLDYKNI	-	-	-	-
252	P14618	62	CTIGPASRSVETLKEMIKSGMNVARLN	+	-	-	-
253	P14618	66	PASRSVETLKEMIKSGMNVARLNFSGH	-	-	-	+
254	P14618	89	FSGHTHEYHAETIKNVRTATESFASDP	+	-	-	-
255	P14618	166	DENILWLDYKNICKVVEVGSKIYVDDG	+	-	-	+
256	P14618	266	EVRKVLGEKGKNIKIISKIENHEGVRR	+	-	-	-
257	P14618	270	VLGEKGKNIKIISKIENHEGVRRFDEI	+	-	-	-
258	P14618	305	VARGDLGIEIPAEKVFLAQKMMIGRCN	+	-	-	-
259	P14618	322	AQKMMIGRCNRAGKPVICATQMLESMI	+	-	-	+
260	P14618	433	SFKCCSGAIIVLTKSGRSAHQVARYRP	+	-	-	-
261	P14618	475	QAHLYRGIFPVLCKDPVQEAWAEDVDL	+	-	-	-
262	P14618	498	DVDLRVNFAMNVGKARGFFKKGDVVIV	-	-	-	+
263	P06733	262	SEFFRSGKYDLDFKSPDDPSRYISPDQ	-	-	-	-
264	P06733	5	MMMMMMMMMSILKIHAREIFDSRGNP	+	-	-	-
265	P06733	60	LELRDNDKTRYMGKGVSKAVEHINKTI	+	-	-	+
266	P06733	64	DNDKTRYMGKGVSKAVEHINKTIAPAL	+	-	-	-
267	P06733	71	MGKGVSKAVEHINKTIAPALVSKKLV	+	-	-	-
268	P06733	89	ALVSKKLVNTEQEKIDKLMIEMDG TEN	+	-	-	+
269	P06733	92	SKKLVNTEQEKIDKLMIEMDG TENKSK	+	-	-	-
270	P06733	126	GVSLAVCKAGAVEKGVPLYRHIADLAG	+	-	-	-

271	P06733	193	EAMRIGAEVYHNLK N VIKEKYGKDATN	+	-	-	-
272	P06733	199	AEVYHNLK N VIKE K YGKDATNVGDEGG	+	-	-	-
273	P06733	202	YHNLK N VIKEKYG K DATNVGDEGGFAP	+	-	-	-
274	P06733	228	PNILENKEGLELL K TAIGKAGYTDKVV	+	-	-	+
275	P06733	233	NKEGLELL K TAIG K AGYTDKVVIGMDV	+	-	-	-
276	P06733	256	GMDVAASEFFRSG K YDLDFKSPDDPSR	+	-	-	-
277	P06733	281	SRYSISPDQLADLY K SFIKDYPVVSIED	+	-	-	-
278	P06733	285	SPDQLADLYKSFI K DYPVVSIEDPFDQ	+	-	-	-
279	P06733	335	VTNPKRIAKAVNE K SCNCLLLKVNQIG	+	-	-	-
280	P06733	343	KAVNEKSCNCLLL K VNQIGSVTESLQA	+	-	-	-
281	P06733	406	IKTGAPCRSERLAK N YNQLLRIEEEELGS	+	-	-	-
282	P06733	420	YNQLLRIEEEELGS K AKFAGRNFRNPLA	+	-	-	+
283	P08238	623	ALRDNSTMGYMMAK K HLEINPDHPIVE	-	-	-	-
284	P08238	219	SQFIGYPITLYLE K EREKEISDDEAEE	-	-	-	+
285	P08238	435	DKENYKKFYEAFS K NLKLGIHEDSTNR	+	-	-	-
286	P08238	481	SLSEYVSRMKETQ K SIYYITGESKEQV	+	-	-	-
287	P08238	531	DEYCVQQLKEFDG K SLVSVTKEGLELP	-	-	-	+
288	P08238	577	CKLMKEILDKKVE K VTISNRLVSSPCC	-	-	-	+
289	P08238	624	LRDNSTMGYMMAK K HLEINPDHPIVET	+	-	-	-
290	P08670	402	VKMALDIEIATYR K LLEGEESRISLPL	-	-	-	-
291	P08670	120	LQELNDRFANYID K VRFLEQQNKILLA	+	-	-	+
292	P08670	129	NYIDKVRFLEQQ N KILLAELEQLKGQG	+	-	-	+
293	P08670	139	QQNKILLAELEQL K GQGKSRLGDLYEE	+	-	-	-
294	P08670	168	RELRRQVDQLTND K ARVEVERDNLAED	+	-	-	-
295	P08670	188	RDNLAEIMRLRE K LQEEMLQREEAEN	+	-	-	+
296	P08670	223	VDNASLARLDLER K VESLQEEIAFLKK	+	-	-	-
297	P08670	235	RKVESLQEEIAFL K KLHEEEIQELQAQ	+	-	-	-
298	P08670	294	AKNLQEAEEWYKS K FADLSEAANRNND	+	-	-	+
299	P08670	373	DTIGRLQDEIQNM K EEMARHLREYQDL	+	-	-	-
300	P08670	445	PLVDTHSKRTL L IKTVETRDGQVINET	+	-	-	+
301	Q08426	277	QARALQYAFFAER K ANKWSTPSGASWK	-	-	-	-
302	Q08426	38	STTLRLDIKEGLQ K AVIDHTIKAIVIC	-	-	-	+
303	Q08426	165	ITSGRRILADEAL K LGILDKVVNSDPV	+	-	-	+
304	Q08426	171	ILADEALKLGILD K VVNSDPVEEAIRF	+	-	-	-
305	Q08426	219	LPNMDSIFSEAL K MRRQHPGCLAQEA	+	-	-	+
306	Q08426	250	VQAAVQYPYEVGI K KEEELFLYLLQSG	+	-	-	-
307	Q08426	280	ALQYAFFAERKAN K WSTPSGASWKTAS	-	-	-	+
308	Q08426	290	KANKWSTPSGASW K TASARPVSSVGVV	-	-	-	+
309	Q08426	346	LATANKMITSVLE K EASKMQQSGHPWS	+	-	-	-
310	Q08426	350	NKMITSVLEKEAS K MQQSGHPWSGPKP	+	-	-	-
311	Q08426	464	SSPTTIATVMNLS K KIKKIGVVVGNCF	+	-	-	-
312	Q08426	532	FRVSDLAGLDVGW K SRKGQGLTGPTLL	-	-	-	+
313	Q08426	577	VLCELGRFGQKTG K GWYQYDKPLGRIH	-	-	-	+
314	Q08426	584	FGQKTGKGWYQYD K PLGRIHKPDPWLS	+	-	-	+
315	Q08426	591	GWYQYDKPLGRIH K PDPWLSKFLSRYR	+	-	-	+
316	Q08426	710	YLKKLASQGNPPL K EWQSLAGSPSSKL	+	-	-	+
317	Q08426	722	LKEWQSLAGSPSS K LLLLLLLLLLLLLLL	-	-	-	+
318	Q99497	62	DVICPDASLEDA K KEGPDVVLPGG	-	-	-	-
319	Q99497	148	NGGHYTYSENRE K DGLILTSRGPPTS	+	-	-	-
320	Q99497	182	VEALNGKEVAAQV K APLVLKDDDDDDDD	-	-	-	+
321	P55072	696	SGADLTEICQRAC K LAIRESIESEIRR	-	-	-	-
322	P55072	315	FIDELDAIAPKRE K THGEVERRIVSQL	-	-	+	-
323	P55072	502	LQELVQYPVEHPD K FLKFGMTPSKGVL	+	-	-	-
324	P55072	505	LVQYPVEHPDKFL K FGMTPSKGVLFGY	+	-	-	-
325	P55072	668	AILKANLRKSPVA K DVDLEFLAKMTNG	+	-	-	+
326	P55072	754	RFARRSVSDNDIR K YEMFAQTLQQSRG	+	-	-	-
327	P31040	41	TGTRGFHFHTVDGN K RASAKVSDSISAQ	-	-	-	-
328	P31040	167	ENYGMFPFSRTEDG K IYQRAFGGQSLKF	+	-	-	-

329	P31040	179	GKIYQRAFGGQSLKFGKGGQAHRCCCV	+	-	-	+
330	P31040	182	YQRAFGGQSLKFGKGGQAHRCCCVADR	+	-	-	-
331	P31040	250	LCIEDGSIHRIRAKNTVVATGGYGRTY	+	-	-	+
332	P31040	335	QGERFMERYAPVAKDLASRDVVSRSMT	+	-	-	+
333	P31040	480	CALSIEESCRPGDKVPPIKPNAGEESV	+	-	-	-
334	P31040	485	EESCRPGDKVPPIKPNAGEESVMNLDK	+	-	-	+
335	P31040	498	KPNAGEESVMNLDKLRFADGSIRTSEL	+	-	-	+
336	P31040	517	GSIRTSELRLSMQKSMQNHAAVFRVGS	+	-	-	-
337	P31040	538	VFRVGSVLQEGCGKISKLYGDLKHLKT	+	-	-	+
338	P31040	541	VGSVLQEGCGKISKLYGDLKHLKTFDR	+	-	-	-
339	P31040	547	EGCGKISKLYGDLKHLKTFDRGMVWNT	+	-	-	+
340	P31040	550	GKISKLYGDLKHLKTFDRGMVWNTDLV	+	-	-	-
341	P31040	598	RKESRGAHAREDYKVRIDEYDYSKPIQ	+	-	-	-
342	P31040	608	EDYKVRIDEYDYSKPIQGGQKKPFEEH	+	-	-	-
343	P31040	615	DEYDYSKPIQGGQKKPFEEHWRKHTLS	-	-	-	+
344	P31040	624	QGGQKKPFEEHWRKHTLSYVDVGTGKV	+	-	-	-
345	P31040	636	RKHTLSYVDVGTGKVTLLEYRPVIDKTL	+	-	-	-
346	P31040	647	TGKVTLLEYRPVIDKTLNEADCATVPPA	+	-	-	-
347	P40926	105	GCDVVVIPAGVPRKPGMTRDDLFTNA	-	-	-	-
348	P40926	78	AADLSHIETKAAVKGYLGPEQLPDCLK	+	-	-	+
349	P40926	91	KGYLGPEQLPDCLKGCDVVVIPAGVPR	+	-	-	+
350	P40926	165	AEVFKKHGVYNPNKIFGVTTLDIVRAN	+	-	-	-
351	P40926	185	LDIVRANTFVAELKGLDPAVNVPVIG	+	-	-	+
352	P40926	203	ARVNVPIGGHAGKTIIPILISQCTPKV	-	-	-	+
353	P40926	215	GKTIIPILISQCTPKVDFPDQTLALTG	+	-	-	+
354	P40926	239	LTGRIQEAGTEVVKAKAGAGSATLSMA	+	-	-	+
355	P40926	269	ARFVFSLVDAMNGKEGVVECSFVKSQE	-	-	-	+
356	P40926	296	TECTYFSTPLLLGKKGIEKNLGIGKVS	+	-	-	+
357	P40926	301	FSTPLLLGKKGIEKNLGIGKVSSFEEK	+	-	-	+
358	P40926	307	LGKKGIEKNLGIGKVSSFEEKMISDAI	+	-	-	+
359	P40926	314	KNLGIGKVSSFEEKMISDAIPELKASI	+	-	-	+
360	P40926	324	FEEKMISDAIPELKASIKKGEDFVKTL	+	-	-	+
361	P40926	328	MISDAIPELKASIKKGEDFVKTLKKKK	+	-	-	+
362	P40926	329	ISDAIPELKASIKKGEDFVKTLKKKKK	+	-	-	-
363	P40926	335	ELKASIKKGEDFVKTLKKKKKKKKKKK	+	-	-	+
364	P22307	244	AAAAILASEAFVQKYGLQSKAVEILAQ	-	-	-	-
365	P22307	132	LGFEKMSKGSGLGKFSDRTIPTDKHVD	+	-	-	+
366	P22307	168	AHPVAPQMFGYAGKEHMEKYGTKIEHF	-	-	-	+
367	P22307	173	PQMFGYAGKEHMEKYGTKIEHFAKIGW	+	-	-	-
368	P22307	177	GYAGKEHMEKYGTKIEHFAKIGWKNNH	+	-	-	-
369	P22307	183	HMEKYGTKIEHFAKIGWKNNHKSNNP	+	-	-	+
370	P22307	282	EKSIIKMVGFDMSKEAARKCYEKSGLT	-	-	-	+
371	P22307	341	ATLVDRGDNTYGGKWWINPSGGLISKG	+	-	-	+
372	P22307	432	IEAVPTSSASDGFKANLVFKEIEKKLE	+	-	-	+
373	P22307	438	SSASDGFKANLVFKEIEKKLEEEGEQF	+	-	-	+
374	P22307	443	GFKANLVFKEIEKKLEEEGEQFVKKIG	+	-	-	+
375	P22307	453	IEKKLEEEGEQFVKKIGGIFAFKVKDG	+	-	-	+
376	P22307	464	FVKKIGGIFAFKVKDGPGGKEATWVVD	-	-	-	+
377	P22307	470	GIFAFKVKDGPVGKEATWVVDVKNKG	+	-	-	+
378	P22307	479	GPGGKEATWVVDVKNKGSVLPNSDKK	-	-	-	+
379	P22307	491	VKNKGSVLPNSDKKADCTITMADSDF	+	-	-	-
380	P22307	492	KNGKGSVLPNSDKKADCTITMADSDFL	-	-	-	+
381	P22307	511	TMADSDFLALMTGKMNPQSAFFQGLK	-	-	-	+
382	P22307	522	TGKMNPQSAFFQGLKITGNMGLAMKL	-	-	-	+
383	P22307	534	GKLKITGNMGLAMKLQNLQLQPGNAKL	-	-	-	+
384	P62807	28	SKKAVTKAQKKGKRRRSRKESYSVY	-	-	-	-
385	P62807	6	MMMMMMMMPEPAKSAPAPKKGSKKAV	+	+	-	-
386	P62807	12	MMPEPAKSAPAPKKGSKKAVTKAQKK	+	+	-	-

387	P62807	13	MMPEPAKSAPAPKKGSKKAVTKAQKKD	+	+	-	-
388	P62807	16	EPAKSAPAPKKGSKKAVTKAQKKDGKK	+	+	-	-
389	P62807	17	PAKSAPAPKKGSKKAVTKAQKKDGKKR	+	+	-	-
390	P62807	21	APAPKKGSKKAVTKAQKKDGKKRKRSR	+	+	-	-
391	P62807	24	PKKGSKKAVTKAQKKDGKKRKRSRKES	+	+	-	-
392	P62807	35	AQKKDGKKRKRSRKESYSVYVYKVLKQ	-	+	-	-
393	P62807	47	RKESYSVYVYKVLKQVHPDTGISSKAM	-	-	+	-
394	P62807	58	VLKQVHPDTGISSKAMGIMNSFVNDIF	-	-	+	-
395	P62807	86	RIAGEASRLAHYNKRSTITSREIQTAV	+	-	+	-
396	P62807	109	QTAVRLLLPGELAKHAVSEGTKAVTKY	-	-	+	-
397	P27348	122	ATNPESKVFYLMKGDYFRYLAEVACG	-	-	-	-
398	P27348	3	MMMMMMMMMMMEKTELIQKAKLAEQA	+	-	-	-
399	P27348	49	LSNEERNLLSVAYKNVVGRRSAWRVI	+	-	-	-
400	P27348	68	RRSAWRVISSIEQKTDTSCLKQLIKD	+	-	-	-
401	P27348	115	DKYLIANATNPESKVFYLMKGDYFRY	+	-	-	-
402	O95336	208	AARTVIFVATGEGKAAVLKRILEDQEE	-	-	-	-
403	O95336	180	EREKIVAPISDSPKPPQVRVTLTLPVL	+	-	-	-
404	Q9NRK6	376	TVRAFGKEMTEIEKYASKVDHVMQLAR	-	-	-	-
405	Q9NRK6	265	FSSILRQEVAFDCKTRTGELINRLSSD	+	-	-	-
406	Q9UG63	436	DTRVALVGPNGAGKSTLLKLLTGELLP	-	-	-	-
407	Q9UG63	304	VCTNI IHMHNKKLKYYTGNYDQYVKTR	+	-	-	-
408	P49748	382	FGEKIHNFGLIQEK LARMVMLQYVTE	-	-	-	-
409	P49748	51	RPYAGGAAQLALDKSDSHPSDALTRKK	+	-	-	-
410	P49748	71	DALTRKKPAKAESKSAFVGMFKGQLTT	+	-	-	+
411	P49748	195	QSIGFKGILLFGTKAQKEKYLPLASG	-	-	-	+
412	P49748	239	ASIRTSAPVSPCGKYYTLNGSKLWISN	+	-	-	+
413	P49748	276	AKTPVTDPATGAVKEKITAFVVERGFG	+	-	-	+
414	P49748	278	TPVTDPATGAVKEKITAFVVERGFGGI	+	-	-	+
415	P49748	298	ERGFGGITHGPPEKMGIKASNTAEVF	+	-	-	-
416	P49748	331	PSENVLGEVGSFKVAMHILNNGRFGM	+	-	-	+
417	P49748	372	AVDHATNRTQFGEKIHNFGLIQEKLAR	-	-	-	+
418	P49748	482	RLFVALQGCMCKGKELSGLSALKNPF	+	-	-	+
419	P49748	550	VRALQFATVVEAKLIKHKKGIVNEQF	+	-	-	-
420	P49748	556	FATVVEAKLIKHKGIVNEQFLLQRLA	+	-	-	+
421	P49748	639	WQELYRNFKSISKALVERGGVVTSNP	-	-	-	+
422	P07108	63	FTGKAKWDANWELKGTSKEDAMKAYIN	-	-	-	-
423	P07108	8	MMMMMMSQAEFEKAAEEVRHLKTKPS	+	-	-	+
424	P07108	17	AEFEKAAEEVRHLKTKPSDEMLFIYG	-	-	-	+
425	P07108	19	FEKAAEEVRHLKTKPSDEMLFIYGHY	+	-	-	-
426	P07108	55	TERPGMLDFTGKAKWDANWELKGTSK	+	-	-	+
427	P07108	77	GTSKEDAMKAYINKVEELKKKYGI III	+	-	-	+
428	P45954	189	LSEAGAGSDSFALKTRADKEGDYVVLN	-	-	-	-
429	P45954	70	FTDEEMMIKSSVKKFAQE QIAPLVSTM	+	-	-	+
430	P45954	284	PEANILGQIGHGYKYAIGSLNEGRIGI	+	-	-	+
431	P45954	426	YEGASNIQLNTIAKHIDA EYYYYYYYY	+	-	-	-
432	P62258	73	WRIISSIEQKEENKGGEDKLMIREYR	-	-	-	-
433	P62258	50	LTVEERNLLSVAYKNVIGARRASWRII	+	-	-	-
434	P62258	69	RRASWRIISSIEQKEENKGGEDKLM	+	-	-	-
435	P62258	118	DKHLIPAANTGESKVFYKMKGDYHRY	+	-	-	-
436	P62258	123	PAANTGESKVFYKMKGDYHRYLAEFA	+	-	-	-
437	P63104	122	ASQAESKVFYLMKGDYRYLAEVAAG	-	-	-	-
438	P63104	3	MMMMMMMMMMMMDKNELVQKAKLAEQA	+	-	-	-
439	P63104	68	RRSSWRVSSIEQKTEGA EKKQOMARE	+	-	-	-
440	Q969T7	67	KRCPPSYNILDNSKIISEE CKELTAL	-	-	-	-
441	Q969T7	256	GVQNILKIGFLNDKVEERRERYMDSYD	+	-	-	-
442	P52209	253	LKFQD TDGKHLLPKIRDSAGQKGTGW	-	-	-	-
443	P52209	38	HGFVVCAFNRVTSKVDDFLANEAKGTK	+	-	-	-
444	P52209	59	EAKGTKVVGASQSLKEMVSKLKKPRRII	+	-	-	-

445	P52209	309	ERIQASKKLKGPQKFQFDGDKKSFL	+	-	-	-
446	P28288	322	FRFSMGFIDSIIAKYLATVVGYLVS	-	-	-	-
447	P28288	61	NEKEGKKERAVVDKVFVSRLIQILK	+	-	-	-
448	P28288	260	LRRPIGKMTITEQKYEGEYRYVNS	+	-	-	-
449	P28288	399	GFTARITELMQVLKDLNHGKYERTM	+	-	-	-
450	P28288	533	RDQVIYPDGDREDQKRKGISDLVL	+	-	-	-
451	P00519	765	FGGHKSEKPALPRKRAGENRSDQV	-	-	-	-
452	P00519	711	LATGEEEGGGSSSKRFLRSCSASC	+	-	-	-
453	Q9UKU7	234	EKGTPGLSFGKKEKKVGWNSQPTR	-	-	-	-
454	Q9UKU7	50	PSMGLNEEQKEFQKVAFDFAAREMA	+	-	-	+
455	Q9UKU7	213	IYVVMCRTGGPGPKGISCIVVEKGP	-	-	-	+
456	Q9UKU7	231	IVVEKGPGLSFGKKEKKVGWNSQP	+	-	-	-
457	P11310	311	EATKYALERKTFGKLLVEHQAI	-	-	-	-
458	P11310	69	AREEIIIPVAAEYDKTGEYPVPLIR	+	-	-	+
459	P11310	179	GSDVAGIKTKAEKKGDEYIINGQKM	-	-	-	+
460	P11310	212	NWYFLLARSDPDKAPANKAFTGFI	+	-	-	+
461	P11310	217	LARSDPDKAPANKAFTGFI	+	-	-	+
462	P11310	259	DTRGIVFEDVKVPKENVLIGDGAGF	+	-	-	+
463	P11310	271	PKENVLIGDGAGFKVAMGAFDKTRP	+	-	-	+
464	P11310	279	DGAGFKVAMGAFDKTRPVVAAGAV	+	-	-	-
465	P11310	301	AVGLAQRALDEATKYALERKTFGKL	+	-	-	-
466	Q5T8D3	84	FYSFYKQATEGPCKLSRPGFWDPI	-	-	-	-
467	Q5T8D3	469	LQEDMQNVLQRLQKLETLTALQAK	+	-	-	-
468	Q15067	229	KPLPGITVGDIGPKFGYDEIDNGYL	-	-	-	-
469	Q15067	89	EFIADPDEIMWFKKLHLVNFVEPV	-	-	-	+
470	Q15067	90	FGIADPDEIMWFKKLHLVNFVEPV	-	-	-	+
471	Q15067	216	HAFIVPIREIGTHKPLPGITVGDIG	+	-	-	-
472	Q15067	241	PKFGYDEIDNGYLMKDNHRIPREN	-	-	-	+
473	Q15067	255	MDNHRIPRENMLMKYAQVKPDGTY	+	-	-	-
474	Q15067	267	MKYAQVKPDGTYVKPLSNKLTYGTM	+	-	-	-
475	Q15067	272	VKPDGTYVKPLSNKLTYGTMVFRS	+	-	-	-
476	Q15067	349	ATAYAFQFVGAYMKETYHRI	-	-	-	+
477	Q15067	437	NTVMMLQTARFLMKSYDQVHSGKL	+	-	-	+
478	Q15067	446	RFLMKSYDQVHSGKLVCGMVSYLND	+	-	-	+
479	Q15067	500	YKLRAARLVEIAAKNLQKEVIHRKS	+	-	-	-
480	Q15067	504	AARLVEIAAKNLQKEVIHRKSKEVA	+	-	-	-
481	Q15067	512	AKNLQKEVIHRKSKEVAWNLT	+	-	-	+
482	Q15067	542	AHCHYVVVKLFSEKLLKIQDKAIQ	-	-	-	+
483	Q15067	637	YDGNVYENLFEWAKNSPLNKA	+	-	-	+
484	Q15067	643	ENLFEWAKNSPLNKA	-	-	-	+
485	Q15067	651	NSPLNKA	+	-	-	-
486	Q15067	654	LNKA	-	-	-	+
487	Q99424	419	EMCRRACGGHGYSKLSGLPSLVTKL	-	-	-	-
488	Q99424	66	VESIHSYPEFSCNDNYFMTQNER	-	-	-	+
489	Q99424	137	RALRSLGSEEQIAKWDPLCKNIQI	-	-	-	+
490	Q99424	453	NTVLYLQVARFLVKS	-	-	-	+
491	Q99424	561	YYVTVKGFTEALEKLENEPAIQV	-	-	-	+
492	Q04917	142	DYYRYLAEVASGEKNSVVEASEA	-	-	-	-
493	Q04917	50	LSNEDRNLLSVAYKNVVGARRSS	+	-	-	-
494	Q04917	69	RRSSWRVISSIEQKTMADGNEKK	+	-	-	-
495	Q04917	120	FLIKNCNDFQYESKVFYLMKGDY	+	-	-	-
496	P31937	125	AYSGANGILKKVKGSLLIDSSTID	-	-	-	-
497	P31937	60	LGNMGNPMAKNLMKHGYPLIIYDV	+	-	-	+
498	P31937	76	YPLIIYDVFPDACKEFQDAGEQV	+	-	-	+
499	P31937	95	GEQVSSPADVAEKADRIITMLPT	-	-	-	+
500	P31937	121	NAIEAYSGANGILKKVKKGSLLID	+	-	-	-
501	P31937	141	LLIDSSTIDPAVSKELAKEVEKMG	-	-	-	+
502	P31937	145	SSTIDPAVSKELAKEVEKMGAVFM	+	-	-	-

503	P31937	149	DPAVSKELAKEVEKMGAVFMDAPVSGG	+	-	-	+
504	P31937	238	EAMNLGIRLGLDPKLLAKILNMSSSGRC	+	-	-	+
505	P31937	242	LGIRLGLDPKLLAKILNMSSSGRCWSSD	+	-	-	+
506	P31937	297	KDLGLAQDSATSTKSPILLGSLAHQIY	-	-	-	+
507	P31937	321	QIYRMMCAKGYSKDFSSVFQFLREEE	+	-	-	+
508	O75027	109	WHGHAGGGLHTDPKEGLKDVDTRKIIK	-	-	-	-
509	O75027	216	AAFFNEVRNAVFGKVAQNSIRRIAKNV	+	-	-	-
510	O75027	251	LGFHLSRQTGALSKAIDRGTRGISFVL	+	-	-	-
511	Q8NFV4	245	WRVNLDAITQHLDKILAFPPQRQESYLG	-	-	-	-
512	Q8NFV4	87	GLFGSKTNFNSIAKILAQQTGRRVLTV	-	-	-	+
513	P42684	340	EEFLKEAAVMKEIKHPNLVQLLGVCTL	-	-	-	-
514	P42684	776	LRAGKPTASDDTSKPFPRSNSTSSMSS	+	-	-	-
515	Q13085	879	GYCLPDPFFSSKVDWVERLMKTLRDP	-	-	-	-
516	Q13085	1334	DHGIRRLTFLVAQKDFRKQVNYEVDRR	+	-	-	-
517	Q9H845	164	KGIILAGTEEQKAKYLPKLASGEHIAA	-	-	-	-
518	Q9H845	41	RLLRTSPPVRAFAKELFLGKIKKKEVF	+	-	-	-
519	Q9H845	92	TEEVDNRKIDQEGKIPDETLEKLKSLG	-	-	-	+
520	Q9H845	521	FGRTVETLLLRFGKTIMEEQVLVLRVA	+	-	-	+
521	Q6JQN1	195	CMEGICKPDPRIYKLCLEQLGLQPSSES	-	-	-	-
522	Q6JQN1	413	SVDLQAVGLEDYQKQGDYIPRQVRTWV	-	-	-	+
523	Q6JQN1	427	QGDYIPRQVRTWVKQYRASETSTIPAM	+	-	-	+
524	Q6JQN1	1052	ADGPDEVHRATVAKLELKHRIIIIIII	+	-	-	+
525	P53396	166	LVGVDEKLNPEIDKHLVHAPEDKKE	-	-	-	-
526	P53396	540	AAMVYPFTGDHKQKFYWGHEILIPVF	+	-	-	-
527	P53396	546	FTGDHKQKFYWGHEILIPVFKNMADA	+	-	-	-
528	P53396	554	FYWGHEILIPVFKNMADAMRKHPEVD	+	-	-	-
529	P53396	948	FGGALDAAAKMFSKAFDSGIIPMEFVN	+	-	-	-
530	P53396	968	IPMEFVNKMKKEGKLIMGIGHRVKSIN	+	-	-	-
531	P53396	978	KEGKLIMGIGHRVKSINNPDMRVQILK	+	-	-	-
532	P53396	1077	GRSMGFIGHYLDQKRLKQGLYRHPWDD	+	-	-	-
533	P49753	243	GGLLEYRASLLAGKGFAMALAYNYE	-	-	-	-
534	P49753	104	EQPVTLRASLRDEKALFQAHARYRAD	+	-	-	-
535	P49753	470	QVDAWKQLQTFHKKHLGGHEGTIPSKV	-	-	-	+
536	Q9Y305	151	KMSPLSIVTALVDKIDMCKKSLSPEQD	-	-	-	-
537	Q9Y305	103	VLLPLGSEPELREKYLTQNTVRFGR	+	-	-	-
538	Q9NR19	227	TDAFYRGEKLVNLKELADEALQKCQEK	-	-	-	-
539	Q9NR19	418	KFYTAPTALRLMKFGDEPVTKHSRAS	+	-	-	-
540	P31946	76	VISSIEQKTERNEKKQMGKEYREKIE	-	-	-	-
541	P31946	5	MMMMMMMMMTMDKSELVQAKLAEQA	+	-	-	-
542	P31946	51	LSNEERNLLSVAYKNVVGARRSSWRVI	+	-	-	-
543	P31946	70	RRSSWRVISSIEQKTERNEKKQMGKE	+	-	-	-
544	P31946	117	DKYLIPNATQPESKVFYLMKMGDYFRY	+	-	-	-
545	Q709F0	580	HSMILVPMNTPGVKIIRPLSVFGYTDN	-	-	-	-
546	Q709F0	177	LQLEGYGIGAGYCKRQVSTWTKQYQAA	+	-	-	-
547	Q709F0	391	KGQEVLIKVKHFMKQHILPAEKEVTEF	-	-	-	+
548	Q9NUB1	404	VRLLLKYGDAWVKYDRSSLRTLGSVG	-	-	-	-
549	Q9NUB1	396	QFYGAPTAVRLLKYGDAWVKKYDRSS	+	-	-	-
550	Q9NUB1	642	ILVVKRLPKTRSGVMRLLLRKIITSE	+	-	-	-
551	P33121	124	SRKPDQPYEWLSYKQVAELSECIGSAL	-	-	-	-
552	P33121	207	ELSLVFVDKPEKAKLLEGVENKLIPG	+	-	-	-
553	P33121	356	FFQGDIRLLMDDLKVLQPTVFPVPR	+	-	-	-
554	P33121	386	MFDRIFGQANTTLKRWLLDFASKRKEA	+	-	-	-
555	P33121	632	GSFEELCRNKDVKKAILEDMMVRLGKDS	+	-	-	-
556	Q9H6R3	368	PLLHGNTTVLYEGKPVGTPDAGAYFRV	-	-	-	-
557	Q9H6R3	518	KLPLPPGAFSGLWKNQEAFAKHLYFEKF	-	-	-	+
558	Q9H6R3	524	GAFSGLWKNQEAFAKHLYFEKFPGYDT	+	-	-	-
559	P60709	284	SCGIHETTFNSIMKCDVDIRKDLYANT	-	-	-	-
560	P60709	84	IEHGIVTNWDDMEKIWHHTFYNELRVA	-	-	+	-

561	P30153	188	SDDTPMVRRAAASKLGEFAKVELELDNV	-	-	-	-
562	P30153	280	FTELQKAVGPEITKTDLVPAFQNLMKD	+	-	-	-
563	Q8WYK0	449	YHITCPIIINDDKPKDLVVLVSRRKPLK	-	-	-	-
564	Q8WYK0	33	ATARGELSAGQLLKWIDTTACLAAEKH	-	-	-	+
565	Q8WYK0	159	VRLQHEDTFNNLMKESSKFDDLIFDEE	-	-	-	+
566	Q8WYK0	228	ISASRLCWAHPFLKSVD MFKFRGPSTV	-	-	-	+
567	Q68CK6	290	WTLGACTFVHLLPKFDPLVILKTLSSY	-	-	-	-
568	Q68CK6	141	RAGLIFMPGTIQMKSTDILYRLQMSKA	+	-	-	+
569	Q68CK6	327	VYRMLLQQDLSSYKFPHLQNCLAGGES	+	-	-	-
570	Q68CK6	525	ASQFLSHDPEQLTKELQQHVKSVTAPY	+	-	-	-
571	Q68CK6	532	DPEQLTKELQQHVKSVTAPYKYPRKIE	+	-	-	+
572	Q68CK6	543	HVKSVTAPYKYPRKIEFVLNLPKTVTG	+	-	-	-
573	Q08AH1	383	SETGLICATYWGMKIKPGFMGKATPPY	-	-	-	-
574	Q08AH1	85	PAFWWVNGQGDEVKWSFREMGLTRRV	-	-	-	+
575	Q08AH1	146	RTGIIIFIPATILLKAKDILYRLQLSKA	+	-	-	+
576	Q08AH1	183	SEVDSIASQCPSLKTLLVSDHSREGW	-	-	-	+
577	Q08AH1	204	HSREGWLDFRSLVKSASPEHTCVKSKT	+	-	-	+
578	Q08AH1	214	SLVKSASPEHTCVSKTLDPMVIFFTS	+	-	-	-
579	Q08AH1	237	FFTSGTTGFPKMAKSHHGLALQPSFPG	-	-	-	+
580	Q08AH1	356	GGEVVLPKDQEEWKRRRTGLLLYENYGQ	+	-	-	+
581	Q08AH1	391	TYWGMKIKPGFMGKATPPYDVQVIDDK	+	-	-	+
582	Q08AH1	531	TPQFLSHDKDQLTKELQQHVKSVTAPY	+	-	-	-
583	Q08AH1	538	DKDQLTKELQQHVKSVTAPYKYPRKVE	+	-	-	+
584	Q08AH1	549	HVKSVTAPYKYPRKVEFVSELPKTTITG	+	-	-	-
585	Q53FZ2	389	YGQTETVLCGNFKGMKIKPGSMGKPS	-	-	-	-
586	Q53FZ2	73	FAKDVLQWTDKEKAGKKPSNPAFWWI	-	-	-	+
587	Q53FZ2	106	MRWSFEELGSLSRKFANILSEACSLQR	-	-	-	+
588	Q53FZ2	157	GTVLIPGTTQLTQKDILYRLQSSKANC	+	-	-	-
589	P68032	52	RPRHQGVMVGMGQKDSYVGDEAQSKRG	-	-	-	-
590	P68032	86	IEHGIIITNWDDMEKIWHHTFYNELRVA	-	-	+	-
591	P12814	254	YVSSFYHAFSGAQKAETAANRICKVLA	-	-	-	-
592	P12814	95	RGKMRVHKISNVNKALDFIASKGVKLV	+	-	-	-
593	P12814	195	LIHRHRPELIDYGLRKDDPLTNLNTA	+	-	-	-
594	P12814	676	TLEDQLSHLRQYEKSIVNYKPKIDQLE	+	-	-	-
595	P12814	840	DQVMASFKILAGDKNYITMDELRRRLP	+	-	-	-
596	P35609	420	RQKASTHETWAYGKEQILLQKDYESAS	-	-	-	-
597	P35609	102	RGKMRFHKIANVKNALDYIASKGVKLV	+	-	-	-
598	P35609	202	LIHRHRPDLIDYSKLNKDDPIGNINLA	+	-	-	-
599	P35609	613	STVTMDELRTKWDKVKQLVPIRDQSLQ	+	-	-	-
600	P35609	842	EQVIASFRILASDKPYILAEELRRRLP	+	-	-	-
601	P00813	64	GMDKPLTLPDFLAKFDYYMPAIAAGCRE	-	-	-	-
602	P00813	54	NTAEGLLNVIGMDKPLTLPDFLAKFDY	+	-	-	-
603	P00813	232	GSAEVVKEAVDILKTERLGHGYHTLED	+	-	-	-
604	Q8N5Z0	213	GNNPTGNSLTSERKKEIYELARKYDFL	-	-	-	-
605	Q8N5Z0	69	ENGKTIQFGEEMKRALQYSPSAGIPE	+	-	-	-
606	Q8N5Z0	179	IVPDSLRLDILSRWKPEDAKNPQKNTPK	+	-	-	-
607	Q8N5Z0	263	DVDGRVIRADSFSKIISGLRIGFLTG	+	-	-	+
608	Q8N5Z0	339	YSNQKDAILAAADKWLTLGLAEWHVPAA	+	-	-	+
609	Q8N5Z0	367	MFLWIKVKGINDVKELIEEKAVKMGVL	+	-	-	+
610	Q8N5Z0	422	QMDVAFQVLAQLIKESLLLLLLLLLLLLL	+	-	-	-
611	Q9UDR5	104	GVKRPPEEKLSMRKTYAFFSHTIKAQE	-	-	-	-
612	Q9UDR5	48	AWERRAPLAPKHIKGITNLGYKVLIQP	+	-	-	-
613	Q9UDR5	56	APKHIKGITNLGYKVLIQPSNRRAIHD	+	-	-	-
614	Q9UDR5	93	QEDISEACLILGVRPPEEKLSMRKTY	+	-	-	+
615	Q9UDR5	128	AQEANMGLLDEILKQEIRLIDYEKMVD	+	-	-	-
616	Q9UDR5	138	EILKQEIRLIDYEKMVDHRGVRVAVFG	+	-	-	+
617	Q9UDR5	274	YGTVLSRHHHLVRKTDVAVDPAEYDKH	-	-	-	+
618	Q9UDR5	286	RKTDVAVDPAEYDKHPERYISRFNTDI	+	-	-	+

619	Q9UDR5	333	LTRQDAQSLLAPGKFSPAGVEGCPALP	-	-	-	+
620	Q9UDR5	458	RDAVITSNGTLPDKYKYIQTRESRER	+	-	-	+
621	Q9UDR5	523	GSDMKNQIEQLGKYNINPVSMDICKQ	+	-	-	+
622	Q9UDR5	535	KKYNINPVSMDICKQEEKLGFLVAKQD	+	-	-	+
623	Q9UDR5	584	VNMVTASYITPALKELEKSVEDAGITI	+	-	-	+
624	Q9UDR5	707	GLNLEGYPNRDSTKYAEIYGISSAHTL	+	-	-	-
625	Q9UDR5	732	TLLRGTLRYKGYMKALNGFVKLG LINR	-	-	-	+
626	Q9UDR5	739	RYKGYMKALNGFVKLG LINREALPAFR	+	-	-	-
627	Q9UDR5	761	LPAFRPEANPLTWKQLLCDLVGISPSS	+	-	-	+
628	Q9UDR5	780	LVGISPSSSEHDVLKEAVLKKLGGDNTQ	+	-	-	-
629	P00505	235	RPEQWKEIATVVKRNLFAFFDMAYQG	-	-	-	-
630	P00505	59	GVTEAFKRDTSNKKMNLGVGAYRDDNG	+	-	-	-
631	P00505	73	MNLGVGAYRDDNGKPYVLPSVRKAEAQ	+	-	-	+
632	P00505	82	DDNGKPYVLPSVRKAEAQIAAKNLDKE	+	-	-	-
633	P00505	90	LPSVRKAEAQIAAKNLDKEYLP IGG LA	+	-	-	+
634	P00505	107	KEYLP IGG LAEFCKASAEALGENSEV	+	-	-	+
635	P00505	122	SAELALGENSEVLKSGRFVTVQTISGT	+	-	-	+
636	P00505	159	QRFFKFSRDVFLPKPTWGNHTPIFRDA	+	-	-	+
637	P00505	185	AGMQLQGYRYDPKTCGFDFTGAVEDI	+	-	-	+
638	P00505	227	HNPTGVDPRPEQWKEIATVVKRNLFA	-	-	-	+
639	P00505	234	PRPEQWKEIATVVKRNLFAFFDMAYQ	+	-	-	-
640	P00505	279	EQGINVCLCQSYAKNMGLYGERVGAFT	+	-	-	-
641	P00505	296	LYGERVGAFTMVC KDADEAKRVESQLK	+	-	-	+
642	P00505	302	GAFTMVCKDADEAKRVESQLKILIRPM	+	-	-	-
643	P00505	309	KDADEAKRVESQLKILIRPMYSNPPLN	+	-	-	+
644	P00505	338	RIAAAILNTPDLRKQWLQEVKVMADRI	+	-	-	+
645	P00505	345	NTPDLRKQWLQEVKVMADRIIGMRTQL	+	-	-	-
646	P00505	363	RIIGMRTQLVSNLKKEGSTHNWQHITD	+	-	-	+
647	P00505	364	IIGMRTQLVSNLKKEGSTHNWQHITDQ	+	-	-	-
648	P00505	387	ITDQIGMFCFTGLKPEQVERLIKEFSI	+	-	-	-
649	P00505	396	FTGLKPEQVERLIKEFSIYMTKDGRIS	+	-	-	+
650	P00505	404	VERLIKEFSIYMTKDGRISVAGVTSSN	+	-	-	+
651	P28330	333	FGKTV AHLQTVQHKLAEKTHICVTRA	-	-	-	-
652	P28330	42	HSGGEERLETPSAKKLTDIGIRRI FSP	+	-	-	-
653	P28330	66	FSPEHDIFRKSVRKFFQEEVIPHHSEW	+	-	-	+
654	P28330	81	FQEEVIPHHSEWEKAGEVSREVWEKAG	+	-	-	+
655	P28330	92	WEKAGEVSREVWEKAGKQGLLGVNIAE	+	-	-	-
656	P28330	95	AGEVSREVWEKAGKQGLLGVNIAEHLG	+	-	-	-
657	P28330	165	EQIKHFIPQMTAGKCIGAIAMTEPGAG	-	-	-	+
658	P28330	240	AHGISLFLVENG MKGFIKGRKLHKMGL	-	-	-	+
659	P28330	254	GFIKGRKLHKMGLKAQDTAE LFFEDIR	+	-	-	+
660	P28330	279	IRLPASALLGEENKGFYYIMKELPQER	+	-	-	+
661	P28330	318	FMFEETRNYVKQRKAFGKTVAHLQTVQ	+	-	-	-
662	P28330	322	ETRNYVKQRKAFGKTVAHLQTVQHKL A	+	-	-	+
663	P28330	358	RAFVDNCLQLHEAKRLDSATACMAKYW	+	-	-	-
664	P16219	62	AEKELFP IAAQVDKEHLFPAAQVKKMG	-	-	-	-
665	P16219	51	HQMLLQTCRDFAEKELFP IAAQVDKEH	+	-	-	+
666	P16219	72	QVDKEHLFPAAQVKMGGGLLLAMDVP	+	-	-	-
667	P16219	129	MSVNNSLYLGPILKFGSKEQKQAWVTP	+	-	-	+
668	P16219	208	AVVFASTDRALQNKGISAF LVPMP TPG	+	-	-	-
669	P16219	262	PKDSILGEPGMGFKIAMQTLDMGRIGI	+	-	-	+
670	P16219	306	YAENRMAFGAPLT KLQVIQFKLADMAL	+	-	-	+
671	Q9NRA8	261	KGRKRTRRRRTASVKEGIVECNGGVAEE	-	-	-	-
672	Q9NRA8	486	RQLKKDGDMTAFNKL VSTMKASGTLPS	+	-	-	-
673	O14561	106	IDPEKLSVNSHFMKDLGLDSL DQVEII	-	-	-	-
674	O14561	88	TLEGIQDRVLYVLKLYDKIDPEKLSVN	+	-	-	-
675	O00116	628	HHHGVGKLRKQWLKESISDV GFGMLKS	-	-	-	-
676	O00116	102	EVMKWNGWGYNDSKFIFNKKGQIELTG	+	-	-	-

677	O00116	347	VHIKMVTPRGIIEKSCQGPRMSTGPD	+	-	-	-
678	Q16352	288	LAAKNLQSAEEWYKSKFANLNEQAARS	-	-	-	-
679	Q16352	290	AKNLQSAEEWYKSKFANLNEQAARSTE	+	-	-	-
680	Q99798	521	NPETDYLGTGDKKFRLEAPDADELPK	-	-	-	-
681	Q99798	31	RQYHVASVLCQRAKVAMSHFEPNEYIH	-	-	-	+
682	Q99798	50	FEPNEYIHYDLLEKNINIVRKRLNRPL	+	-	-	+
683	Q99798	138	HCDHLIEAQVGGEKDLRRAKDINQEVY	+	-	-	+
684	Q99798	144	EAQVGGEKDLRRAKDINQEVYNFLATA	+	-	-	+
685	Q99798	233	IPWELKCPKVIGVKTGSLSGWSSPKD	+	-	-	+
686	Q99798	411	AVAKQALAHGLKCKSQFTITPGSEQIR	-	-	-	+
687	Q99798	549	EFDPGQDQTYQHPPKDSGQHVDVSPTS	-	-	-	+
688	Q99798	573	PTSQRLQLLEPFDKWDGKDLEDLQILI	+	-	-	+
689	Q99798	577	RLQLLEPFDKWDGKDLEDLQILIKVKG	-	-	-	+
690	Q99798	591	DLEDLQILIKVKGKCTTDHISAAGPWL	-	-	-	+
691	Q99798	605	CTTDHISAAGPWLKFRGHLDNISNNLL	+	-	-	+
692	Q99798	628	NNLLIGAINIENGKANSVRNAVQTQFEG	-	-	-	+
693	Q99798	689	LEPRHLGGRAIITKSFARIHETNLKKQ	-	-	-	+
694	Q99798	723	ADPADYNKIHPVDKLTIQGLKDFTPGK	+	-	-	+
695	Q99798	730	KIHPVDKLTIQGLKDFTPGKPLKCIK	+	-	-	+
696	Q99798	736	KLTIQGLKDFTPGKPLKCIKHPNGTQ	+	-	-	-
697	Q99798	739	IQGLKDFTPGKPLKCIKHPNGTQETI	+	-	-	-
698	Q99798	743	KDFTPGKPLKCIKHPNGTQETILLNH	+	-	-	-
699	Q8N9L9	380	FPLCPASLHRLLNKHVIWGGEPRASHK	-	-	-	-
700	Q8N9L9	42	EQRVTLRASLRDEKGALEFRAHARYCAD	+	-	-	-
701	Q8N9L9	313	VGGYKNPSMIPIEKAQGPILLIVGQDD	-	-	-	+
702	Q8N9L9	408	QEDAWKQILAFFCKHLLGGTQKTAVPKL	-	-	-	+
703	Q08AH3	562	NLPKTVTGKIQRAKLRLDKEWKMSGKAR	-	-	-	-
704	Q08AH3	327	VYRMLLQQLSSYKFPHLQNCVTVGES	+	-	-	-
705	Q9ULC5	128	AEYLGSCLLHKGKYSPPDQFVGIFAQN	-	-	-	-
706	Q9ULC5	361	FPAVPRLLNRIYDKVQNEAKTPLKKFL	+	-	-	-
707	Q6NUN0	155	MIPGVTQLTEKDLKYRLQASRAKSIIT	-	-	-	-
708	Q6NUN0	97	TGAEIKWSFEELGKQSRKAANVLGGAC	+	-	-	+
709	Q6NUN0	152	GTVMIPGVTQLTEKDLKYRLQASRAKS	+	-	-	-
710	Q6NUN0	303	SCIFVHELPRVDAKVILNTLSKFPITT	+	-	-	+
711	P63261	315	GTTMYPGIADRMQKEITALAPSTMKIK	-	-	-	-
712	P12235	92	IRYFPTQALNFAFKDKYKQLFLGGVDR	-	-	-	-
713	P12235	147	LDFARTRLAADVGKGAAQREFHGLGDC	-	-	-	+
714	P12235	245	DTVRRRMMMQSGRKADIMYTGTVDWC	-	-	-	+
715	P12235	272	RKIAKDEGAKAFFKGAWSNVLRGMGGA	-	-	-	+
716	P10109	126	STCHLIFEDHIYEKLDAITDEENDMLD	-	-	-	-
717	P10109	66	LSVSARARSSSEDKITVHFINRDGETL	+	-	-	+
718	P10109	158	TDRSRLGCQICLTKSMDNMTVRVPETV	-	-	-	+
719	Q12904	167	RLDLRIGCIIITARKHPDADSLYVEVD	-	-	-	-
720	Q12904	269	FPGEPAKELNPKKKIWEQIQPDLHTND	-	-	-	+
721	O60218	66	HEVGEAIQEIKIQAOKREDLFIVSKL	-	-	-	-
722	O60218	95	TFFERPLVRKAFFKTLKDLKLSYLDVY	+	-	-	-
723	O60218	125	WPQGFKSGDDLFPKDDKGNAIGGKATF	+	-	-	-
724	O60218	222	AYSPLGSPDRPWAKEPEDPSLLEDPKIK	+	-	-	-
725	O60218	263	IRFHIQRNVIVIPKSVTPARIVENIQV	+	-	-	-
726	P47895	350	YAKKRPVGDVDFVTEQGPQIDQKQFD	-	-	-	-
727	P47895	47	IFINNEWHESKSGKKFATCNPSTREQI	+	-	-	+
728	P47895	378	ILELIESGKKEGAKLECGGSAMEDKGL	+	-	-	+
729	P47895	394	CGGSAMEDKGLFIKPTVFSEVTDNMRI	+	-	-	+
730	P47895	409	TVFSEVTDNMRIAKEEIFGPVQPILKF	+	-	-	+
731	P47895	421	AKEEIFGPVQPILKFKSIEEVIKRANS	+	-	-	+
732	O75891	845	FGLASGVFTTRDINKALYVSDKLQAGTV	-	-	-	-
733	O75891	38	EVVGVTVPDKDGGKADPLGLEAEKDG	-	-	-	+
734	O75891	767	HLVKLMEYCQHGKVEGATLVCGGNQVP	-	-	-	+

735	Q9UKV3	305	GQKSREAPILKEFKEEGEEIPRVKPEE	-	-	-	-
736	Q9UKV3	654	SRSRSASSNSRKSLSPGVS RDSSTS	-	-	+	-
737	Q9UKV3	717	VQARRLSQPESA EKHV TQRLQPERGSP	+	-	-	-
738	Q9UKV3	861	KRRWGASTATTQK KPSISITTESL KSL	+	-	-	-
739	Q9NPJ3	123	GKTLAFTSVDLTNKATGKLIAQGRHTK	-	-	-	-
740	Q9NPJ3	27	AMTKARNFERVLGKITLVSAAPGKVIC	+	-	-	-
741	Q9NPJ3	37	VLGKITLVSAAPGKVICEMKVEEHTN	+	-	-	-
742	Q9NPJ3	43	LVSAAPGKVICEMKVEEHTNAIGTLH	+	-	-	-
743	Q9NPJ3	108	KLGEDIVITAHVLKQGKTLAFTSVDLT	+	-	-	-
744	Q9NPJ3	127	AFTSVDLTNKATGKLIAQGRHTKHLGN	+	-	-	-
745	P68133	293	TYNSIMKCDIDIRKDLYANNVMSGGTT	-	-	-	-
746	P51825	68	SRIQNMLGNYEEVKEFLSTKSHTHRLD	-	-	-	-
747	P51825	681	EKKKKHKSSLPAPSKALSGPEPAKDNE	+	-	-	-
748	Q9Y4W6	141	WSRFQKGDIPWDDKDFRMFFLWTALFW	-	-	-	-
749	Q9Y4W6	117	TTRSSGGGGGGGGKRGKKDDSHWWSR	-	-	-	+
750	O95081	141	PQKVKEFLQEKYEKKRWYVPPDQVKGP	-	-	-	-
751	O95081	173	SASTPVQGSIPGKPLRTLLGDPAPSL	+	-	-	-
752	C9JRZ8	66	HEVG EAIQE KIQE KAVMREDLFIVSKV	-	-	-	-
753	C9JRZ8	125	WPQGFKTGDDFFPKDDKGNMISGKGT	+	-	-	-
754	C9JRZ8	263	IRFHIQRNVTVIPKSMTPAHIVENIQV	+	-	-	-
755	Q3SY69	411	DVYMATKFEGFIQKVVRKL RGEDQEVE	-	-	-	-
756	Q3SY69	681	GFTGSTPIGKQIMKSCAVSNLKKVSLE	-	-	-	+
757	Q3SY69	903	AAPFGGVKQSGFGKDLGEEALNEYLKT	+	-	-	-
758	Q96Q35	404	HTIQILTEENIHLKQKIISKNEEICEG	-	-	-	-
759	Q96Q35	376	ELQKEKAIVGNLEKMLQTKFAETEEKY	+	-	-	-
760	P30838	236	CDLDVACRRIAWGFKNMNSGQTCVAPDY	-	-	-	-
761	P30838	178	VINGGVPETTELLKERFDHILYTGSTG	+	-	-	-
762	P30838	194	FDHILYTGSTGVGKIIMTAAAKHLTPV	+	-	-	-
763	P49189	68	VQNAKA AFKIWSQKSGMERC RILLEAA	-	-	-	-
764	P49189	30	GARVEPADASGTEKAFEPATGRVIATF	+	-	-	+
765	P49189	59	SGEKEVNLAVQNAKA AFKIWSQKSGME	-	-	-	+
766	P49189	298	GQVCCNGTRVFVQKEILDKFTEEVVKQ	+	-	-	-
767	P49189	303	NGTRVFVQKEILDKFTEEVVKQTQRIK	+	-	-	+
768	P49189	344	INRPHLERVLGFVKVAKEQGAKVLCGG	+	-	-	-
769	P15121	195	VNQIECHPYLTQEKLIQYCQSKGIVVT	-	-	-	-
770	P15121	95	TYHEKGLVKGACQKTLSDLKLDYLDLY	+	-	-	-
771	P15121	222	AYSPLGSPDRPWA KPEDPSLLEDPRIK	+	-	-	-
772	P15121	263	IRFPMQRNLVVIPKSVTPERIAENFKV	+	-	-	-
773	Q6P6C2	231	VSFFSDSALCFGCKFQFKPIRVSEPV	-	-	-	-
774	Q6P6C2	132	YNEHTVDRAPLRNKYFFGEGYTYGAQL	+	-	-	-
775	Q96CM8	339	GATLILASPIFNGKALEAISRERGT	-	-	-	-
776	Q96CM8	179	VLKKVGCKALVFPKQFTQQYYNVLKQ	+	-	-	-
777	Q96CM8	182	KVGCKALVFPKQFTQQYYNVLKQICP	+	-	-	+
778	Q96CM8	340	ATLILASPIFNGKALEAISRERGTFL	+	-	-	-
779	Q96CM8	398	SPAPPELIRAI INKINMKDLV VAYGTT	+	-	-	-
780	Q96CM8	478	GYCVMLGYWGEPQKTEEAVDQDKWYWT	-	-	-	+
781	Q96CM8	510	MNEQGFC KIVGRSKDMIIRGGENIYPA	+	-	-	-
782	Q96CM8	544	THPKVQEVQVGVKDDRMGEEICACIR	+	-	-	+
783	Q96CM8	570	RLKDGEETTVEEIKAFCKGKISHFKIP	+	-	-	+
784	Q96CM8	599	IVFVTNYPLTISGKIQKFKLREQMERH	-	-	-	+
785	Q9BYX7	238	QEMAMAASSSSVEKSYELPDGQVITIG	-	-	-	-
786	Q9BYX7	84	MEHGII TNWDDMEKIWHHTFYNELRVA	-	-	+	-
787	O43707	233	PVTNLNNAFEVAEKYLDIPKMLDAEDI	-	-	-	-
788	O43707	114	RGKMRVHKINN VNKALDFIASKGVKLV	+	-	-	-
789	O43707	214	LIHRHRPELIEYDKLRKDDPVTNLNNA	+	-	-	-
790	O43707	592	DADREREAILAIHKEAQRIAESNHIKL	+	-	-	-
791	O43707	625	TTVTPQI INSKWEKVQQLVPKRDHALL	+	-	-	-
792	O43707	779	QMQEFRASFNHFDKDHGGALGP EEFKA	+	-	-	-

793	O43707	859	DQVIASFVKVLAGDKNFITAEELRREL	+	-	-	-
794	O75689	172	ALKYFNNDAKEPKAVMKIEHLNATFQ	-	-	-	-
795	O75689	272	MEKTGPKQTEGFRKRWFTMDDRRLMYF	+	-	-	-
796	P11766	18	VIKCKAAVAWEAGKPLSIEEIEVAPPK	-	-	-	-
797	P11766	233	IGVDINKDKFARAKFEGATECINPQDF	-	-	-	+
798	P11766	315	ATRPFQLVTGRTWKGTAFGGWKSVESV	-	-	-	+
799	P05141	94	YFPTQALNFAFKDKYKQIFLGGVDKRT	-	-	-	-
800	P05141	43	ERVKLLLQVQHASKQITADKQYKGIID	-	-	-	+
801	P05141	52	QHASKQITADKQYKGIIDCVVRIPKEQ	-	-	+	-
802	P05141	105	KDKYKQIFLGGVDKRTQFWLYFAGNLA	+	-	-	+
803	P05141	147	LDFASTRLAADVKGAGAEREFRGLGDC	+	-	-	+
804	P05141	163	AEREFRGLGDCLVKIYKSDGIKGLYQG	+	-	-	-
805	P05141	166	EFRGLGDCLVKIYKSDGIKGLYQGFNV	+	-	-	-
806	P05141	268	LDCWRKIARDEGGKAFFKGAWSNVLRG	+	-	-	+
807	P12236	63	QYKGIVDCIVRIPKEQGVLSFWRGNLA	-	-	-	-
808	P12236	43	ERVKLLLQVQHASKQIAADKQYKGIVD	-	-	-	+
809	P12236	105	KDKYKQIFLGGVDKHTQFWRYFAGNLA	+	-	-	+
810	P12236	147	LDFASTRLAADVKGSGTEREFRGLGDC	+	-	-	+
811	P12236	163	TEREFRGLGDCLVKITKSDGIRGLYQG	+	-	-	-
812	P12236	166	EFRGLGDCLVKITKSDGIRGLYQGFSV	+	-	-	-
813	P12236	268	VDCWRKIFRDEGGKAFFKGAWSNVLRG	+	-	-	+
814	Q9UHB7	385	NGHQSKSMLKDDLLKSSSEDSGEQDC	-	-	-	-
815	Q9UHB7	822	KDLLPSPAGPVPSKDPKTEHGSRKRTI	+	-	-	-
816	Q8N302	633	SNKGRKMLEKMGWKKEGGLGKDGGGMK	-	-	-	-
817	Q8N302	664	LQLRRTHAGLTGKPPSSFEDVHLLQNK	+	-	-	-
818	Q5TGY3	50	PLLPTRPASPDPKAFSTHAFSENPRP	-	-	-	-
819	Q5TGY3	79	RRDPSTRPPVLAKGDDPLPPRAARPV	+	-	-	-
820	P55008	36	RLDEINKQFLDDPKYSSDEDLPSKLEG	-	-	-	-
821	P55008	11	MMMSQTRDLQGGKAFGLLKAQQEERL	+	-	-	-
822	Q9ULX6	478	DLTQEIAMEHFVKVEAAHCAACDLFI	-	-	-	-
823	Q9ULX6	257	GGSRFGFGFGNGMKQMRRTWKTWTAD	+	-	-	-
824	P31751	165	FDYLKLLGKGTGKVLVREKATGRYY	-	-	-	-
825	P31751	14	MNEVSVIKEGWLHKGREYIKTWRPRYF	+	-	-	-
826	P31751	20	IKEGWLHKGREYIKTWRPRYFLLKSDG	+	-	-	-
827	P02768	341	SLAADFVESKDVCKNYAEAKDVFLGMF	-	-	-	-
828	P02768	229	SSAQQLKCASLQKFGERAFAKAWAVAR	-	-	-	+
829	P02768	460	LVEVSRNLGKVGSKCKKHPEAKRMPCA	-	-	-	+
830	P02768	543	TFTFHADICTLSEKERQIKQTALVEL	-	-	-	+
831	P02768	588	FAAFVEKCKKADDKETCFAEEGKKLVA	-	-	-	+
832	Q9H2P0	617	PVKSSPQAAVPYKQDVGKTLCPCLFSI	-	-	-	-
833	Q9H2P0	1035	DREQLKWKNSSYKVEGFWSKDQSQWK	+	-	-	-
834	Q9H2P0	1042	KNSSYKVEGFWSKDQSQWKNASENDE	+	-	-	-
835	P55196	1546	VDMLSKEIQELQSKPDRSAEESDRLRK	-	-	-	-
836	P55196	1807	RQRLFSQGDVSNKVKASRKLTELENE	+	-	-	-
837	P14550	141	NADGTICYDSTHYKETWKALEALVAKG	-	-	-	-
838	P14550	127	WPYAFERGDNPFPKNADGTICYDSTHY	+	-	-	+
839	P14550	145	TICYDSTHYKETWKALEALVAKGLVQA	-	-	-	+
840	P31749	214	VLQNSRHPFLTALKYSFQTHDRLCFVM	-	-	-	-
841	P31749	14	MSDVAIVKEGWLHKGREYIKTWRPRYF	+	-	-	-
842	P31749	20	VKEGWLHKGREYIKTWRPRYFLLKNDG	+	-	-	-
843	P05062	242	LKPNMVTAGHACTKKYTPEQVAMATVT	-	-	-	-
844	P05062	13	MMAHRFPALTQEQKELSEIAQSIVAN	-	-	-	+
845	P05062	121	KLDQGGAPLAGTNKETTIQGLDGLSER	-	-	-	+
846	P05062	317	RALQASALAAWGGKAANKEATQEAFMK	-	-	-	+
847	Q9UHK6	278	PEMKKKFADVFAEKTAEWCQIFDGTD	-	-	-	-
848	Q9UHK6	58	RLGRGKRSLVLDLKQPRGA AVLRLCK	+	-	-	-
849	Q9UHK6	87	DVLLEPFRRGVMEKLQLGPEILQREN	+	-	-	+
850	Q9UHK6	268	LPNQMSMDDWPEMKKKFADVFAEKTKA	-	-	-	+

851	P28838	469	YRSAGACTAAAFLEKEFVTHPKWAHLDI	-	-	-	-
852	P28838	45	MTKGLVLGIYSKEKEDDVPQFTSAGEN	-	-	-	+
853	P28838	61	DVPQFTSAGENFDKLLAGKLRETLNIS	-	-	-	+
854	P28838	103	HQDFPSVVLVGLGKAAGIDEQENWHE	-	-	-	+
855	P28838	221	NEMTPTRFAEIIKENLKSASSKTEVHI	+	-	-	+
856	P28838	455	VVDCQLADVNNIGKYRSAGACTAAAFLE	+	-	-	+
857	P28838	476	TAAAFLEKEFVTHPKWAHLDIAGVMTNK	-	-	-	+
858	P28838	489	KWAHLDIAGVMTNKDEVYPYLRKGMTGR	+	-	-	+
859	P07355	157	NRVYKEMYKTDLEKDIIISDTSGDFRKL	-	-	-	-
860	P07355	49	ERDALNIETAIKTKGVDEVTIVNILTNI	+	-	-	-
861	P07355	152	ELQEINRVYKEMYKTDLEKDIIISDTSG	+	-	-	-
862	P07355	227	ISIMTERSVPHLQKVFDRYKSYSPYDM	+	-	-	-
863	Q9BYV1	152	TVFFHPPMHEYAEKLAALLPEPLKVIF	-	-	-	-
864	Q9BYV1	71	YQSLGYNRVLEIHKHEHLSPVVTAYFQK	+	-	-	+
865	Q9BYV1	84	KEHLSPVVTAYFQKPLLLHQGHMEWLF	+	-	-	-
866	Q9BYV1	262	IRKCSCAPDCCQAKDQYIEQFKDTLST	+	-	-	+
867	Q9BYV1	304	GVNGVVQYPKGFLKEAFELVRARGGVC	-	-	-	+
868	Q9BYV1	417	QENSQEVGTYMLLKFAKLRFDEFEIVGD	+	-	-	+
869	Q9BYV1	420	SQEVGTYMLLKFAKLRFDEFEIVGDVRG	+	-	-	+
870	Q8IVF2	1757	VQMPSLKMPKVALKGPQMDVKGPKLDL	-	-	-	-
871	Q8IVF2	1510	KFKMPSTFGVSAPGKSIEASVDVSAPKV	+	-	-	-
872	Q9BQI0	48	CDQKYSDEENLPEKLTAFKEKYMFDL	-	-	-	-
873	Q9BQI0	13	MMSGELSNRFQGGKAFGLLKARQERRL	+	-	-	-
874	P05091	226	QTPLTALYVANLIKEAGFPPGVVNIVP	-	-	-	-
875	P05091	52	IFINNEWHDAVSRKTFPTVNPSTGEVI	+	-	-	-
876	P05091	73	STGEVICQVAEGDKEDVDKAVKAARAA	+	-	-	-
877	P05091	78	ICQVAEGDKEDVDKAVKAARAAFQLGS	+	-	-	-
878	P05091	159	LRYAGWADKYHGKTIPIDGDFFSYTR	+	-	-	-
879	P05091	368	KTEQGPQVDETQFKKILGYINTGKQEG	+	-	-	-
880	P05091	383	ILGYINTGKQEGAKLLCGGGIAADRGY	+	-	-	-
881	P05091	426	AKEEIFGPVMQILKFKTIEEVVGRANN	+	-	-	-
882	P05091	428	EEIFGPVMQILKFKTIEEVVGRANNST	+	-	-	-
883	P05091	451	NNSTYGLAAAVFTKDLDKANYLSQALQ	+	-	-	-
884	P04075	208	GDHDLKRCQYVTEKVLAADVYKALSDHH	-	-	-	-
885	P04075	42	GILAADESTGSIARKLQSIGTENTEN	+	-	-	-
886	P04075	108	PQVIKSKGGVVGIKVDKGVVPLAGTNG	+	-	-	-
887	P04075	330	KKENLKAQEEYVKRALANSLACQGKY	+	-	-	-
888	Q96Q42	1416	ANRRLLQEAVKEIKSYLKRIFQLVRFL	-	-	-	-
889	Q96Q42	533	LLPSLRTEVWTWGGKKEGQLGHGDVLP	+	-	-	-
890	P50995	315	RSNEHIRELNRAYKAFFKKTLEEAIRS	-	-	-	-
891	P50995	248	RQQILLSFKTAYGKDLIKDLKSELNG	+	-	-	-
892	P50995	255	FKTAYGKDLIKDLKSELNGNFECTILA	+	-	-	-
893	P50995	479	LLDIRSEYKRMYGKSLYHDISGDTSGD	+	-	-	-
894	P20073	237	KAFFKTSYGKDLIKDLKSELNGNMEEL	-	-	-	-
895	P20073	233	RQKIKAAFFKTSYGKDLIKDLKSELNG	+	-	-	-
896	Q10567	538	IYWRLSTDPVAAKEVVLAEKPLISEE	-	-	-	-
897	Q10567	318	NINLIVQKRPEILKHEMKVFFVKYNDP	+	-	-	-
898	O95831	337	RALGTEVIQLFPEKGNMGKILPEYLSN	-	-	-	-
899	O95831	109	NERISGLGLTPEQKQKAALSASEGEE	-	-	-	+
900	O95831	388	SSGKLLIKLDGRKVETDHIVAAGLE	+	-	-	-
901	O95831	593	NIFNRMPIARKIIKDGEQHEDLNEVAK	+	-	-	-
902	P49419	242	AVTKIIAKVLEDNKLPGAICSLTCGGA	-	-	-	-
903	P49419	94	RQASVADYEETVKKAREAWKIADIPA	+	-	-	+
904	P49419	462	NEVKQGLSSSIFTKDLGRIFRWLGPKG	+	-	-	-
905	P49419	500	TSGAEIGGAFGGEEKHTGGGRESGSDAW	+	-	-	-
906	P49419	537	INYSKDLPLAQGIKFOQQQQQQQQQQQ	-	-	-	+
907	Q8TD30	133	NLLDSPSPEDAKKRARRILQACGGNS	-	-	-	-
908	Q8TD30	415	FSREKESVLGNLAKKAKLTEDLFNQVP	+	-	-	-

909	Q8TD30	505	HFRMTILPPVEKLKTVLQKVKDFHINF	+	-	-	-
910	Q8TD30	512	PPVEKLKTVLQKVKDFHINFLEKYAAA	+	-	-	-
911	Q9NQW6	298	ASISSSSVKATSPVKSTTSITDAKSCEG	-	-	-	-
912	Q9NQW6	371	SKDKSTTPGGTGIKPFLERFGERCQEH	+	-	-	-
913	Q99873	287	LVAYFNIEFTRCHKRTGFSTSPESPYT	-	-	-	-
914	Q99873	124	SISDYAVKIVKANKLDHVVTIIKGKVE	-	-	-	+
915	P27695	79	SWNVDGLRAWIKKGLDWVKEEAPDIL	-	-	-	-
916	P27695	6	MMMMMMMMMPKRKGKGAEDGDELRT	+	-	-	-
917	P27695	7	MMMMMMMMMPKRKGKGAEDGDELRT	+	-	-	-
918	P27695	27	GDELRTPEAKKSKTAAKNDKEAAGE	+	-	-	-
919	P27695	31	RTEPEAKKSKTAAKNDKEAAGEGPAL	+	-	-	-
920	P27695	32	TEPEAKKSKTAAKNDKEAAGEGPALY	+	-	-	-
921	P27695	35	EAKKSKTAAKNDKEAAGEGPALYEDP	+	-	-	-
922	P27695	197	YRQRWDEAFRKFLKGLASRKPLVLCGD	+	-	-	-
923	O95433	39	HWTERDASNWSTDKLKTLFLAVQVQNE	-	-	-	-
924	O95433	3	MMMMMMMMMMMMMAKWGECDPRWIVEER	+	-	-	-
925	O95433	212	PVGVKIPTCKITLKETFLTSPEELYRV	+	-	-	-
926	P00352	210	QTPLTALHVASLIKEAGFPPGVVNIVP	-	-	-	-
927	P00352	91	RTMDASERGRLLYKLADLIERDRLLLA	+	-	-	-
928	P00352	128	YSNAYLNDLAGCIKTLRYCAGWADKIQ	+	-	-	-
929	P00352	252	IDKVAFTGSTEVGKLIKEAAGKSNLKR	+	-	-	-
930	P00352	353	VTQGPQIDKEQYDKILDLESKGKEGA	+	-	-	-
931	P00352	367	ILDLESKGKEGAKLECGGGPWGNKGY	+	-	-	-
932	P00352	410	AKEEIFGPVQQIMKFKSLDDVIKRANN	+	-	-	-
933	P00352	419	QQIMKFKSLDDVIKRANNTFYGLSAGV	+	-	-	-
934	P00352	435	NNTFYGLSAGVFTKIDIDKAITISSALQ	+	-	-	-
935	P00352	495	GFHEYTEVKTVTVKISQKNSSSSSSSS	+	-	-	-
936	P30038	296	NFTGSPVPTFKHLWKQVAQNDRFHTFP	-	-	-	-
937	P30038	31	TGAGLRWKHTSSLKVANEPVLAFTQGS	-	-	-	+
938	P30038	52	AFTQGSPPERDALQKALKDLKGRMEAIP	+	-	-	-
939	P30038	93	YQVSPFNHGHKVAKFCYADKSLLNKAIEAALAA	+	-	-	+
940	P30038	99	NHGHKVAKFCYADKSLLNKAIEAALAA	+	-	-	+
941	P30038	114	LLNKAIEAALAARKKEWDLKPIADRAQI	+	-	-	+
942	P30038	130	DLKPIADRAQIFLKAADMLSGPRRAEI	+	-	-	+
943	P30038	175	AAELIDFFRFNAKYAVELEGQQPISV	+	-	-	+
944	P30038	318	FHTFPRLAGECGGNFHFVHRSADVES	+	-	-	-
945	P30038	347	SGTLRSAFEYGGQKCSACSRLYVPHSL	-	-	-	+
946	P30038	365	SRLYVPHSLWPQIKGRLLLEHSRIKVG	+	-	-	-
947	P30038	376	QIKGRLLLEHSRIKVGDPADDFGTFFS	+	-	-	-
948	P30038	395	EDFGTFFSAVIDAKSFARIKKWLEHAR	-	-	-	+
949	P30038	462	FGPVLSVYVYPDDKYKETLQLVDSTTS	+	-	-	-
950	P30038	509	VLRNAAGNFYINDKSTGSIVGQQPFGG	+	-	-	+
951	P30038	531	QPFGGARASGTNDKPGGPHYILRWTS	+	-	-	-
952	P30038	552	LRWTSPPQVIKETHKPLGDWSYAYMQQQ	+	-	-	-
953	P09972	13	MMPHSYPALSAEQKKELSDIALRIVAP	-	-	-	+
954	P09972	111	IQDKGIVVGIKVDKGVVPLAGTDGETT	+	-	-	-
955	P09525	184	VRQDAQDLYEAGEKKWGTDEVKFLT	-	-	-	-
956	P09525	213	RNRNHLHVFDEYKRISQKDIEQSIKS	+	-	-	-
957	P09525	293	MLDIRAHFKRLYGKSLYSFIKGDTS	+	-	-	-
958	P09525	300	FKRLYGKSLYSFIKGDTSGDYRKVLLV	+	-	-	-
959	P08758	126	IIASRTPEELRAIKQVYEEYGSLED	-	-	-	-
960	P08758	70	FKTLFGRDLLDLKSELTGKFEKLIVA	+	-	-	-
961	P08758	76	RDLLDLKSELTGKFEKLIVALMKPSR	+	-	-	-
962	P08758	79	LDDLKSELTGKFEKLIVALMKPSRLYD	+	-	-	-
963	P08758	97	LMKPSRLYDAYELKHALKGAGTNEKVL	+	-	-	-
964	P08758	101	SRLYDAYELKHALKGAGTNEKVLTEII	+	-	-	-
965	P08758	290	SEIDLFNIRKEFRKNFATSLYSMIKGD	-	-	-	+
966	P07741	51	SFRAAIGLLARHLKATHGGRIDYIAGL	-	-	-	-

967	P07741	114	YSLEYGKAELEIQKDALEPGQRVVVD	+	-	-	-
968	Q92747	165	PNNVLLAAGSCDFKCRVFSAYIKEVDE	-	-	-	-
969	Q92747	82	TCGADRDAYVWSQKDGWVKPTLVILRI	+	-	-	-
970	Q8N6T3	76	TMDKWKDIELEKMKAGGNAKFREFLES	-	-	-	-
971	Q8N6T3	231	ASRFASAAKEGATKFGSQASQKASELG	+	-	-	-
972	P30837	272	AFTGSTEVGHLIQKAAGDSNLKRVTL	-	-	-	-
973	P30837	51	QLFINNEWQDAVSKKTFPTVNPTTGEV	+	-	-	-
974	P30837	52	LFINNEWQDAVSKKTFPTVNPTTGEVI	+	-	-	+
975	P30837	81	VAEGDRADVDRVKAAREAFRLGSPWR	-	-	-	+
976	P30837	364	PFELDTQQGPQVDKEQFERVLGYIQLG	+	-	-	+
977	P30837	383	VLGYIQLGQKEGAKLLCGGERFGERGF	+	-	-	+
978	P30837	399	CGGERFGERGFFIKPTVFGGVQDDMRI	+	-	-	+
979	P30837	414	TVFGGVQDDMRIAKEEIFGPVQPLFKF	+	-	-	+
980	P30837	426	AKEEIFGPVQPLFKFKKIEEVERANN	+	-	-	+
981	P30837	429	EIFGPVQPLFKFKKIEEVERANNTRY	+	-	-	-
982	Q15699	82	SPCQDSSVNYGITKVEGQPLHTELNRA	-	-	-	-
983	Q15699	131	ELGDKCDSNVSSSKRRRHRTTFTSLQL	+	-	-	-
984	Q9H4A4	188	NRAFFPCFDTPAVKYKYSALIEVPDGF	-	-	-	-
985	Q9H4A4	446	QFDSFLKAYVHEFKFRSILADDFLDFY	+	-	-	-
986	P04083	257	SKHDMNKVLDLELKGDIKCLTAIVKC	-	-	-	-
987	P04083	58	SSDVAALHKAIMVKGVEATIIDILTK	+	-	-	-
988	P04083	239	TTRSYPQLRRVFQKYTKYSKHDMNKVL	+	-	-	-
989	P04083	312	IMVSRSEIDMNDIKAFYQKMYGISLCQ	+	-	-	-
990	P08133	314	LYSMIKNDTSGEYKKTLLKLSGGDDDA	-	-	-	-
991	P08133	63	RSNRQRQEVCSYKSLYGKDLIADLKY	+	-	-	-
992	P08133	68	RQEVCSYKSLYGKDLIADLKYELTGK	+	-	-	-
993	P08133	75	YKSLYGKDLIADLKYELTGKFERLIVG	+	-	-	-
994	P08133	81	KDLIADLKYELTGKFERLIVGLMRPPA	+	-	-	-
995	P08133	306	FRTKYEKSLSYMIKNDTSGEYKKTLLK	+	-	-	-
996	P08133	370	VRPANDFNPDAKALRKAMKGLGTDE	+	-	-	-
997	P08133	418	FKSHFGRDLMTDLKEISGDLARLILG	+	-	-	-
998	P08133	483	IRAINAYKEDYHKSLEDALSSDTSKH	+	-	-	-
999	P08133	620	KLYKSMKGAGTDEKTLTRIMVSRSEID	+	-	-	-
1000	Q92688	67	LISVSNLPKLPKIKKLELSENRIFGGL	-	-	-	-
1001	Q92688	86	ENRIFGGLDMLAEKLPNLTHLNLGNK	+	-	-	-
1002	P63010	420	VQEAIVVIRIDIFRKYPNKYESIATLC	-	-	-	-
1003	P63010	265	NSAVVLSAVKVLKFLLELLPKDSYYN	+	-	-	-
1004	Q9BZZ5	374	LTAKLNAEKLKDFKIRLQYFARGLQVY	-	-	-	-
1005	Q9BZZ5	251	LLQCTRQAVPLFSKNVHSTRFVTFCE	+	-	-	-
1006	O60306	734	IEHLKASFPGHNVKVTVEDPALQIPPF	-	-	-	-
1007	O60306	1051	TCTHAALKRHDLVKLGFKYDNILMEEA	+	-	-	-
1008	P27338	309	KCIVYYKEPFWRKDYCGTMIIDGEEA	-	-	-	-
1009	P27338	52	VGGRTYTLRNQKVKYVDLGGSYVGPTQ	+	-	-	-
1010	P04114	2385	ETIQKLSNVLQQVKIKDYFEKLVGFID	-	-	-	-
1011	P04114	2004	EYSQDLDAYNTKDKIGVELTGRTLADL	+	-	-	-
1012	O15143	138	FEQENDWWVCKHIKKPIRSTVLSLDWH	-	-	-	-
1013	O15143	82	TCGTDRDAYVWTLKGRTWKPTLVILRI	+	-	-	-
1014	Q92974	230	WSLAVDSSFLQQHKKEVMKQQDVIYEL	-	-	-	-
1015	Q92974	353	EFCSRHSKALKLYKELYARDKRFQQFI	+	-	-	-
1016	Q8NFD5	1105	VCVKEIGGLAQVNKNKKWRELATNLNV	-	-	-	-
1017	Q8NFD5	1777	KPKQASKFDKLPKIVKKNLFFVDRS	+	-	-	-
1018	Q9H993	46	IDTLHRHKSEFFEKHGEEGVAEKKAI	-	-	-	-
1019	Q9H993	40	QILTKVIDTLHRHKSEFFEKHGEEGVE	+	-	-	-
1020	Q9UM13	129	PSGWIHVPLTDNHKKPRTTFMIQIAVL	-	-	-	-
1021	Q9UM13	169	IKIYTPVEESSIGKFPRTTIDFMMYR	+	-	-	-
1022	Q9UJX3	460	LATVCLEDPTQEKAKTLLDKALTQRP	-	-	-	-
1023	Q9UJX3	263	DNSRAISTICSLEKKSLLRDNDVLLGS	+	-	-	-
1024	P05089	172	VPGFSWVTPCISAKDIVYIGLRDVPDG	-	-	-	-

1025	P05089	17	KSRTIGIIGAPFSKQGPRGGVEEGPTV	-	-	-	+
1026	P05089	75	SPFQIVKNPRSVGKASEQLAGKVAEVK	-	-	-	+
1027	Q14865	74	WEERTSRQLLSSSKLYFLPEDTPQGRN	-	-	-	-
1028	Q14865	336	AFLVALYKYMKERKTPIERIPYLGFKQ	-	-	+	-
1029	O43488	266	GNSWAETYRNRFWKEHHFEAIALVEKA	-	-	-	-
1030	O43488	128	KPDSVRSQLETSLKRLQCPQVDLFYLLH	+	-	-	-
1031	O43488	236	YAYNPLAGLLTGKRYKYEDKDQKQPVG	-	-	-	+
1032	O15145	158	CEKVFDQNDKPSKWWTCFVKRQFMNK	-	-	-	-
1033	O15145	56	DEAIYYFKANVFFKNYEIKNEADRTL	+	-	-	-
1034	O15145	61	YFKANVFFKNYEIKNEADRTLIIYITLY	+	-	-	-
1035	Q8N3C0	938	RMRANPLAYGISHKAYQIDPTLRKHRE	-	-	-	-
1036	Q8N3C0	572	IIVKELTGDMQLSKSEILRTQMLVTTTP	+	-	-	-
1037	P05023	833	ISLAYEQAESDIMKRQPRNPKTDLVN	-	-	-	-
1038	P05023	9	MMMMMMGKGVGRDKYEPAAVSEQGDKK	+	-	-	-
1039	P05023	21	DKYEPAAVSEQGDKKGGKGGKDRDMDE	+	-	-	-
1040	P05023	661	LNIPVSQVNPRAKACVVHGSDLKDMT	-	-	-	+
1041	O14497	2033	KHPERKQAPLTYEKEEQDQGVSCNKV	-	-	-	-
1042	O14497	1612	TSPSKSPFLHSGMKMQKAGPPVPASHI	+	-	-	-
1043	O14497	1905	TDQEGPPPDGPPEKRITATMDDMLSTR	+	-	-	-
1044	Q9Y4X5	168	EKLFAECHVINPSKKSRTQMNTRSSA	-	-	-	-
1045	Q9Y4X5	142	TITRILLSHFNWDKEKLMEYFDGNLE	+	-	-	-
1046	P04424	43	YDRHLWEVDVQGSKAYSRGLEKAGLLT	-	-	-	-
1047	P04424	7	MMMMMMMASESGKLWGGRFVGAVDPI	+	-	-	-
1048	P04424	69	TKAEMDQILHGLDKVAEEWAQGTFKLN	+	-	-	-
1049	P04424	288	DAYSTGSSLMPQKKNPDSLELIRSKAG	+	-	-	-
1050	O15144	170	KKDRVTVVFSTVFKDDDDVVIGKVMQ	-	-	-	-
1051	O15144	275	IHTRMRAKTSDFLKVLRARPDAEKKE	+	-	-	-
1052	O15144	295	PDAEKKEMKTITGKTFSRRRRRRRRR	+	-	-	-
1053	P18859	53	QKLFDVKIREYKSKRQTSGGPVDASSE	-	-	-	-
1054	P18859	41	TAVAFNKELDPIQKLFVDKIREYKSKR	+	-	-	-
1055	P18859	46	NKELDPIQKLFVDKIREYKSKRQTSGG	+	-	-	-
1056	P18859	79	EYQQELERELFKLKQMFNGADMNTFPT	+	-	-	-
1057	P18859	94	MFGNADMNTFPTFKFEDPKFEVIEKPQ	+	-	-	+
1058	P18859	99	DMNTFPTFKFEDPKFEVIEKPQAAAAA	+	-	-	+
1059	P18859	105	TFKFEDPKFEVIEKPQAAAAAAAAAAAA	+	-	-	-
1060	P56385	50	AEEERRIAAEEKKQDELKRIARELAE	-	-	-	-
1061	P56385	34	LGVAYGATRYNYLKPRAEERRIAAEE	+	-	-	-
1062	P56211	31	EDKVTSPKEAAEAKLKARYPHLGQKPG	-	-	-	-
1063	P56211	109	QDLPQRKPSLVASKLAGGGGGGGGGGGG	+	-	-	-
1064	P61160	195	LDIAGRDI TRYLIKLLLLRGYAFNHS	-	-	-	-
1065	P61160	299	IQAADIDTRSEFYKHIVLSGGSTMYPG	+	-	-	-
1066	P61160	322	MYPGLPSRLERELKQLYLERVLKGDVE	+	-	-	-
1067	Q9Y2D1	229	DQNKSAALRYRQRKRAEGEALGECQG	-	-	-	-
1068	Q9Y2D1	29	LPASGLGWLVDYGLPPAPAPLAPYEV	+	-	-	-
1069	Q8WXF7	241	GADGGAKFLEKRLKVSNGHEELQNVR	-	-	-	-
1070	Q8WXF7	395	LAPNDLQTKHLQLKEESVKLFRGVKKM	+	-	-	-
1071	P61158	225	EVGIPPEQSLETA KAVKERYSYVCPDL	-	-	-	-
1072	P61158	240	VKERYSYVCPDLVKEFNKYDTDGSKWI	+	-	-	-
1073	P61158	244	YSYVCPDLVKEFNKYDTDGSKWIKQYT	+	-	-	-
1074	P61158	251	LVKEFNKYDTDGSKWIKQYTGINAISK	+	-	-	-
1075	P61158	254	EFNKYDTDGSKWIKQYTGINAISKKEF	+	-	-	-
1076	P08243	354	ASVGMYLISKYIRKNTDSVVFSGEGS	-	-	-	-
1077	P08243	385	QGYIYFHKAPSPEKAEESERLLRELY	+	-	-	-
1078	Q5VTU8	28	YSQICAKVVRDALKTEFKANAKKTSN	-	-	-	-
1079	Q5VTU8	21	AGLSYIRYSQICAKVVRDALKTEFKAN	+	-	-	-
1080	Q6DD88	290	DFDGKLDIAGEFKEQLQALIPYVLNP	-	-	-	-
1081	Q6DD88	391	LSPDILEEKHCEFKQLALDHFKKTKKM	+	-	-	-
1082	P25705	175	GPIGSKTRRRVGLKAPGIIPRISVREP	-	-	-	-

1083	P25705	123	EPDNVGVVVFVFGNDK L LIKEGDIVKRTGA	+	-	-	-
1084	P25705	126	NVGVVVFVFGNDK L I K EGDIVKRTGAIVD	+	-	-	-
1085	P25705	132	FGNDK L LIKEGDIV K RTGAIVDVPVGEE	+	-	-	-
1086	P25705	161	GRVVDALGNAIDG K GPIGSKTRRRVGL	+	-	-	+
1087	P25705	167	LGNAIDGKGPIGS K TRRRVGLKAPGII	+	-	-	+
1088	P25705	230	GKTSIAIDTII N Q K RFNDGSDEKKKLY	+	-	-	+
1089	P25705	239	I N Q K RFNDGSDE K KKLYCIYVAIGQK	+	-	-	+
1090	P25705	240	I N Q K RFNDGSDE K KKLYCIYVAIGQKR	+	-	-	-
1091	P25705	261	AIGQKRSTVAQ L V K RLTDADAMKYTIV	+	-	-	+
1092	P25705	305	SGCSMGEYFRDNG K HALIIYDDLKQA	+	-	-	+
1093	P25705	427	VSRVGSAAQTRAM K QVAGTMKLELAQY	+	-	-	+
1094	P25705	434	AQTRAMQVAGTM K LELAQYREVAafa	+	-	-	-
1095	P25705	498	VAVIYAGVRGYLD K LEPSKITKFENAF	+	-	-	+
1096	P25705	506	RGYLDKLEPSKIT K FENAFLSHVVSQH	+	-	-	+
1097	P25705	531	QHQALLGTIRADG K ISEQSDAKLKEIV	+	-	-	+
1098	P25705	539	IRADGKISEQSDAK L KEIVTNFLAGFE	+	-	-	+
1099	P25705	541	ADGKISEQSDAK L KEIVTNFLAGFEAA	+	-	-	-
1100	Q9GZN1	165	YSFTHIVPYCRSK K KKEAIIIRINVGK	-	-	-	-
1101	Q9GZN1	260	GFCKPREEMVLSG K YKSGEQILRLANE	+	-	-	-
1102	P50553	100	KRQRSSSPELMR C KRRLNFSGFGYSLP	-	-	-	-
1103	P50553	156	EHVPNGAANKKMS K VETLRSAVEYIRA	+	-	-	-
1104	Q9NR48	324	GTTAVFINKNLG K KPGTITTVGLLSKD	-	-	-	-
1105	Q9NR48	375	GTVVGLVKNKDLG K LGSTVGLVAKDCA	+	-	-	-
1106	Q9NR48	2317	ATHKKSGRSKEKR K SKHKLKKRRGHLS	+	-	-	-
1107	Q9NR48	2319	HKKSGRSKEKR K SKHKLKKRRGHLSEE	+	-	-	-
1108	Q9NR48	2323	GRSKEKRKSKHK L KRRGHLSEEPSN	+	-	-	-
1109	Q5T9A4	568	DACVQDAVQQYRQ K MRWLKAEGPGRGV	-	-	-	-
1110	Q5T9A4	427	DAFLRKRATEEIS K DLRATLNAFLYHM	+	-	-	-
1111	Q5T9A4	495	ERLVRHLHFDNCV L KPATEGKRRLKLAQ	+	-	-	-
1112	P15336	434	TAMQKKSGYHTAD K DDSSSEDISVPSSP	-	-	-	-
1113	P15336	357	RRAANEDPDEKRR K FLERNRAAASRCR	+	-	-	-
1114	P15336	374	RNRAAASRCRQ K RKVWVQSLEKKAEDL	+	-	-	-
1115	Q9UII2	49	GAGSIREAGGAFG K REQAEEERYFRAQ	-	-	-	-
1116	Q9UII2	103	KEIERHKQKIK M LKHDDDDDDDDDDDD	-	-	-	+
1117	Q8NHH9	314	LKVATNPSTFDGRL K DIDEDFKRELRLNL	-	-	-	-
1118	Q8NHH9	422	IAPSDLERKHL D LKEVAIKQFRSVKKM	+	-	-	-
1119	Q13315	276	LYIWTQHRNLN S LKEVIEEEFQLQIYI	-	-	-	-
1120	Q13315	3016	NKVAERVLMLR L QEKLGVEEGTVLSVG	+	-	-	-
1121	Q5SQI0	81	SRMQSNRHVVY I LKDSSARPAGKGAI	-	-	-	-
1122	Q5SQI0	56	IMTIIDELGKAS A KQNLSAPITSASR	+	-	-	-
1123	Q5SQI0	146	HGHGRELFQYML Q KERVEPHQLAIDRP	+	-	-	-
1124	Q5SQI0	233	ARKLPPKRAEGD I KPYSSSDREFLKVA	+	-	-	-
1125	Q5SQI0	244	DIKPYSSSDREF L KVAVEPPWPLNRAP	+	-	-	-
1126	P36542	64	VAAAKYARAER E LKPARIYGLGSLALY	-	-	-	-
1127	P36542	39	ATLKDITRRLKS I KNIQKITKSMKMVA	+	-	-	-
1128	P36542	49	KSIKNIQKITK S KMVAAAKYARAERE	-	-	-	+
1129	P36542	55	QKITKSMKMVA A AKYARAERELKPARI	+	-	-	-
1130	P36542	115	LCGAIHSSIA K QMKSEVATLTAAGKEV	+	-	-	+
1131	P36542	154	LYRTHSDQFLVAF K EVGRKPPTFGDAS	+	-	-	+
1132	P36542	197	SIIFNKFRSVIS Y KTEEKPIFSLNTVA	+	-	-	-
1133	P36542	270	MDNASKNASEMID K LTLTFNRTRQAVI	-	-	-	+
1134	P48047	98	RSIKVKS L NDITAKERFSPLTTNLINL	-	-	-	-
1135	P48047	54	YATALYSAASK Q NKLEQVEKELLRVAQ	+	-	-	-
1136	P48047	60	SAASKQN K LEQVEKELLRVAQILKEPK	+	-	-	-
1137	P48047	70	QVEKELLRVAQ I LKEPKVAASVLNPNYV	+	-	-	-
1138	P48047	73	KELLRVAQILKEP K VAAASVLNPNYVKRS	+	-	-	-
1139	P48047	90	SVLNPNYVKRSIK V KSLNDITAKERFSP	-	-	-	+
1140	P48047	158	SASPLEEATLSEL K TVLKSFLSQGVVL	+	-	-	+

1141	P48047	162	LEEATLSELKTVLKSFLSQGQVLKLEA	+	-	-	+
1142	P48047	172	TVLKSFLSQGQVLKLEAKTDPSILGGM	+	-	-	-
1143	P48047	176	SFLSQGQVLKLEAKTDPSILGGMIVRI	+	-	-	-
1144	P48047	192	PSILGGMIVRIGEKYVDMSVKTKIQKL	+	-	-	-
1145	P48047	199	IVRIGEKYVDMSVKTKIQKLGRAMREI	-	-	-	+
1146	P24539	53	HLVPVPPLPEYGGKVRVGLIPEEFFQF	-	-	-	-
1147	P24539	131	PFVADFADKLNEQKLAQLEEAKQASIQ	-	-	-	+
1148	P24539	139	KLNEQKLAQLEEAKQASIQHIQNAIDT	+	-	-	-
1149	P24539	154	ASIQHIQNAIDTEKSQQALVQKRHYLF	+	-	-	-
1150	P24539	162	AIDTEKSQQALVQKRHYLFDVQRNNIA	+	-	-	-
1151	P24539	221	RRKEQEHEMINWVEKHVVQSISTQQEKE	+	-	-	-
1152	P24539	233	EKHVVQSISTQQEKETIAKCIADLKLL	+	-	-	-
1153	P24539	244	QEKETIAKCIADLKLAKKAQAQPVMM	+	-	-	-
1154	Q9NVI7	231	RRATVEREMELRHKNEMLRVEAEARAR	-	-	-	-
1155	Q9NVI7	539	QEERERLVRMYFDKYVLKPATEGKQRL	+	-	-	-
1156	O00244	39	LGGVKYDIDLPNKVCIESEHSMDTLL	-	-	-	-
1157	O00244	60	SMDTLLATLKKTKTVSYLGLEEEEEEE	+	-	-	-
1158	P56381	28	YSQICAKAVRDALKTEFKANAECTSGS	-	-	-	-
1159	P56381	21	AGLSYIRYSQICAKAVRDALKTEFKAN	+	-	-	+
1160	P56381	32	CAKAVRDALKTEFKANAECTSGSNVKI	+	-	-	+
1161	P56381	37	RDALKTEFKANAECTSGSNVKIVKVKK	+	-	-	+
1162	P56381	44	FKANAECTSGSNVKIVKVKKEEEEEEE	+	-	-	-
1163	O75964	55	TPAEIPRAIQSLKIVNSAQTGSFKQL	-	-	-	-
1164	O75964	11	MMMAQFVRNLVEKTPALVNAAVTYSK	+	-	-	-
1165	O75964	24	KTPALVNAAVTYSKPRLATFWYYAKVE	+	-	-	-
1166	O75964	35	YSKPRLATFWYYAKVELVPPTPAEIPR	+	-	-	-
1167	O75964	54	PTPAEIPRAIQSLKIVNSAQTGSFKQ	+	-	-	-
1168	Q7Z4Y8	24	KTPALVNAAVTYLPRLAAFWYYTTVE	-	-	-	-
1169	Q7Z4Y8	11	MMMAPFVRNLVEKTPALVNAAVTYLYK	+	-	-	-
1170	Q7Z4Y8	54	PTPAEIPRAIQSLKIVSSAQTGSFKQ	+	-	-	-
1171	P54259	89	ISESESEETNAPKKTKTEQELPRPQSP	-	-	-	-
1172	P54259	641	YKTASPPGPPPYGKRAPSPGAYKTATP	+	-	-	-
1173	P03928	27	TPMLLTFLITQLKMLNTNYHLPPSPK	-	-	-	-
1174	P03928	54	PMKMKNYNKPWEPKWTIKICSLHSLPPQ	+	-	-	+
1175	P03928	57	MKNYNKPWEPKWTIKICSLHSLPPQSSS	+	-	-	-
1176	P46100	295	SVFENLEQLLQONKKIKVDSEKSNKV	-	-	-	-
1177	P46100	967	CKKVQDGLSDIAEKFLKKDQSDETSED	+	-	-	-
1178	Q8WWM7	641	CPSQTGSPPVGLIKGEDKDEGPVAEQV	-	-	-	-
1179	Q8WWM7	207	HFRNVDFNYATKDKFTDSAIAMNSKVN	+	-	-	-
1180	Q13825	105	LGINRAYGKNSLSKNLIKMLSKAVDAL	-	-	-	-
1181	Q13825	100	RGIVVLGINRAYGKNSLSKNLIKMLSK	+	-	-	+
1182	Q13825	109	RAYGKNSLSKNLIKMLSKAVDALKSDK	-	-	-	+
1183	Q13825	113	KNSLSKNLIKMLSKAVDALKSDKKVRT	+	-	-	+
1184	Q13825	144	SEVPGIFCAGADLKERAKMSSEVGPF	+	-	-	+
1185	Q13825	148	GIFCAGADLKERAKMSSEVGPFVSKI	-	-	-	+
1186	Q13825	160	AKMSSEVGPFVSKIRAVINDIANLPV	-	-	-	+
1187	Q13825	204	ALACDIRVAASSAKMGLVETKLAIIPG	+	-	-	+
1188	Q13825	211	VAASSAKMGLVETKLAIIPGGGGTQRL	+	-	-	+
1189	Q13825	329	IPTKDRLEGLLAFKEKRPPRYKGEEEE	-	-	-	+
1190	O00154	302	VITISGRMTFTSNKSMEIEVLVDADPV	-	-	-	-
1191	O00154	168	TNKATLWYVPLSLKNVDKVLEVPPVY	+	-	-	-
1192	O00154	198	EQEEGRKRYEAQKLERMETKWRNGDI	+	-	-	-
1193	O00154	283	IVTASVDAINFHDKIRKGCVITISGRM	+	-	-	-
1194	Q8N9N5	133	VILNNDRQNAIVAKMEDPLSNRAPDSL	-	-	-	-
1195	Q8N9N5	275	REVQAVSNLSGQGHGKKQLDPLTIYG	+	-	-	-
1196	O15382	111	SLQLFEGMKAFKKGKDDQQVRLFRPWLNM	-	-	-	-
1197	O15382	321	WGEFRVVERTITMKQLLRALEEGRVRE	+	-	-	-
1198	O75947	63	PAIDWAYKANVAKAGLVDDFEKKFNA	-	-	-	-

1199	O75947	85	KKFNALKVPVPEDK Y TAQVDAEEKEDV	+	-	-	-
1200	O75947	95	PEDKYTAQVDAEEK E DEVKSCAEWVSL	+	-	-	-
1201	O75947	117	WVSLSKARIVEYE K EMEKMNLI	+	-	-	-
1202	O75947	149	LNEAFPETKLDKK K YPYWPHQPIENLL	+	-	-	-
1203	P56134	59	RGYYRYYNKYINV K GSISGITMVLAC	-	-	-	-
1204	P56134	22	APVPVKDKKLLEV K LGELPSWILMRDF	+	-	-	-
1205	P41182	336	LNKGLVSPQSPQ K SDCQPNSPTESCS	-	-	-	-
1206	P41182	379	SPTDPKACNWKKY K FIVLNSLNQNAKP	+	-	-	-
1207	P06576	459	LSEEDKLTVSRAR K IQRFLSQPFQVAE	-	-	-	-
1208	P06576	124	IAMDGTEGLVRGQ K VLD SGAPIKIPVG	+	-	-	+
1209	P06576	133	VRGQKVLD SGAPI K IPVGPETLGRIMN	+	-	-	+
1210	P06576	161	IGEPIDERGPIKT K QFAPIHAEAPEFM	+	-	-	+
1211	P06576	198	TGIKVVDLLAPYA K GKIGLFGGAGVG	+	-	-	-
1212	P06576	259	LYHEMIESGVINL K DATSKVALVYGQM	+	-	-	+
1213	P06576	264	IESGVINLKDATS K VALVYGQMNEPPG	+	-	-	+
1214	P06576	426	VGSEHYDVARGVQ K ILQDYKSLQDIIA	+	-	-	-
1215	P06576	480	PFQVAEVFTGHMG K LVPLKETIKGFQQ	+	-	-	-
1216	P06576	485	EVFTGHMGKLVPL K ETIKGFQQILAGE	+	-	-	-
1217	P06576	522	MVGPIEEAVAKAD K LAEHSSSSSSSSS	+	-	-	+
1218	P30049	131	EAVTLDMLDLGA K ANLEKAQAEVGT	-	-	-	-
1219	P30049	136	DMLDLGA K ANLEKAQAEVGTADEAT	+	-	-	+
1220	P30049	165	EIQIRIEANEALV K ALEEEEEEEEEEE	+	-	-	+
1221	A6NMY6	104	LSGHLETVILGL L KTPAQYDASELKAS	-	-	-	-
1222	A6NMY6	49	ERDALNIETAIKT K GVDEVTIVNIVTN	+	-	-	-
1223	Q8N5M1	72	EGGFEINLDHR K LTPQAKLFTVPSEA	-	-	-	-
1224	Q8N5M1	133	TQRNKDQLIRAAV K FLD TDTICYVEE	-	-	-	+
1225	P56817	203	PDDSLEPFFDSL V KQTHVPNLFSLQLC	-	-	-	-
1226	P56817	126	YQRQLSSTYRDLR K GVYVPYTQGWEG	+	-	-	-
1227	P56817	275	VIIVRVEINGQDL K MDCKEYNYDKSIV	+	-	-	-
1228	P56817	279	RVEINGQDLKMD C KEYNYDKSIVDSGT	+	-	-	-
1229	P56817	285	QDLKMDCKEYNYD K SIVDSGTTNLRP	+	-	-	-
1230	P56817	299	SIVDSGTTNLR P KKVFEAAVKSIAAA	+	-	-	-
1231	P56817	300	IVDSGTTNLR P KKVFEAAVKSIAAAS	+	-	-	-
1232	P56817	307	NLR L PKKVFEAAV K SIAAASSTEKFPD	+	-	-	-
1233	Q9UIF9	1835	VNPRLVSGYRR I KNPMDFSTMRERLL	-	-	-	-
1234	Q9UIF9	680	PKVKRGRGRPP K VITELLNKTDNRPL	+	-	-	-
1235	Q9UIF9	799	EEVTKAKPACKAD K TLATQRRLEERQR	+	-	-	-
1236	O14874	135	ILHVHELYIRAFQ K LTD FPP IKDQADE	-	-	-	-
1237	O14874	192	HIEDEKLVR F LD K TLTSRLGIRMLAT	+	-	-	-
1238	O14874	233	IICTRLSPKK I IE K WVDFARRLCEHKY	+	-	-	-
1239	Q7L4P6	406	VNKYICEKIMDIN K SCKNEERREAKYN	-	-	-	-
1240	Q7L4P6	133	KRPEGRKPSEVAH K SIEAVVARLEKQN	+	-	-	-
1241	O15392	15	GAPTLP P AWQP F L K DHRISTFKNWPFL	-	-	-	-
1242	O15392	23	WQPFLKDHRIST F K N WPFLEGCTPE	+	-	-	-
1243	O15392	90	HKKHSSGCAFLSV K KQFEELTLGEFLK	+	-	-	-
1244	O15392	110	TLGEFLKLD R ERAK N KIAKETNNKKKE	+	-	-	-
1245	O15392	112	GEFLKLD R ERAK N KIAKETNNKKKEFE	+	-	-	-
1246	O15392	115	LKLD R ERAK N KIAKETNNKKKEFEETA	+	-	-	-
1247	O15392	121	RAK N KIAKETNN K KEFEETAKKVRRA	+	-	-	-
1248	O15392	129	ETNNKKKEFEETA K KVRRAIEQLAAMD	+	-	-	-
1249	Q9P281	2060	AQDGPEALKTPG K SISKDKAGKAELL	-	-	-	-
1250	Q9P281	222	QKGP K DFDRFLV G ELGREKAGKAAEG	+	-	-	-
1251	Q9UIG0	1177	RMHVLLGMLD A C I KWDMSAENARCKVC	-	-	-	-
1252	Q9UIG0	1335	VDDAEVDELVLQ T KRSSRRQSLELQKC	+	-	-	-
1253	Q86UU0	73	QNVNQGPTCNVGS K GVGAGNHGAKANQ	-	-	-	-
1254	Q86UU0	36	PLSPRGHC P PAP A KPMHPENKLTNHGK	+	-	-	-
1255	Q86UU0	108	KNPQAGVPPFSS L K G KVVRDRSVSVDS	+	-	-	-
1256	Q86UU0	110	PQAGVPPFSS L K G KVVRDRSVSVDSGE	+	-	-	-

1257	Q86UU0	137	QREAGTPSLDSEA K EVAPRSKRRCVLE	+	-	-	-
1258	P54132	870	FNRHNLKYYYVLPK K PKKVAFDCLWIR	-	-	-	-
1259	P54132	863	PQVFSMSFNHNL K YYYVLPKKPKKVAF	+	-	-	-
1260	O60885	102	AVKLNLPDYKII K TPMDMGTIKKRLE	-	-	-	-
1261	O60885	1111	AASVVQPQPLVV V KEEKIHSPRIIRSEP	+	-	-	-
1262	Q02338	122	TVQLNVCSSEVE K VVEIVRSSLKDPE	-	-	-	-
1263	Q02338	73	VTGCDSGFGFSLA K HLSKGFVLFAGC	+	-	-	-
1264	Q02338	97	AGCLMKDKGHDGV K ELDSLNSDRLRTV	+	-	-	-
1265	Q02338	132	EVEKVVEIVRSSL K DPEKGMWGLVNNA	+	-	-	-
1266	Q02338	177	VAEVLNLTGTVRMT K SFLPLIRRAKGRV	+	-	-	-
1267	Q02338	212	RMANPARSPYCIT K FGVEAFSDCLRYE	+	-	-	-
1268	Q02338	258	TSLYSPESIQAI A KMWEELPEVVRKD	+	-	-	-
1269	Q02338	259	SLYSPESIQAI A KMWEELPEVVRKDY	+	-	-	+
1270	Q02338	280	VVRKDYGKKYFDE K IAKMETYCSSGST	+	-	-	-
1271	Q93088	151	KKVFLQQLEVF M KKNVDFLIAEYFEHV	-	-	-	-
1272	Q93088	40	GGFVFALEKRGY V KAGPWTPEAAVEHP	-	-	-	+
1273	Q93088	93	EDKLENRGNYVLE K ISGQEVNEAACDI	-	-	-	+
1274	Q93088	232	FDPTISLKT V KLMKEGLEAARLKAHLM	-	-	-	+
1275	Q93088	241	VKLMKEGLEAARL K AHLMSQPLAYHTP	-	-	-	+
1276	Q93088	340	KHGSWGSGLDMHT K PWVRARARKEYWE	-	-	-	+
1277	Q93088	377	NPSMSKPDGWGV T KGTALMQQKEATT	-	-	-	+
1278	P53004	276	LGQFSEKELAAEK R ILHCLGLAEEIQ	-	-	-	-
1279	P53004	248	SGSLENVPNVGV N KNIFLKDQNFVQK	+	-	-	-
1280	P53004	253	NVPNVGVNKNIFL K DQNFVQKLLGQF	+	-	-	-
1281	Q12830	338	TWPEVLRVYCESD K EYHHVLPYQEAED	-	-	-	-
1282	Q12830	880	HREDHDKRRHLA H KFCLTPAGEFKWNG	+	-	-	-
1283	Q5VTR2	336	RKFEEMNAELEEN K ELAQNRLCELEKL	-	-	-	-
1284	Q5VTR2	21	RAAGEPGTSM P PEKKAAVEDSGTTTET	+	-	-	-
1285	Q5VTR2	348	NKELAQNRLCELE K LRQDFEETTTQNE	+	-	-	-
1286	Q5VTR2	510	YKRKLREAQSDLN K TRLRSGSALLQSQ	+	-	-	-
1287	O75150	298	DIEKLKREQKLN K HLEALEQLNSGY	-	-	-	-
1288	O75150	20	KRAAGDGGSG P PEKKLSREEKTTTTLI	+	-	-	-
1289	O75150	355	NQELANSRMAELE K LQAEQGAVRTNE	+	-	-	-
1290	O75150	517	YKRKLREVQAEIG K LRAQASGSAHSTP	+	-	-	-
1291	Q8WY22	93	FVLGVDMFVETLW K VWTELLDVLGLDV	-	-	-	-
1292	Q8WY22	229	SNPSVEEKLEHLE K QVRLNIRLNRLV	+	-	-	-
1293	Q9Y6E2	345	FSSQGGSELILLQ K VQEYCYDNIHFMK	-	-	-	-
1294	Q9Y6E2	117	DHETIRNYAQVFN K LIRRYKYLEKAFF	+	-	-	-
1295	Q07021	100	SDEIKEERKIQKH K TLPKMSGGWELEL	-	-	-	-
1296	Q07021	91	GDKAFVDFLSDEI K EERKIQKHKTLPK	+	-	-	-
1297	Q9UIF8	211	GQTKSTSSGGNR K CNQEQSKNQPLDA	-	-	-	-
1298	Q9UIF8	1462	DLKEKDNTNLF L QKPGSFSKLSKLLEV	+	-	-	-
1299	Q9NYF8	891	FKKSGSSPKWTHD K YQGDGIVEDEEET	-	-	-	-
1300	Q9NYF8	152	PRSSSSRSSSPY S KSPVSKRRGSQEKQ	+	-	-	-
1301	Q9NYF8	332	SSFYPDGGDQ E TAKTGKFLKRFTDEES	+	-	-	-
1302	Q9NYF8	421	YRQFRKSVLADQ G KSFATASHRNTEEE	+	-	-	-
1303	Q9NYF8	437	ATASHRNTEEEGL K YKSKVSLKGNRES	+	-	-	-
1304	Q9NYF8	475	KETGYVVERPST T KDKHKEEDKNSEI	+	-	-	-
1305	Q6W2J9	412	GGEGAQPVPGHAR K TAVQDRKDGSSPP	-	-	-	-
1306	Q6W2J9	392	VSSEFFAARLSNG K YPKAPEGGEGAQP	+	-	-	-
1307	Q8NFC6	826	IIKTDENVRK E NNKERRLSAECTKAE	-	-	-	-
1308	Q8NFC6	473	EGKTKSVRHAYV H KPYLYSKYYSDSD	+	-	-	-
1309	Q9ULD4	280	VDCILCPNKGGA F KQTSBGHWAHVCA	-	-	-	-
1310	Q9ULD4	447	QGGVSGSLKGV P KSKMSLKQKIKKEP	+	-	-	-
1311	Q9ULD4	449	GVSGSLKGV P KSKMSLKQKIKKEPEE	+	-	-	-
1312	Q9ULD4	671	FNLIVTNCMKYNA K DTIFHRAAVRLRD	+	-	-	-
1313	Q9C0K0	619	ALPQYGELLAD K QKRGAFKRAAGGGD	-	-	-	-
1314	Q9C0K0	851	KLTRHMKTHGQ I GKEVYRCDICQMPFS	+	-	-	-

1315	O00512	96	MGLKNGAGNGAKGKGKRERSISADSFD	-	-	-	-
1316	O00512	844	LNTAPPVQRLGRKPLDISVAGSQVHS	+	-	-	-
1317	Q9H694	935	ARRKMLLAISELNKNRRKLFESPNART	-	-	-	-
1318	Q9H694	398	KPKPKQPSKSVIVKSVERNALNMYEAR	+	-	-	-
1319	Q86WA6	132	KDAVDLMKALKFKKVSLLGWSGGITA	-	-	-	-
1320	Q86WA6	86	GETDFGPQLKNLNKKLFTTVVWDPRGY	+	-	-	-
1321	Q86WA6	119	DRDFPADFFERDAKDAVDLMKALKFKK	+	-	-	-
1322	Q86WA6	126	FFERDAKDAVDLMKALKFKKVSLLGWS	+	-	-	+
1323	Q86WA6	184	EDSMIYEGIRDVSKWSERTRKPLEALY	-	-	-	+
1324	Q86WA6	191	GIRDVSKWSERTRKPLEALYGYDYFAR	+	-	-	+
1325	Q86WA6	217	RTCEKWVDGIRQFKHLPDGNICRHLLP	+	-	-	-
1326	Q86WA6	243	PRVQCPALIVHGEKDPLVPRFHADFIH	+	-	-	-
1327	Q86WA6	260	VPRFHADFIHKHVKSRLHLMPEGKHN	+	-	-	+
1328	Q86WA6	271	HVKGSRLHLMPEGKHNHLHRLFADEFNK	+	-	-	+
1329	Q9H0E9	159	ATKKKLEEEAEVKKRATDAAYQARQA	-	-	-	-
1330	Q9H0E9	85	LETTETPKRKRGEKGEVVETVEDVIVR	+	-	-	-
1331	Q9H0E9	481	DKPVPLPAPEMTVKQERLDFEETENKG	+	-	-	-
1332	Q5VW32	83	GFINSLDESTQESKLRYIQNFKWTDTL	-	-	-	-
1333	Q5VW32	283	AIRSLQEAEKLYAKAEALCKEYGETKG	+	-	-	-
1334	P41223	94	EGYADKNLIAKWKQGYENLCCLRCIQ	-	-	-	-
1335	P41223	125	NFGTNCICRVPKSKLEVGRIEEECTHCG	+	-	-	-
1336	P27797	272	GEWEPPVIQNPEYKGEWKPRQIDNPDY	-	-	-	-
1337	P27797	48	SRWIESKHKSDFGKFVLSSGKFYGDEE	+	-	-	-
1338	P27797	159	VIFNYKGKNVLINKDIRCKDDEFTHLY	+	-	-	-
1339	P27797	209	LEDDWDFLPPKKIKDPDASKPEDWDER	+	-	-	-
1340	Q13867	267	YREHVKPLFNMEDKICLVNDPRPQHKY	-	-	-	-
1341	Q13867	391	AVSEKDDQDGAFTKWRVENSWGEDHGH	+	-	-	-
1342	O00327	148	ANYKPTFLSDDELKHLILRAADGFLFV	-	-	-	-
1343	O00327	538	TSTPPPDASSPGGKKILNGGTPDIPSS	+	-	-	-
1344	Q9NPI1	67	DHDKHKDRKRKKRKKGEKQIPGEEKGR	-	-	-	-
1345	Q9NPI1	328	QEQLDRIVKESGGKLTRRLVNSQCEFE	+	-	-	-
1346	Q9NSG2	204	LKHQSIIKSQKHKDIITSLCEDILFS	-	-	-	-
1347	Q9NSG2	792	VEEAKRSSLQPYAKRARQEFPWEEYR	+	-	-	-
1348	Q5T440	148	ALQKHLALYRIRRKVTVEPHPELRVWA	-	-	-	-
1349	Q5T440	309	GATVLTASGQTVGKFRAGQGNVGLALL	+	-	-	+
1350	Q13112	67	AIVEFLSNLARHTKAVNVVRFSPGTGEI	-	-	-	-
1351	Q13112	494	SRRVTLNTLQAWSKTTTPRRINLTPLKT	+	-	-	-
1352	Q86VP6	1158	LVEPLRATCTTKVKANSVKQEFQKQDE	-	-	-	-
1353	Q86VP6	55	DDDSERKVVKMILKLLDKNGEVQNLA	+	-	-	-
1354	Q86VP6	971	LTLIDPETLLPRIKGYLISGSSYARSS	+	-	-	-
1355	O95861	261	TCAPEVILHAVGGKLTDIHGNVLQYHK	-	-	-	-
1356	O95861	244	GKASAYVFASPGCKKWDTCAPEVILHA	-	-	-	+
1357	Q9H8M2	202	KIVANEYKSVTEFKADFKLCDNAMTY	-	-	-	-
1358	Q9H8M2	373	SSKLLPGFTTTLGFKDERRNKVTFLLSA	+	-	-	-
1359	Q8TDN6	160	HTLAELKMTGNCLKGSRLLSFDPAFD	-	-	-	-
1360	Q8TDN6	276	NMHRRVIRSITAAKYREKQQVKDVQKL	+	-	-	-
1361	O43684	52	VRLYDVPANSMRLKYQHTGAVLDCAFY	-	-	-	-
1362	O43684	179	NMGYVQQRRESSLYQTRCIRAFPNKQ	+	-	-	-
1363	O43852	79	PEESKERLGKIVSKIDGDKDGFVTVDE	-	-	-	-
1364	O43852	165	MMVRDERRFKMADKDGDLIATKEEFTA	+	-	-	-
1365	O95696	381	KELTGGGTTFSVRKTAYCDVHTPPGCT	-	-	-	-
1366	O95696	368	AQKAGLYMKMEPVKELTGGGTTFSVRK	+	-	-	-
1367	O95696	516	QRSSQQRENDEEMKAAKEKLKYWQRLR	+	-	-	-
1368	O95696	519	SQQRENDEEMKAAKEKLKYWQRLRHD	+	-	-	-
1369	O95696	903	SELISCIENGNYAKAARIAAEVGQSSM	+	-	-	-
1370	Q6UB35	395	GLLADEIEIYGKSKAKVRLSVLERLKD	-	-	-	-
1371	Q6UB35	189	EKDVDGVTIDINLGKLVRGDAHECFVSP	+	-	-	+
1372	Q6UB35	596	FLRKITIGQGNTEKGHYRQAQFDIAVA	-	-	-	+

1373	P07858	165	GGYPAEAWNFWTRKGLVSGGLYESHVG	-	-	-	-
1374	P07858	220	CSKICEPGYSPTYQDKHYGNSYSVS	+	-	-	-
1375	Q03135	86	AEPEGTHSFDGIWKASF'TTFTVTKYWF	-	-	-	-
1376	Q03135	5	MMMMMMMMMSGGKYVDSEGHLYTVPI	+	-	-	-
1377	O60566	522	SLAENIWQE QPHSKGPSVPFSIFDEFL	-	-	-	-
1378	O60566	250	TARAPIIRVGGALKAPSQNRGLQNPFP	+	-	-	-
1379	Q8NDD1	240	E EKRLAQETDIFKKKKRKGQEDRRKSK	-	-	-	-
1380	Q8NDD1	185	RLEVHRFGITGYGKGERILEQERAIM	+	-	-	-
1381	P62158	31	SLFDKGDGTITTKELGTVMRSLGQNP	-	-	-	-
1382	P62158	22	QIAEFKEAFSLFDKQDGTITTKELGT	+	-	-	-
1383	P62158	95	SEEEIREAFRVFDKDGNGYISAAELRH	+	-	-	-
1384	P62158	116	AAELRHVMTNLGEKLTDEEVDEMIREA	-	-	+	-
1385	P42574	57	MGLCIIINNKNFHKSTGMTSRSGTDVD	-	-	-	-
1386	P42574	11	MMMENTENSVDSKSIKNLEPKIIHGS	+	-	-	-
1387	Q9UKL3	1212	SEDPVHYKSLVGCKKSEENYQDQNNSS	-	-	-	-
1388	Q9UKL3	1343	CTEKSEWELKTPEKQLLETCLKCESIPA	+	-	-	-
1389	P43155	390	MPKKLRFNITPEIKSDIEKAKQNLSIM	-	-	-	-
1390	P43155	93	GERLQKGLERRARKTENWLSEWWLKTA	-	-	-	+
1391	P43155	261	VGILTSNHRNSWAKAYNTLIKDKVNRD	+	-	-	+
1392	P43155	268	HRNSWAKAYNTLIKDKVNRDSVRSIQK	+	-	-	-
1393	P27824	515	CCSGKKQTSGMEYKKTDAQPDPVKEEE	-	-	-	-
1394	P27824	137	SRAKHHAISAKLNKPFLFDTKPLIVQY	+	-	-	-
1395	Q14790	132	SFKFLLQEEISKCKLDDDMNLLDIFIE	-	-	-	-
1396	Q14790	224	SPREQDSESQTLDKVYQMKSKPRGYCL	+	-	-	-
1397	Q92793	135	PLSQGDSSAPSLPKQAASTSGPTPAAS	-	-	-	-
1398	Q92793	657	ANSRDEYYHLLAEKIYKIQKELEEKRR	+	-	-	-
1399	Q92793	1014	TQAEDTEPDPGESKGEPRSEMMEEDLQ	+	-	-	-
1400	Q92793	1216	KYEFSPQTLCCYGKQLCTIPRDAAYYS	+	-	-	-
1401	Q92793	1583	AASETTEGSQGDSKNAKKKNNKKTNKN	+	-	-	-
1402	Q92793	1591	SQGDSKNAKKKNNKKTNKNKSSISRAN	+	-	-	-
1403	Q92793	1592	QGDSKNAKKKNNKKTNKNKSSISRANK	+	-	-	-
1404	Q92793	1595	SKNAKKKNNKKTNKNKSSISRANKKKP	+	-	-	-
1405	Q92793	1597	NAKKKNNKKTNKNKSSISRANKKKPSM	+	-	-	-
1406	Q92793	1741	LCINCYNKSHAHKMKVWGLGLDDEGS	+	-	-	-
1407	Q92793	1744	NCYNKSHAHKMKVWGLGLDDEGSSQG	+	-	-	-
1408	O00257	347	GVSDPQPQDAGSRKLSPTKEAFGEQPL	-	-	-	-
1409	O00257	149	ERAGKPPPPGKSGKYYYQLNSKKHHPY	+	-	-	-
1410	Q4VC31	104	KNLDDLTLKQLRKEQTKLWQMSELN	-	-	-	-
1411	Q4VC31	100	EEREKNLDDLTLKQLRKEQTKLWQM	+	-	-	-
1412	P14635	78	EAKPSATGKVIDKLPKPLEKVPMLVP	-	-	-	-
1413	P14635	73	MPMKKEAKPSATGKVIDKKLPKPLEKV	+	-	-	-
1414	P47756	48	LCEDLLSSVDQPLKIARDKVVGKDYLL	-	-	-	-
1415	P47756	235	NKIRSTLNEIYFGKTKDIVNGLRSIDA	+	-	-	-
1416	Q12834	359	VPLQTFTQHQAQAVKAWAWCPWQSNVLA	-	-	-	-
1417	Q12834	66	GRTPGRTPGKSSSKVQTTPSKPGGDRY	+	-	-	-
1418	Q01518	458	GGDFNEFPVPEQFKTLWNGQKLVT'TVT	-	-	-	-
1419	Q01518	81	DVQKHAEMVHTGLKLERALLVTASQCQ	+	-	-	-
1420	Q13185	92	SQKAGKEKDGTKRKSLSDSESDDSKSK	-	-	-	-
1421	Q13185	5	MMMMMMMMMASNK'TTLQKMGKKQNGK	+	-	-	-
1422	Q13185	10	MMMMMASNK'TTLQKMGKKQNGKSKKVE	+	-	-	-
1423	Q13185	44	VVEKVLDRRVVNGKVEYFLKWKGFTDA	+	-	-	-
1424	Q13185	50	DRRVVNGKVEYFLKWKGFTDADNTWEP	+	-	-	-
1425	P45973	102	KRKSNFSNSADDIKSKKKREQSNDIAR	-	-	-	-
1426	P45973	40	DRRVVKGQVEYLLKWKGFTDADNTWEP	+	-	-	-
1427	P06493	238	NEVWPEVESLQDYKNTFPKWKPGSLAS	-	-	-	-
1428	P06493	6	MMMMMMMMMEDYTKIEKIGEGTYGVVY	+	-	-	-
1429	P06493	9	MMMMMMEDYTKIEKIGEGTYGVVYKGR	+	-	-	-
1430	P06493	245	ESLQDYKNTFPKWKPGSLASHVKNLDE	-	-	-	+

1431	P17676	302	RDKAKMRNLETQH K VLELTAENERLQK	-	-	-	-
1432	P17676	43	YYEADCLAAAYGG K AAPAAPPAARPGP	+	-	-	-
1433	P17676	129	DFLSDLFSDDYGG K NCKKPAEYGYVSL	+	-	-	-
1434	P17676	132	SDLFSDDYGGK NCKK PAEYGYVSLGRL	+	-	-	-
1435	P17676	133	DLFSDDYGGK NCKK PAEYGYVSLGRLG	+	-	-	-
1436	P04040	169	RDPILFPSFIHSQ K RNPQTHLKDPDMV	-	-	-	-
1437	P04040	221	GHRHMNGYGSHTF K LVNANGEAVYCKF	-	-	-	+
1438	P04040	233	FKLVNANGEAVY K FHYKTDQGINKLS	+	-	-	-
1439	P04040	306	PFNPFDLTKVWPH K DYPLIPVGKLVLN	+	-	-	+
1440	P04040	480	LKDAQIFIQKKAV K NFTEVHPDYGSHI	+	-	-	+
1441	P04040	499	HPDYGSHIQALLD K YNAEKPKNAIHTF	+	-	-	-
1442	P52907	93	GDLGNSRFLDPRN K ISFKFDHLRKEAS	-	-	-	-
1443	P52907	19	DRVSDEEKVRIA K FITHAPPGEFNEV	+	-	-	-
1444	P52907	97	NSRFLDPRNK I SF K FDHLRKEASDPQP	+	-	-	-
1445	Q8WUD4	23	RLEEEALRRKER L KALREKTGRKDKED	-	-	-	-
1446	Q8WUD4	53	KTKHLREEEEGE K HRELRLRNYVPED	+	-	-	-
1447	Q16543	147	EKTEEDSEEVRE Q KHKTFVEKEYEKQIK	-	-	-	-
1448	Q16543	78	QRKLKELEVAEGG K AELERLQAEAQQQL	+	-	-	-
1449	Q16543	154	EEVRE Q KHKTFVE K YEKQIKHFGMLRR	+	-	-	-
1450	Q8N4T8	140	GGSIENVGSIVGL K GNSGQSVYSASKG	-	-	-	-
1451	Q8N4T8	40	YRLAVIARNLEGA K AAAGDLGGDHAF	+	-	-	-
1452	Q8N4T8	96	AAGINRDGLLVRT K TEDMVSQ LHTNLL	+	-	-	-
1453	Q8N4T8	195	HTDMTKDLKEEHL K KNIPLGRFGETIE	+	-	-	-
1454	Q8N163	446	MPTLEEWALCQQ K AAEAAPPTQEAQG	-	-	-	-
1455	Q8N163	112	AYNPGQAVPWN A V K VQTLNQPLLKSP	+	-	-	-
1456	Q8N163	215	KRKQRAGGEPWGA K KPRHDLPPYRVHL	+	-	-	-
1457	Q03701	871	SSGKDDMDFAGNV K KRTKGAKDNTLDE	-	-	-	-
1458	Q03701	695	VHFDNLKGGKQLN K YDPFSRNPLFCGA	+	-	-	-
1459	P49454	1725	VTLEMESKLAAEK K QTEQLSLELEVAR	-	-	-	-
1460	P49454	2875	ILEELKKTKMDNL K YVNQLKKENERAQ	+	-	-	-
1461	Q8N884	506	SNLIDKRSKEFLT K QIEYERNNEFPVF	-	-	-	-
1462	Q8N884	7	MMMMMMMQPWHG K AMQRASEAGATAP	+	-	-	-
1463	Q8N884	414	EEKCCRKDCCLKM K YLLEQLKERFKDK	+	-	-	-
1464	Q86WR0	168	ERNEKKAQIQEM K KREKEEMKKKREMD	-	-	-	-
1465	Q86WR0	23	VNSSAYTIYMGKD K YENEDLIKHWPE	+	-	-	-
1466	O95400	25	GDEEDEDEIIVPK K KLVDPVAGSGGPG	-	-	-	-
1467	O95400	44	VAGSGGPGSRFKG K HSLDSDEEEDDDD	+	-	-	-
1468	Q9UJX2	291	DIDKALSIFNELR K QDPYRIENMDTFS	-	-	-	-
1469	Q9UJX2	467	KCYWRAYAVGDVE K MALVKLAKLHEQL	+	-	-	-
1470	P50750	345	LTSMFEYLAPPR K GSQITQQSTNQSR	-	-	-	-
1471	P50750	44	GEVFKARHRKTG Q KVALKKVLMENEKE	+	-	-	-
1472	P50750	48	KARHRKTG Q KVAL K KVLMENEKEGFPI	+	-	-	-
1473	P61604	36	AETVTKGGIMLPE K SGQKVLQATVVAV	-	-	-	-
1474	P61604	8	MMMMMMAGQAFR K FLPLFDRVLVERS	+	-	-	-
1475	P61604	28	RVLVERSAAETVT K GGIMLPEKSQGV	-	-	-	+
1476	P61604	40	TKGGIMLPEKS Q G K VLQATVVAVGSGS	+	-	-	+
1477	P61604	54	VLQATVVAVGSGS K GKGGEIQPVSVKV	-	-	-	+
1478	P61604	56	QATVVAVGSGSKG K GGEIQPVSVKVGD	+	-	-	+
1479	P61604	66	SKGKGGEIQPVS V GVGDKVLLPEYGGT	+	-	-	+
1480	P61604	70	GGEIQPVSVKVGD K VLLPEYGGTKVVL	+	-	-	+
1481	P61604	80	VGDKVLLPEYGGT K VLLDDKDYLFRD	+	-	-	+
1482	P61604	86	LPEYGGTKVVLDD K DYLFRDGDILGK	+	-	-	+
1483	P61604	99	KDYFLFRDGDILG K YVDDDDDDDDDDDD	+	-	-	-
1484	Q8IWX8	863	VKMGWSGSGGLGA K EQGIQDPIKGGDV	-	-	-	-
1485	Q8IWX8	18	LPPDDQELRNVID K LAQFVARNGPEFE	+	-	-	-
1486	Q8IWX8	879	GIQDPIKGGDVRD K WDQYKGVGVALDD	+	-	-	-
1487	Q14004	943	CGSPCPAVWPDVI K LPYFNTMKPKKQY	-	-	-	-
1488	Q14004	556	LQVTKVENNLIVD K ATKKAVIVGKESK	+	-	-	-

1489	Q9Y232	360	RKQDGFTHILLSTKSSENNLSLNPEVMR	-	-	-	-
1490	Q9Y232	135	LTRTNRTSPNNARQISRSTNSNFSKT	-	-	+	-
1491	P49715	298	YRVRRERNNI AVRKSRDKAKQRNVETQ	-	-	-	-
1492	P49715	161	ERVGAPALRPLVIKQEPREDEAKQLA	+	-	-	-
1493	Q16739	241	AFAQYIAEDYFMAKAIADRGWRFAMST	-	-	-	-
1494	Q16739	117	KYPNVDARLFIGGKKGVINPKINNLM	+	-	-	-
1495	Q14839	72	KPRDPKIPKSKRQKKERMLLCRQLGDS	-	-	-	-
1496	Q14839	1643	PMETEPKGAADVEKVEEKSAIDLTPIV	+	-	-	-
1497	Q3L8U1	566	NFPTASVEGKEEKKGRRMKS KPKDKDS	-	-	-	-
1498	Q3L8U1	499	PSSKKS DSGSYTTLQNTQVRVMSEKK	+	-	-	-
1499	Q8NE62	357	QACTRPITLHSAQKPLRKVCIGLEWLW	-	-	-	-
1500	Q8NE62	436	HVGPMRGTSVGWLKLR SANPQDHPVIQ	-	-	-	+
1501	Q8NE62	484	EIFAQEALAPFRGKELQPGSHIQSDKE	+	-	-	+
1502	Q8NE62	496	GKELQPGSHIQSDEIDAFVRAKADSA	+	-	-	+
1503	Q8NE62	580	AADI IKGQPALWDKDV PVYKPRTLATQ	+	-	-	-
1504	Q9H444	70	HGTKNKRAALQALKRKKRYEKQLAQID	-	-	-	-
1505	Q9H444	6	MMMMMMMMMSVFGKLF GAGGGKAGKGG	+	-	-	-
1506	Q9H444	114	TNTEVLKNMGYAAKAMKAAHDNMDIDK	+	-	-	-
1507	O60563	99	AALFLAAKVEEQPKLEHVIKVAHTCL	-	-	-	-
1508	O60563	390	QNSKSVPSAKVSLKEYRAKHAEELAAQ	+	-	-	-
1509	Q9NWX4	307	GMDLFCYGSYFHKVAGQLLPLAYNLL	-	-	-	-
1510	Q9NWX4	19	GKRRPGGEGPQCEKTTDVKKSKFCEAD	+	-	-	-
1511	Q9NWX4	186	LREITDKKKINLLKNIDEKLTEAAREL	+	-	-	-
1512	Q9NWX4	233	KTFHGAGLVVPVDKNDVGYREL PETDA	+	-	-	-
1513	P24941	250	KPSFPKWARQDFS KVVPLDEDGRSLL	-	-	-	-
1514	P24941	6	MMMMMMMMMENFQKVEKIGEGTYGVVY	+	-	-	-
1515	Q00534	307	ALSHPYFQDLERCKENLD SHLPPSQNT	-	-	-	-
1516	Q00534	264	RQAFHSKSAQPIEKFVTDIDELGKDLL	+	-	-	-
1517	Q8N0T1	75	AHFAKSISLEPLQKELIPQQRHESKPV	-	-	-	-
1518	Q8N0T1	21	GPKSRNVFHIA SQNFKAKNKAKPVTT	+	-	-	-
1519	Q9P2M7	959	NKKRSQDDRARQLKGLEEKVSRLETEL	-	-	-	-
1520	Q9P2M7	573	EETGHWQSMFQKNKEDLRATKQELLQL	+	-	-	-
1521	Q9NZ45	42	LAYKRFYVKDHRNKAMINLHIQKDNPK	-	-	-	-
1522	Q9NZ45	55	KAMINLHIQKDNPKIVHAFDMEDLGDK	+	-	-	-
1523	Q9NZ45	68	KIVHAFDMEDLGD KAVYCRCWRSKKFP	+	-	-	-
1524	Q9NZ45	104	NEETGDNVGPLIIKKKTTTTTTTTTTTT	+	-	-	-
1525	P0C7P0	48	TPARSVVALKTPIKVELVAGKTYRWCV	-	-	-	-
1526	P0C7P0	55	ALKTPIKVELVAGKTYRWCVCGRSKKQ	+	-	-	+
1527	P0C7P0	86	GSHFFQRTGLSPLKFKAQETRMVALCT	+	-	-	-
1528	P09496	223	EWERVARLCDFNPKSSKQAKDVSRMRS	-	-	-	-
1529	P09496	242	KDVSRMRSVLISLKQAPLVHHHHHHHHH	+	-	-	-
1530	Q00535	268	LNATGRDLLQNLLKCNPVQRISAEAL	-	-	-	-
1531	Q00535	56	GVPSSALREICLLKELKHKNIVRLHDV	+	-	-	-
1532	O75390	143	TEEQVSWLSKEWAKRAALPSHVVTMLD	-	-	-	-
1533	O75390	57	EQARIKTFRQQHGKTVVGQITVDDMYG	-	-	-	+
1534	O75390	76	ITVDDMYGGMRGMKGLVYETSVLDPDE	+	-	-	+
1535	O75390	103	GIRFRGFSIPECQKLLPKAKGGEEPLP	-	-	-	+
1536	O75390	193	NFARAYAQGISRTRYWELIYEDSMDLI	-	-	-	+
1537	O75390	321	VLVWLTQLQKEVGKDV SDEKL RDIWN	+	-	-	+
1538	O75390	327	QLQKEVGKDV SDEKL RDIWN TLNSGR	+	-	-	+
1539	O75390	375	EFALKHLPNDPMFKLVAQLYKIVPNVL	+	-	-	+
1540	O75390	382	PNDPMFKLVAQLYKIVPNV LLEQGKAK	+	-	-	-
1541	O75390	393	LYKIVPNV LLEQGAKNPWPVNDAHSG	+	-	-	+
1542	O75390	395	KIVPNV LLEQGAKNPWPVNDAHSGVL	-	-	+	-
1543	O75390	450	IWSRALGFPLERP KSMSTEGLMKFVDS	-	-	-	+
1544	O75390	459	LERPKSMSTEGLMKFVDSKSGGGGGGG	+	-	-	+
1545	Q14008	1369	GMNVCQPTPGKALKEIAVHIGDRDNAV	-	-	-	-
1546	Q14008	48	FQIKIKDEKSPEWSKFLGLIKKFVTDSN	+	-	-	-

1547	P33552	30	YEYRHVMLPRELSKQVPKTHLMSEEEW	-	-	-	-
1548	P33552	4	MMMMMMMMMMMAHKQIYYSDKYFDEHY	+	-	-	-
1549	Q9UJS0	101	PDALFMVAFQLFDKAGKGEVTFEDVKQ	-	-	-	-
1550	Q9UJS0	353	AVGATAVYPIDLVKTRMQNQIRSTGSFV	+	-	-	-
1551	Q9UJS0	372	QRSTGSFVGELMYKNSFDCFKKVLRYE	+	-	-	-
1552	Q9UJS0	484	LSVVRDLGFFGIYKGAACFLRDIPFS	+	-	-	+
1553	Q9UJS0	580	RKILREEGPKALWKAGARVFRSSPQF	-	-	-	+
1554	Q9UJS0	662	GIENKFGLYLPLFKPSVSTSKAIGGGP	+	-	-	-
1555	Q96JM3	547	PAKTAPPASPEARKRALFPEPRKHALF	-	-	-	-
1556	Q96JM3	490	PDLWKSSFFIEPQKPVFPETRKPGPSG	+	-	-	-
1557	Q96RK0	1330	DTPERKEAAGTGKVKVRPPPLKKTFD	-	-	-	-
1558	Q96RK0	1268	ERTSAKGPMASKFPSSSSDWRVPGQ	+	-	-	-
1559	Q8N0X4	269	RQSREGAAMGFTGKQVIHPNQIAVVQE	-	-	-	-
1560	Q8N0X4	57	PRRAVLYVPGNDEKKIKKIPSLNVDCA	+	-	-	-
1561	Q8N0X4	61	VLYVPGNDEKKIKIPSLNVDCAVLDC	+	-	-	-
1562	Q8N0X4	82	CAVLDCEDGVAANKNEARLRIVKTLE	+	-	-	+
1563	Q8N0X4	92	AANKKNEARLRIVKTLEDIDLGPTEKC	+	-	-	+
1564	Q8N0X4	309	ELIAAFKEHQQLGKGAFTFQGSMDMP	-	-	-	+
1565	Q9HAW4	166	KHIHDKEGTAGKAKVSKRRLEKEERK	-	-	-	-
1566	Q9HAW4	891	LNVRNHRNQYQALKPRPLASMDENAM	+	-	-	-
1567	P62633	91	GRGGHIAKDCKEPKREREQCCYNCGRP	-	-	-	-
1568	P62633	8	MMMMMMSSNECFKCGRSGHWARECPT	+	-	-	-
1569	Q9NRG0	108	PKKILASKYLKMLKEEKREDEENDND	-	-	-	-
1570	Q9NRG0	102	FLADILPKKILASKYLKMLKEEKREED	+	-	-	-
1571	Q07065	161	REELGQGLQGVQKQVQSLQATFGTFES	-	-	-	-
1572	Q07065	21	GSKGGHGAASPSEKGAHPSGGADDAK	+	-	-	-
1573	P09497	194	KESKEETPGTEWEKVAQLCDFNPKSSK	-	-	-	-
1574	P09497	204	EWEKVAQLCDFNPKSSKQCKDVSRLRS	+	-	-	-
1575	O14967	114	KENQVPGDRGLVLKSRAKHHAISAVLA	-	-	-	-
1576	O14967	128	SRAKHHAISAVLAKPFIFADKPLIVQY	+	-	-	-
1577	Q00610	1254	VDGARKANSTRTWKEVCFACVDGKEFR	-	-	-	-
1578	Q00610	737	DPDVHFKYIQAACKTGQIKEVERICRE	-	-	-	+
1579	Q00610	856	DELVAEVEKRNRLKLLLPWLEARIHEG	+	-	-	-
1580	Q00610	1441	PRLDHTRAVNYFSKVKQLPLVKPYLRS	+	-	-	+
1581	Q00610	1501	DNFDNISLAQRLEKHELIEFRRIAAYL	+	-	-	-
1582	P53675	450	HLVLQQGRKQLEKWLKEDKLECSEEL	-	-	-	-
1583	P53675	737	DPDVHLKYIQAACKTGQIKEVERICRE	-	-	-	+
1584	P53675	856	DELVAEVEKRNRLKLLLPWLESQIQEG	+	-	-	-
1585	P53675	1441	PRLDHTWTVSFFSKAGQLPLVKPYLRS	+	-	-	+
1586	P53675	1501	DNFDNISLAQQLEKHQLMEFRCIAAYL	+	-	-	-
1587	O00299	192	NLLPKLHIVQVCKKYRGFTIPEAFRG	-	-	-	-
1588	O00299	13	MMAEEQPQVELFVKAAGSDGAKIGNCPF	+	-	-	-
1589	O00299	119	AGLDIFAKFSAYIKNSNPALNDNLEKG	+	-	-	-
1590	O00299	131	IKNSNPALNDNLEKGLLKALKVLDNYL	+	-	-	-
1591	Q9Y696	106	EFLEEVLCPPKYLKLSPKHPESNTAGM	-	-	-	-
1592	Q9Y696	130	AGMDIFAKFSAYIKNSRPEANEALERG	+	-	-	-
1593	Q9Y224	154	LQIQRHDDYLVMLKAIRILVQERLTQD	-	-	-	-
1594	Q9Y224	20	TALDYHNPAGFNCKDETEFRNFIVWLE	+	-	-	-
1595	Q9Y224	62	RNIHSSDWPKFFEKYLRDVNCPFKIQD	+	-	-	-
1596	Q9Y224	98	GLAVRLEYGDNAEKYKDLVPDNSKTAD	+	-	-	-
1597	Q15417	172	AGQSVIGLQMGTNKCASQAGMTAYGTR	-	-	-	-
1598	Q15417	23	YGLSAEVKNKIASKYDHQAEEDLRNWI	+	-	-	-
1599	Q9Y281	22	DEVIKVFNDMKVRKSSTQEEIKRKKA	-	-	-	-
1600	Q9Y281	19	TVNDEVIKVFNDMKVRKSSTQEEIKKR	+	-	-	-
1601	P48444	156	VFRAVRETQEREAKAEMRRKAKELQQA	-	-	-	-
1602	P48444	233	SGPSKALKLGAKGKEVDNFVDKLGSEG	+	-	-	-
1603	P48444	241	LGAKGKEVDNFVDKLGSEGETIMSSSM	+	-	-	-
1604	P48444	309	ELHGMIMLRISDDKYGRIRLHVENEDK	+	-	-	-

1605	P48444	351	FTAESLIGLKNPEKSFVPNSDVGVLKW	+	-	-	-
1606	Q96KP4	201	VDYVCISDNYWLGGKKKPCITYGLRGIC	-	-	-	-
1607	Q96KP4	9	MMMMMAALTTLFKYIDENQDRYIKKL	+	-	-	-
1608	O75208	70	SFSQQHSETQGAEKPDPESSHSPRYT	-	-	-	-
1609	O75208	175	EEEQKLVLQLGQAEKRKTDQFLRDAVET	+	-	-	-
1610	P10606	107	EEDNTSVVWFWLHKGEAQRCPRCGAHY	-	-	-	-
1611	P10606	68	AKKGLDPYNVLPKKGASGTREDPNLVP	+	-	-	-
1612	P10606	86	TREDPNLVPSISNKRIVGCICEEDNTS	+	-	-	-
1613	P10606	121	GEAQRCPRCGAHYKLVPQQLAHHHHHH	+	-	-	-
1614	P15954	40	LPFSVENKWSLLAKMCLYFGSAFATPF	-	-	-	-
1615	P15954	25	SVVRRSHYEEGPGKNLFPFSVENKWSLL	+	-	-	+
1616	O14548	78	KFFQKADGVPVYLKRGLPDQMLYRTTM	-	-	-	-
1617	O14548	69	GKNKVPELQKFFQKADGVPVYLKRGLP	+	-	-	-
1618	Q9H078	81	AATGGRQGGFRDTKCLAAATWGRLPGP	-	-	-	-
1619	Q9H078	589	LIQLVNKELNFWAKRAKQRHNITLLWD	+	-	-	-
1620	Q16740	261	PPQDGEDEPTLVQKEPVEAAPAAEPVP	-	-	-	-
1621	Q16740	200	QATDIAIQAEIIMKLKKQLYNIYAKHT	-	-	-	+
1622	Q16740	211	IMKLKKQLYNIYAKHTKQSLQVIESAM	+	-	-	-
1623	O76031	402	EGTIVNVPEKNSRKLGRGETVQVDTTNI	-	-	-	-
1624	O76031	437	NGLDRIISRKNEKYLFGFTPSNLGKG	+	-	-	-
1625	Q15003	452	WAGPDHWRFRPRRKQDAPSQSENKKKS	-	-	-	-
1626	Q15003	637	EPQKVNKIEIHYAKTAKKMDMKKLKQS	+	-	-	-
1627	Q99439	214	MDHSTISLQMGTNKCASQVGMTAPGTR	-	-	-	-
1628	Q99439	8	MMMMMMSSTQFNKGPSYGLSAEVKNR	+	-	-	-
1629	Q99439	25	YGLSAEVKNRLLSKYDPQKEAELRTWI	+	-	-	-
1630	Q9NZJ6	283	IASIVPKGHTHTWEKFVSPETLESILES	-	-	-	-
1631	Q9NZJ6	143	DNLLKTIPNHQPGKPLLGMKILDVGCG	+	-	-	-
1632	Q9NZJ6	149	IPNHQPGKPLLGMKILDVGCGGGLLTE	+	-	-	-
1633	Q9NZJ6	196	TAQCHKSFDPVLDKRIEYRVCSLEEIV	+	-	-	-
1634	Q96DG6	118	KIDREISAILKYLKQQCHAQKIGIVGF	-	-	-	-
1635	Q96DG6	36	REVQVEHIKAYVTKSPVDAGKAVIVIQ	+	-	-	-
1636	Q8N1G2	685	REQHFNQRIQLAEKFVKAVSKPSRPDM	-	-	-	-
1637	Q8N1G2	108	MAKMGFREGEGLGKYSQGRKDIVEASS	+	-	-	-
1638	Q6ZRI6	653	RTNFHSSVAFMFRKFKILRPAPLPAAV	-	-	-	-
1639	Q6ZRI6	17	KRPLRTLGPVMYGKLPRLETDSGLEHS	+	-	-	-
1640	P23528	96	ALYDATYETKESKEDLVFIFWAPESA	-	-	-	-
1641	P23528	13	MMASGVAVSDGVIKVFNDMKVRKSSTP	+	-	-	-
1642	P23528	73	VGQTVDDPYATFVKMLPDKDCRYALYD	+	-	-	-
1643	P23528	144	IKHELQANCYEEVKDRCTLAEKLGGSA	+	-	-	-
1644	Q99708	830	EIYYADMPAEEREKKLASCSRHRFRYI	-	-	-	-
1645	Q99708	432	QNRTEYGKDSNTDKHLEPLKSLGGRTS	+	-	-	-
1646	Q99708	526	KNKFRQVTLYEALKTIPKGFSSSRKAS	+	-	-	-
1647	Q99708	604	RESLETENVLDDIKSAGSHEPIKIQTR	+	-	-	-
1648	P23786	642	PGRNAREFLQCVEKALEDMFDALEGKS	-	-	-	-
1649	P23786	69	KLEDTIRRYLSAQKPLLNDGQFRKTEQ	-	-	-	+
1650	P23786	79	SAQKPLLNDGQFRKTEQFCKSFENGIG	+	-	-	-
1651	P23786	85	LNDGQFRKTEQFCKSFENGIGKELHEQ	-	-	-	+
1652	P23786	239	LPKPSRDELFTHDDKARHLLVLRKGNFY	+	-	-	+
1653	P23786	305	TSENARDIWAELRQKLMSSGNEESLRKV	+	-	-	-
1654	P23786	424	TVQKLNFEITDALKTGITAAKEKFDAT	-	-	-	+
1655	P23786	439	GITAAKEKFDATMKTTLTIDCVQFQGG	-	-	-	+
1656	P23786	510	GRTETIRPASVYTKRCSEAFVREPSRH	+	-	-	+
1657	P23786	544	MMVECSKYHGQLTKEAAMGQGFDRLHF	+	-	-	+
1658	P35606	212	KPYLISGADDRLVKIWDYQNKTCVQTL	-	-	-	-
1659	P35606	627	PKEQRTVAHFLEKQGFQKQALTVSTD	+	-	-	-
1660	P52943	37	DWHKFCLKCERCSKTTLTPGGHAEHDGK	-	-	-	-
1661	P52943	23	KTVYFAEKVSSILGKDWHKFCLKCERCS	+	-	-	-
1662	P52943	138	TCPRCSKKVYFAEKVTSILGKDWHRPCL	+	-	-	-

1663	P52943	144	KKVYFAEKVTSLSGKDWHRPCLRCERCG	+	-	-	-
1664	P31146	313	EAPFLHYLSMFSSKESQRGMGYMPKRG	-	-	-	-
1665	P31146	449	EMRKLQATVQELQKRLDRLEETVQAKK	+	-	-	-
1666	P11712	247	LKNVAFMKSYILEKVKEHQESMDMNNP	-	-	-	-
1667	P11712	249	NVAFMKSYILEKVKEHQESMDMNNPQD	+	-	-	-
1668	P11712	375	LPTSLPHAVTCDIKFRNYLIPKGTTIL	+	-	-	-
1669	P33261	190	VICSIIFQKRFDYKDQQFLNLMEKLNE	-	-	-	-
1670	P33261	249	NLAFMESDILEKVKEHQESMDINNPRD	+	-	-	-
1671	P33261	375	IPTSPLHAVTCDVKFRNYLIPKGTTIL	+	-	-	-
1672	P50238	36	DWHRPCLKCEKCGKTLTSGGHAHEGK	-	-	-	-
1673	P50238	9	MMMMMPKCPKCNKEVYFAERTVSLGK	+	-	-	-
1674	P50238	22	KEVYFAERTVSLGKDWHRPCLKCEKCG	+	-	-	-
1675	P53618	703	QLSLLAAMGNTQRKEAADPLASKLNKV	-	-	-	-
1676	P53618	494	RSLGEIPIVESEIKKEAGELKPEEEIT	+	-	-	-
1677	Q02318	498	EMQLLLARLIQKYKVVLAPETGELKSV	-	-	-	-
1678	Q02318	283	RYLDGWNALFSGFKKLIDEKLEDMEAQ	+	-	-	-
1679	Q02318	509	KYKVVLAPETGELKSVARIVLVPNKKV	+	-	-	-
1680	Q02318	520	ELKSVARIVLVPNKKVGLQFLQRQCCC	+	-	-	-
1681	O43809	167	EPPQYPYIPAHITKPKHEKKLFLVQLQ	-	-	-	-
1682	O43809	23	QTGWPRGVTQFGNKYIQQTKPLTLERT	+	-	-	-
1683	O43809	29	GVTQFGNKYIQQTKPLTLERTINLYPL	+	-	-	-
1684	O43809	56	TNYTFGTKEPLYEKDSSVAARFQRMRE	+	-	-	-
1685	P02489	78	RSDRDKFVIFLDVKHFSPEDLTVKVQD	-	-	-	-
1686	P02489	70	LDSGISEVRSDRDKFVIFLDVKHFSPE	+	-	-	-
1687	P02489	99	TVKVQDDFVEIHGKHNERQDDHGYISR	+	-	-	-
1688	Q9ULV4	419	KKNILDSKPTANKKCDLISIPKKTDT	-	-	-	-
1689	Q9ULV4	446	ASVQNEAKLDEILKEIKSIKDTICNQD	+	-	-	-
1690	P04632	165	DSDTTGKLGFEFKEYLWNNIKRWQAIY	-	-	-	-
1691	P04632	179	YLWNNIKRWQAIYKQFDTDRSGTICSS	+	-	-	-
1692	O75534	64	FHCSQYNGNLQDLKVGDDVEFEVSSDR	-	-	-	-
1693	O75534	81	DVEFEVSSDRRTGKPIAVKLVKIKQEI	+	-	-	-
1694	P35222	292	LQKMVALLNKTNVKFLAITTDCLQILA	-	-	-	-
1695	P35222	49	HSGATTTAPSLSGKGNPEEEDVDTSQV	+	-	-	-
1696	Q14019	93	TWIGENVSGLQRAKTGTDKTLVKEVVQ	-	-	-	-
1697	Q14019	102	LQRAKTGTDKTLVKEVVQNFAKEFVIS	+	-	-	-
1698	Q14019	126	VISDRKELEEDFIKSELKKAGGANYDA	+	-	-	-
1699	P13073	149	EWVAKQTKRMLDMKVNPIQGLASKWDY	-	-	-	-
1700	P13073	29	STSVCVRAHESVVKSEDFSLPAYMDRR	+	-	-	+
1701	P13073	53	DRRDHPLPEVAHVKHLSASQKALKEKE	+	-	-	-
1702	P13073	60	PEVAHVKHLSASQKALKEKEKASWSSL	+	-	-	+
1703	P13073	67	HLSASQKALKEKEKASWSSLSMDEKVE	+	-	-	-
1704	P20674	115	FASTVRILEVVKDKAGPHKEIYPYVIQ	-	-	-	-
1705	P20674	87	INTLVITYDMVPEPKIIDAALRACRRLN	+	-	-	-
1706	P20674	113	NDFASTVRILEVVKDKAGPHKEIYPYV	+	-	-	-
1707	Q96L46	152	LGFEFKEYLWNNIKKWQCVYKQYDRDH	-	-	-	-
1708	Q96L46	159	YLWNNIKKWQCVYKQYDRDHSGSLGSS	+	-	-	-
1709	P19784	123	PALVFHEYINNTDFKQLYQILTDFDIRF	-	-	-	-
1710	P19784	97	KILENLRGGTNIKILIDTVKDPVSKTP	+	-	-	-
1711	P67870	139	DIPGEAMVKLYCPKCMDVYTPKSSRHH	-	-	-	-
1712	P67870	212	LQLQAASNFKSPVKTIIRRRRRRRRRR	+	-	-	-
1713	Q8WYA6	247	TEGAQQGLLQWLLKRLKAKMPFDANKL	-	-	-	-
1714	Q8WYA6	91	DESSVKKMILTFEKRSYKNQELRIKFP	+	-	-	-
1715	P14406	46	KLFQEDDEIPLYLKGGVADALLYRATM	-	-	-	-
1716	P14406	33	SRRHFKNKVPEKQKLFQEDDEIPLYLK	+	-	-	-
1717	Q99829	135	AGRGTTITVSAQELKDNRVVTMEVEARN	-	-	-	-
1718	Q99829	171	SDPFLEFFRQDGGKWHLVYRSEVIKNN	+	-	-	-
1719	O43169	101	KQYYIGDIHPSDLKPESGSKDPSKNDT	-	-	-	-
1720	O43169	30	ETSVTYYYRLEEVAKRNSLKLWLVIHG	+	-	-	-

1721	Q9BQ61	72	FANDGSFLELFKR K MEEEQRQRQEPP	-	-	-	-
1722	Q9BQ61	146	AKKQKTEDEVLT S KGDAAKYMAEVKK	+	-	-	-
1723	Q9BT78	144	PLETGQKQYNVDY K LETYLIKARLYLE	-	-	-	-
1724	Q9BT78	25	LMNSSGSHKDLA G KYRQILEKAIQLSG	+	-	-	-
1725	Q9HB71	41	ALTAEKSKIETE I KNMQQKSQKKAEL	-	-	-	-
1726	Q9HB71	8	MMMMMMASEEL Q KDLEEVKVLEKAT	+	-	-	-
1727	Q9HB71	19	LQKDLEEVKVLE K ATRKVRDALTAE	+	-	-	-
1728	Q9HB71	85	TVKISNYGWDQ S DKFVKIYITLTGVHQ	+	-	-	-
1729	Q9HB71	118	QVHFTERSFDLL V KNLNGKSYSMIVNN	+	-	-	-
1730	P02511	121	QDEHGFISREFHR K YRIPADVPLTIT	-	-	-	-
1731	P02511	92	LDVKHFSPEELKV V LGDVIEVHGKHE	+	-	-	-
1732	P02511	166	SGPERTIPITREE K PAVTAAPKKKKKK	+	-	-	-
1733	Q9H8E8	259	RASRNPVESAME L KEKRSRTQEAKDIR	-	-	-	-
1734	Q9H8E8	231	KLSASTLKIKAA S KPTLDPITVEGLR	+	-	-	-
1735	Q9H8E8	292	AGFLDRSTSS T PKFISRGRPDVILE	+	-	-	-
1736	Q05D32	70	KGSTPKEEREN P SKRSRIERDIDNNLI	-	-	-	-
1737	Q05D32	26	NQIQRTQRTARAK R KYSEVDDSLPSGGE	+	-	-	-
1738	Q05D32	57	NETGLLSIK K FIKGSTPKEERENPSK	+	-	-	-
1739	Q13617	179	EIKNDRGGEDPN Q KVIHGVINSFVHVE	-	-	-	-
1740	Q13617	393	EPKSVCKAPELLA K YCDNLLKKSAGM	+	-	-	-
1741	P99999	40	HKTGPNLHGLFGR K TGQAPGYSYTAAN	-	-	-	-
1742	P99999	56	QAPGYSYTAANK N KGIWGEDTLMEYL	-	-	-	+
1743	P99999	73	WGEDTLMEYLE N PKKYIPGTMIFVGI	+	-	-	+
1744	P99999	100	KKKEERADLIAY L KATNEEEEEEEEE	+	-	-	-
1745	Q8N465	353	IETSGSNAGHDAE K LGHFLEHALGSGL	-	-	-	-
1746	Q8N465	101	PNVDWLRTRLRGCS K VLLRPRTSEEVSH	-	-	-	+
1747	P21291	32	FAEEVQCEGNS F HKSCFLCMVCKKNLD	-	-	-	-
1748	P21291	84	YGYGQGAGTL S DKGESLGIKHEEAPG	+	-	-	-
1749	P21291	112	RPTTNPNA S KFAQKIGGSERCPRCSQA	+	-	-	-
1750	P21291	131	RCPRCSQAVYAAE K VIGAGKSWHKACF	+	-	-	-
1751	P21291	137	QAVYAAEKVIGAG K SWHKACFRCAKCG	+	-	-	-
1752	P21291	161	KCGKGLESTTLAD K DGEIYCKGCIYAKN	+	-	-	-
1753	Q16527	178	IYCKGCIYAKN F GPKGFGYGQAGALVH	-	-	-	-
1754	Q16527	112	RPTTNPNTSK F AQKYGGAEKCSRCGDS	+	-	-	-
1755	Q16527	137	DSVYAAEK I IGAGKPWHKNCFRCAKCG	-	-	-	+
1756	Q9Y5B0	835	DAQDGEQPGPSRR K RQPSMSETMPLYT	-	-	-	-
1757	Q9Y5B0	780	PGPEVRIYDSNT G KLIRTGARGPPAPS	+	-	-	-
1758	Q9P013	206	VFKNCAKGVD D QKDKRFDVNDTLRSEF	-	-	-	-
1759	Q9P013	18	ARPTFEPARGGR G KGEDLSQLSKQYS	+	-	-	-
1760	P51397	42	KHPHTGDTKEEK D KDDQEWESPPPKP	-	-	-	-
1761	P51397	29	PPAVKAGGMR I VQKHPHTGDTKEEKDK	+	-	-	-
1762	Q96EP5	181	DQAVNMHFHDIM G KKVEVKRAEPRDSK	-	-	-	-
1763	Q96EP5	150	GVVTEVVM I YDAEKQRPGRGFITFED	+	-	-	-
1764	O14578	1438	FCRDKMNSPGL Q TEPSSSLHLEGWMK	-	-	-	-
1765	O14578	1721	SKVVILRYNEN L SKYICIRKEIETSEPC	+	-	-	-
1766	Q9UER7	65	SSGGKKCYKLENE K LFEEFLELCKMQT	-	-	-	-
1767	Q9UER7	512	SLQISNEKNLE P GKQISRSSGEQQNKG	+	-	-	-
1768	Q9UJU6	131	RAEEDVEPECIME K VAKASGANYSFHK	-	-	-	-
1769	Q9UJU6	176	QKTNAVSEIKRV G KDSFWAKAEKEEEN	+	-	-	-
1770	Q9UJU6	288	SPQPGKLRSP F LQKQLTQPETHFGREP	+	-	-	-
1771	O95822	347	FTKWLLGLLNS Q TEHGRNELFTDSEC	-	-	-	-
1772	O95822	59	RAVPPTPAYEL R KTPAPAEGQCADFV	+	-	-	-
1773	O95822	168	VQLRADLLEA Q ALKLVEGPDVREMNGV	+	-	-	+
1774	O95822	211	ERVTWHSPCEV L QKISEAEAVHPVKNW	+	-	-	-
1775	O95822	222	LQKISEAEAVHP V KNWMDMKRRVGPYR	-	-	-	+
1776	O95822	389	KLLSSSEWVQ S EKLVRALQTPLMRLC	+	-	-	-
1777	O95822	472	EETGPNSTSYL G SKIIKASEQVLSLVA	+	-	-	-
1778	P00167	33	HNHKSSTW L ILHHKVYDLTKFLEEHPG	-	-	-	-

1779	P00167	10	MMMMMAEQSDEAVKYYTLEEIQKHNHS	+	-	-	-
1780	P00167	19	DEAVKYYTLEEIQKHNHSTWLILHH	+	-	-	-
1781	Q96F07	425	SWKLVHPTDKFCNKDCPGTAEYERAT	-	-	-	-
1782	Q96F07	1062	AAPFQNILPRVYIKEGERLEVMRKRL	+	-	-	-
1783	Q9NV06	233	NIVLYDMRQATPLKKVILDMRTNTICW	-	-	-	-
1784	Q9NV06	49	EVPREYIRALNATKLERVFAKPFLASL	+	-	-	-
1785	Q9NXF7	57	PNLSPLESLAWQVKCLLKYSTTWKPLN	-	-	-	-
1786	Q9NXF7	61	PLESLAWQVKCLLKYSTTWKPLNPNSW	+	-	-	-
1787	Q9GZR7	527	HQAPARILHKKHTKKMDKTAKLDLLMQ	-	-	-	-
1788	Q9GZR7	17	KDTKSRPKQSSCGKFQTKGIKVVGWKWK	+	-	-	-
1789	Q9GZR7	71	LVSPAKNPSSLFSKEAPKRKAQAVSEE	+	-	-	-
1790	P81605	42	GSGNPCHEASAAQKENAGEDPGLARQA	-	-	-	-
1791	P81605	68	APKPRKQRSSLLEKGLDGAKKAVGGLG	+	-	-	-
1792	Q16531	1104	GDLIESFLDISRPKMQEVVANLQYDDG	-	-	-	-
1793	Q16531	1067	MQNRLNKVIKSVGKIEHSFWRSFHTER	+	-	-	-
1794	Q13206	279	LSLKNPEYVWVHEKAKYSTPATLEQNY	-	-	-	-
1795	Q13206	555	NDEVEEFRAYFNEKMSILQGGKRLEG	+	-	-	-
1796	Q92499	535	LEQYFIQQGGGPDKKGHQFSCVCLHGD	-	-	-	-
1797	Q92499	239	ALFPACVLKNAELKFNFGEFEFKFPPK	+	-	-	-
1798	Q92499	268	FVALSKAPDGYIVKSQHSNGAQTQTK	+	-	-	-
1799	Q92499	281	KSQHSNGAQTQTKFLPNAPKALIVEP	+	-	-	-
1800	Q9UK59	218	LGSPAASELLEHLKPTYWFSAPHLHVKF	-	-	-	-
1801	Q9UK59	128	YRGVRIGGISGIFKSHDYRKGFECPP	+	-	-	-
1802	Q96C86	51	APVRLPFSGFRLQKVLRESARDKIIFL	-	-	-	-
1803	Q96C86	138	NDVKTTVVYPATEKHLQKYLRQDLRLI	+	-	-	-
1804	Q96C86	142	TTVVYPATEKHLQKYLRQDLRLIRETG	+	-	-	-
1805	Q9NR30	678	IDSKVKGMVFLKGLGVCDFVPTASVT	-	-	-	-
1806	Q9NR30	779	NRSQNKGGQKRSFSKAFGQQQQQQQQQQ	+	-	-	-
1807	O00571	50	RYIPPHLRNREATKGFYDKDSSGWSSS	-	-	-	-
1808	O00571	55	HLRNREATKGFYDKDSSGWSSSKDKDA	+	-	-	-
1809	O00571	118	DGIGSRGDRSGFGKFERGGNSRWCDKS	+	-	-	-
1810	Q7L014	824	VDIDEQIESMFNSKKRVKDMAAPGTSS	-	-	-	-
1811	Q7L014	263	GGGNEKKSGPTVTKVVTVTTKKAVVD	+	-	-	-
1812	Q7L014	776	EGKIIKKSSGFSGKGFKFDETEQALAN	+	-	-	-
1813	Q7L014	903	TVSAKTIAEQLAEKINAKLNYVPLEKQ	+	-	-	-
1814	O95786	203	KGIKDVETEDLEDKMETSDIQIFYQED	-	-	-	-
1815	O95786	858	RPHPKPKQFSSFEKRAKIFCARQNCSH	+	-	-	-
1816	P17844	470	ISVLREANQAINPKLLQLVEDRGSGRS	-	-	-	-
1817	P17844	32	PRFGGSRAGPLSGKFGNPGEKLVKKK	+	-	-	-
1818	P17844	33	RFGGSRAGPLSGKFGNPGEKLVKKKW	+	-	-	-
1819	P17844	40	GPLSGKKFGNPGEKLVKKKWNLDELPK	+	-	-	-
1820	P17844	236	ATPGRLLDFLECGKTNLRRTTYLVLDE	+	-	-	-
1821	Q9H4E7	318	AAIQMAIRLQAEGRKTSLHKDLKQKRRE	-	-	-	-
1822	Q9H4E7	225	ELIQDVLKQGYLWKRHGLRRNWAERWF	+	-	-	-
1823	P51659	702	ILSDEDFMEVVLGKLDLPQKAFFSGRLK	-	-	-	-
1824	P51659	46	GALVVVNDLGGDFKGVGKGS LAADKV	+	-	-	+
1825	P51659	57	DFKGVGKGS LAADKVVEEIRRRGGKAV	-	-	-	+
1826	P51659	68	ADKVVEEIRRRGGKAVANYDSVEEGEK	-	-	-	+
1827	P51659	84	ANYDSVEEGEKVKTALDAFGRIDVVV	-	-	-	+
1828	P51659	275	HPMTPEAVKANWKKICDFENASKPQSI	-	-	-	+
1829	P51659	356	EAIMYALGVGASIKDPKDLKFIYEGSS	-	-	-	+
1830	P51659	424	LELYKPLPRAGKLC EAVVADVLDKGS	-	-	-	+
1831	P51659	565	DVSRFKAIKARFAKPVYPGQTLQTEMW	+	-	-	-
1832	P51659	579	PVYPGQTLQTEMWKEGNRIHFQTKVQE	-	-	-	+
1833	P51659	663	FEWHITKGGNIGAKWTIDLKSGSGKVY	-	-	-	+
1834	P51659	669	KGGNIGAKWTIDLKSGSGKVYQGPAGK	+	-	-	-
1835	P51659	707	DFMEVVLGKLDLPQKAFFSGRLKARGNI	+	-	-	-
1836	P51659	725	GRLKARGNIMLSQKLQMIKLDYAKLLL	-	-	-	+

1837	Q13268	106	HVGKAEDREQLVAKALEHCGGVDFLVC	-	-	-	-
1838	Q13268	96	EGLSVAGIVCHVGKAEDREQLVAKALE	+	-	-	+
1839	Q13268	219	KDIRVNCVVPGLIKTDFSKVFHGNESL	+	-	-	+
1840	Q13268	237	KVFHGNESLWKNFKEHHQLQRIGESL	-	-	-	+
1841	Q8IYB7	580	PQGCHIYEYRESNKLVEEFMLLANMAV	-	-	-	-
1842	Q8IYB7	252	LEKKHSRAATGFLKLLADKNSELEFRKY	+	-	-	-
1843	P09417	192	AVLPVTLDTMPNRRKSMPEADFSSWTPL	-	-	-	-
1844	P09417	73	FTEQADQVTAEVGKLLGEEKVDAILCV	-	-	-	+
1845	P09417	79	QVTAEVGKLLGEEKVDAILCVAGGWAG	-	-	-	+
1846	P09417	96	ILCVAGGWAGGNAKSKSLFKNCDLMWK	-	-	-	+
1847	P09417	102	GWAGGNAKSKSLFKNCDLMWKQSIWTS	-	-	-	+
1848	O43143	185	QWCVEYMRSLPGPKRGVACTQPRRVAA	-	-	-	-
1849	O43143	488	RTRPGKCFRLYTEKAYKTEMQDNTYPE	+	-	-	-
1850	Q08211	365	LAFATPEQISMDLKNELMYQLEQDHDH	-	-	-	-
1851	Q08211	146	GVPGPTWDRGANLKDYYSRKEEQEVQA	+	-	-	-
1852	Q08211	191	LENAKARLNQYFQKEKIQGEYKYTQVG	+	-	-	-
1853	Q08211	199	NQYFQKEKIQGEYKYTQVGPDHNRSEI	+	-	-	-
1854	Q08211	1024	KILTTEGRNALIHKSSVNCPSFSSQDMK	+	-	-	-
1855	Q86XP3	394	VCTPGRLLIDHVKKATNLQRVSYLVFD	-	-	-	-
1856	Q86XP3	5	MMMMMMMMMMNNWKGPGTKRGFGFGG	+	-	-	-
1857	Q9Y2R4	554	YIKGFQKLLSKQKKMIKKPLERESIS	-	-	-	-
1858	Q9Y2R4	15	DVHDLFRRLGAGAKFDTRRFSADAARF	+	-	-	-
1859	P60981	69	LVGDVGVTITDPFKHFVGMLPEKDCRY	-	-	-	-
1860	P60981	19	QVADEVCRIFYDMKVRKCSTPEEIKKR	+	-	-	-
1861	P23743	230	VYCNLCESIGLGKQGLSCNLCKYTVH	-	-	-	-
1862	P23743	484	LRWGGGYEGQNLAKILKDLEMSKVVMH	+	-	-	-
1863	Q16854	120	SYTFQTFSLFLSRLKVQLEPFPEKLLQA	-	-	-	-
1864	Q16854	275	KQEDLMREVNFTVKNLLLLLLLLLLLLL	+	-	-	-
1865	Q92506	129	SEDDWDKVIAVNLKGTFLVTQAAAQAL	-	-	-	-
1866	Q92506	160	CRGSIINISSIVGKVGNGQTNYAASK	-	-	-	+
1867	Q92506	173	KVGNGVGTNYAASKAGVIGLTQTAARE	-	-	-	+
1868	P49448	98	LVKDLRTQESEEQKRNRRVGRILRIKP	-	-	-	-
1869	P49448	68	ELVADREDDPNFFKMVEGFFDRGASIV	-	-	-	+
1870	P49448	84	EGFFDRGASIVEDKLVKDLRTQESEEQ	+	-	-	+
1871	P49448	183	YKCAVVDVPFGGAKAGVKINPKNYTEN	+	-	-	+
1872	P49448	187	VVDVPFGGAKAGVKINPKNYTENELEK	+	-	-	-
1873	P49448	191	PFGGAKAGVKINPKNYTENELEKITRR	+	-	-	+
1874	P49448	200	KINPKNYTENELEKITRRFTMELAKKG	-	-	-	+
1875	P49448	211	LEKITRRFTMELAKKGFIPGVDVPAP	+	-	-	-
1876	P49448	363	DFKLQHGSIILGFPKAPYEGSILEVDC	+	-	-	+
1877	P49448	365	KLQHGSIILGFPKAPYEGSILEVDCDI	+	-	-	+
1878	P49448	386	EVDCDILIPAATEKQLTKSNAPRVKAK	+	-	-	-
1879	P49448	390	DILIPAATEKQLTKSNAPRVKAKIIAE	+	-	-	+
1880	P49448	415	AEGANGPTTPEADKIFLERNILVIPDL	+	-	-	+
1881	P49448	457	KNLNHVSYGRLTFKYERDSNYHLLLSV	+	-	-	+
1882	P49448	477	YHLLLSVQESLERKFGKHGGTIPIVPT	+	-	-	+
1883	P49448	480	LLSVQESLERKFGKHGGTIPIVPTAEF	+	-	-	+
1884	P49448	503	TAEFQDSISGASEKDIVHSALAYTMER	+	-	-	+
1885	P49448	527	MERSARQIMHTAMKYNLGLDLRTAAYV	+	-	-	+
1886	P49448	545	LDLRTAAYVNAIEKVFVKYSEAGVTFT	+	-	-	+
1887	P49448	548	RTAAYVNAIEKVFVKYSEAGVTFTTTT	+	-	-	-
1888	Q9BTZ2	143	TEEVWDKTLTDLINVKAPALMTKAVVPEM	-	-	-	-
1889	Q9BTZ2	92	EGLSVTGTVCHVGKAEDRERLVATAVK	+	-	-	+
1890	Q9BTZ2	105	KAEDRERLVATAVKLHGGIDILVSNA	+	-	-	-
1891	Q9BTZ2	216	RNIRVNCLAPGLIKTSFSRMLWMDKEK	+	-	-	+
1892	Q9BTZ2	227	LIKTSFSRMLWMDKEEESMKETLRIR	-	-	-	+
1893	Q9BTZ2	234	RMLWMDKEEESMKETLRIRRLGEPED	-	-	-	+
1894	O15523	25	LDQQQLANLDLNSEKQSGGASTASKGRY	-	-	-	-

1895	O15523	55	HLRNREASKGFHDKDSSGWSCSKDKDA	+	-	-	-
1896	Q16698	181	VLNGTAFVTLEIGKQLIKAQKGAFLS	-	-	-	-
1897	Q16698	42	TKILYQNTALQSFFSPLQKAMLPPN	+	-	-	+
1898	Q16698	49	TEALQSKFFSPLQKAMLPPNSFQKVA	+	-	-	+
1899	Q16698	73	KVAFITGGGTGLGKGMTTLLSSLGAQC	-	-	-	+
1900	Q16698	97	AQCVIASRKMDVLKATAEQISSQTGNK	+	-	-	+
1901	Q16698	230	VEAMSKSLAAEWGKYGMRFNVIQPGPI	+	-	-	-
1902	Q16698	244	YGMRFNVIQPGPIKTKGAFSRLDPTGT	+	-	-	+
1903	Q16698	260	GAFSRLDPTGTFEKEMIGRIPCGRGT	+	-	-	+
1904	Q16698	319	LISGEFNDLRKVTKEQWDTIEELIRKT	+	-	-	+
1905	Q96HY7	827	YSLVKQRESLGAKKHDFAIIRVEELCP	-	-	-	-
1906	Q96HY7	183	MLESQEFDHFLATKFSTVKRYGGEGAE	-	-	-	+
1907	Q96HY7	188	EFDHFLATKFSTVKRYGGEGAESMMGF	-	-	-	+
1908	Q96HY7	800	TFNPVIGDSSVDPKVKVTLVFCSGKHF	-	-	-	+
1909	Q96HY7	818	LVFCSGKHfYSLVKQRESLGAKKHDF	-	-	-	+
1910	O60884	332	QYRNPFEKGDLYIKFDVQFPENNWINP	-	-	-	-
1911	O60884	39	KAYRKLAKKEYHPDKNPNAGDKFKEISF	+	-	-	-
1912	O60884	152	KNVLCSACSGQGGKSGAVQKCSACRGR	+	-	-	-
1913	P18858	59	VSESDSPVKRPGRKAARVLGSEGEED	-	-	-	-
1914	P18858	226	EEEEQTKPPRRAPKTLSSFFTTPRKPAV	+	-	-	-
1915	Q9H7D0	1310	KEKLYQEIIISYFDKGMWEKAIKLSKE	-	-	-	-
1916	Q9H7D0	758	DDSSKTELLFAALKALKYLFRFIIQSR	+	-	-	-
1917	Q9H7D0	818	PLEEAVKIKGAALKYLPsiINDVKLVF	+	-	-	-
1918	Q9NUI1	71	ASRSLPRVLTAARKLAGATGRRCLPLS	-	-	-	-
1919	Q9NUI1	151	TSGTFNVSRLVYEKFFRDHGGVIVNIT	+	-	-	-
1920	Q9NUI1	291	GVKGLPDFASFSAKLLLLLLLLLLLLLL	+	-	-	-
1921	Q92608	147	GTLPKDELKELKQKVTskIDYGNKILE	-	-	-	-
1922	Q92608	304	DKIYLICQIVRVGKMDLKDtgAKKCTQ	+	-	-	-
1923	Q92608	738	SRGEQCEPILRTLKALEYVFKFIVRSR	+	-	-	-
1924	Q92608	797	QYKTTILLQVAALKYIPSVLHDVEMVF	+	-	-	-
1925	Q96N67	983	SFLQTLTGRLPTKLFHEELALQWVVC	-	-	-	-
1926	Q96N67	1962	LDGRAHGEHQFKRKTILTtSHAFPY	+	-	-	-
1927	Q9H2U1	440	VNRQEKEEKEAIYKERWPDYVRELRRR	-	-	-	-
1928	Q9H2U1	947	IVFQSPARIAHLVKELRKELDILLQEK	+	-	-	-
1929	P31689	44	LKYHPDKNPNEGEKFKQISQAYEVLSD	-	-	-	-
1930	P31689	66	EVLSDAKKRELYDKGGEQAIKEGGAGG	+	-	-	-
1931	P26358	1275	FFLLENVRNFVSFKRSMVLKLTlRCLV	-	-	-	-
1932	P26358	70	IKNQLCDLETKLRKEELSEEGYLAKVK	-	-	+	-
1933	P26358	142	PKPLSKPRTPRRSKSDGEAKPEPSPSP	-	-	+	-
1934	P26358	160	AKPEPSPSPRITRKSTRQTTITSHFAK	+	-	-	-
1935	P26358	173	KSTRQTTITSHFAKGPakRKPQEESE	+	-	-	-
1936	P26358	188	PAKRKPQEESEKSDESIKEEDKDQD	+	-	-	-
1937	P26358	259	RSQTKEPTPKQKLKEEPPDREARAGVQA	+	-	-	-
1938	P26358	366	CIQCGQYLDLDPDLKYGQHPPDAVDEPQ	+	-	-	-
1939	P26358	749	EAVKTDGKKSYYKVCIDAETLEVGD	+	-	-	-
1940	P26358	891	SPPKTQPTEDNKFKFCVSCARLAEMRQ	+	-	-	-
1941	P26358	957	EAFTFNIKLSSPVKRPRKEPVDEDLYP	+	-	-	-
1942	P26358	961	FNIKLSSPVKRPRKEPVDEDLYPEHYR	+	-	-	-
1943	P26358	975	EPVDEDLYPEHYRKYSdYIKGSNLDA	+	-	-	-
1944	P26358	1054	LLYWSDEEAVVDFKAVQGRCTVEYGED	+	-	-	-
1945	P26358	1111	DPPNHARSPGNKGKKGKKGKPKSQA	+	-	-	-
1946	P26358	1113	PNHARSPGNKGKKGKKGKPKSQA	+	-	-	-
1947	P26358	1115	HARSPGNKGKKGKKGKPKSQA	+	-	-	-
1948	P26358	1117	RSPGNKGKKGKKGKKGKPKSQA	+	-	-	-
1949	P26358	1119	PGNKGKKGKKGKKGKPKSQA	+	-	-	-
1950	P26358	1121	NKGKKGKKGKKGKKGKPKSQA	+	-	-	-
1951	P26358	1349	PRACQLSVVDDKFKFVSNITRLSSGPF	+	-	-	-
1952	P26358	1415	GAQYQPILRDHICKDMSALVAARMRHI	+	-	-	-

1953	Q96BY6	1253	LSTNGGFQSQTAI K HANSVDTSFSDKDV	-	-	-	-
1954	Q96BY6	834	QDSASGKHGGSDI K WVDGGKPLFKVST	+	-	-	-
1955	O75417	153	ALFILPFVSVAKE K KYYLQSLFQEVGI	-	-	-	-
1956	O75417	990	NQEHQTCSIFRAR K RASLDINKEKPGA	+	-	-	-
1957	P0CG22	232	KTSFSRMLWMDKE K EESMKETLRIRRL	-	-	-	-
1958	P0CG22	92	EGLSMTGTVCHVG K MKDWERLVATAMK	+	-	-	+
1959	P0CG22	105	KMKDWERLVATAM K LHGVIDILSLSIT	+	-	-	-
1960	O60610	377	VFDEQGEEDSYDL K GRLLDDIRMEDDF	-	-	-	-
1961	O60610	1057	VEKASRVSAENLQ K NLDQMKKQISDVE	+	-	-	-
1962	O60610	1103	MTSFVKDAQEQYN K LRMMHSNMETLYK	+	-	-	-
1963	O75165	2016	LIALLEKLTELLE K NNPHGETLETITM	-	-	-	-
1964	O75165	84	TFRKGSQKSETL K FSTEHRTELLTEA	+	-	-	-
1965	P09622	267	DMEISKNFQRILO K QGFKFKLNTKVTG	-	-	-	-
1966	P09622	66	GYVAAIKAAQLGF K TVCIEKNETLGGT	+	-	-	+
1967	P09622	104	LLNNSHYHMAHG K DFASRGIEMSEVR	+	-	-	+
1968	P09622	122	RGIEMSEVRNLNLD K MMEQKSTAVKALT	+	-	-	+
1969	P09622	132	NLDKMMEQKSTAV K ALTGGIAHLFKQN	+	-	-	+
1970	P09622	143	AVKALTGGIAHL F KQNKVVHNGYGKI	+	-	-	+
1971	P09622	159	KVVHNGYGKITG K NQVTATKADGGTQ	-	-	-	+
1972	P09622	166	YGKITGKNQVTAT K ADGGTQVIDTKNI	-	-	-	+
1973	P09622	273	NFQRILQKQGF K KLNTKVTGATKKSD	-	-	-	+
1974	P09622	277	ILQKQGF K KLNT K VTGATKKSDGKID	-	-	-	+
1975	P09622	346	PRGRIPVNTFRQT K IPNIYAIGDVVAG	+	-	-	-
1976	P09622	410	PEVAWVGKSEE Q LKEEGIEYKVGKFPF	+	-	-	+
1977	P09622	417	KSEE Q LKEEGIEY K VGKFPFAANSRAK	+	-	-	-
1978	P09622	420	E Q LKEEGIEYKVG K FPFAANSRAKTNA	+	-	-	-
1979	P09622	430	KVGKFPFAANSRA K TNADTDGMVKILG	-	-	-	+
1980	P09622	505	EAFREANLAAS F GKSINFFFFFFFFF	+	-	-	+
1981	O75937	210	EAQEKAKREREWQ K NFEESRDGRVDSW	-	-	-	-
1982	O75937	146	TVKERKKQLKKEG K PTIVEEDDPELFK	+	-	-	-
1983	Q12882	107	NLDIKSFITSIAN K NYYGAAKMIFSDN	-	-	-	-
1984	Q12882	384	RAVPEEMELAKEE K CEFLPFLSPRKVI	+	-	-	-
1985	Q16555	451	ECRGSPLVVISQ G KIVLEDGTLHVTEG	-	-	-	-
1986	Q16555	258	QTNCPLYITKVMS K SSAEVIAQARKKG	-	-	-	+
1987	Q9H3Z4	33	LGLDKNATSDDIK K SYRKLALKYHPDK	-	-	-	-
1988	Q9H3Z4	56	HPDKNPDNPEAAD K FKEINNAHAILTD	+	-	-	-
1989	P09884	271	MEVEVDLEPMAA K AWDKESPAEEVK	-	-	-	-
1990	P09884	224	VSRKEPPLTPVPL K RAEFAGDDVQVES	+	-	-	-
1991	P09884	970	YGCLGFSYSR F YAKPLAALVTYKGREI	-	-	-	+
1992	Q14194	56	KQIGENLIVPGGV K TIEANGRMVIPGG	-	-	-	-
1993	Q14194	258	RINCPVYITKVMS K SAADIIALARKKG	-	-	-	+
1994	Q13838	156	VKVAVFFGGLSI K KDEEVLLKNCPHIV	-	-	-	-
1995	Q13838	36	GGDGAEAPAKKDV K GSYVSIHSSGFRD	+	-	-	-
1996	P63167	31	QQDSVECATQALE K YNIEKDIAAHIKK	-	-	-	-
1997	P63167	36	ECATQALEKY N IEKDIAAHIKKEFDKK	+	-	-	-
1998	Q9P2K8	1336	QHNGIIFQFVAFI K RRQRAVPEILAAG	-	-	-	-
1999	Q9P2K8	1259	NLSLSSNSLCRLY K FIEQKGDLDLMP	+	-	-	-
2000	Q9HAF1	91	RNRKFKEAERLFS K SSVTSAAAVSALA	-	-	-	-
2001	Q9HAF1	6	MMMMMMMMMAMHN K AAPPQIPDTRREL	+	-	-	-
2002	Q9HAF1	69	NIIRGWDRYLT N QKNSNSKNDRNRKF	+	-	-	-
2003	Q9HAF1	74	WDYRLTNQKNSNS K NDRRNRKFKEAER	+	-	-	-
2004	O00429	679	VPKAVMHFLVNHV K DTLQSELVGQLYK	-	-	-	-
2005	O00429	597	PTTGNWRGMLK T SAEELLAEKSKPI	+	-	-	-
2006	P30046	21	TNLPANRVPAGLE K RLCAAAASILGKP	-	-	-	-
2007	P30046	33	EKRLCAAAASILG K PADRVNVTVRPGL	+	-	-	-
2008	Q14117	344	NTCQKALGKDDFT K IPNGVNGVEDRMS	-	-	-	-
2009	Q14117	256	PLYIVHVMKS S AAKVIADARRDGKVY	-	-	-	+
2010	Q9UQ16	589	LKVRDVEKSFMS S KHIFALFNTEQRNV	-	-	-	-

2011	Q9UQ16	299	TNHIRDTLPNFRN K LQGQLLSIEHEVE	+	-	-	-
2012	Q9UQ16	604	IFALFNTEQRNVY K DYRFLELACDSQE	+	-	-	-
2013	P42126	126	MCGRSPAHYAGYW K AVQELWLRLYQSN	-	-	-	-
2014	P42126	61	LVEPDAGAGVAVM K FKNPPVNSLSLEF	+	-	-	+
2015	P42126	84	SLEFLTELVISLE K LENDKSFRGVILT	-	-	-	+
2016	P42126	89	TELVISLEKLEND K SFRGVILTSDRPG	+	-	-	-
2017	P42126	283	RDADVQNFVSFIS K DSIQKSLQMYLER	+	-	-	+
2018	P42126	288	QNFVSFISKDSIQ K SLQMYLERLKEEK	-	-	-	+
2019	Q96EY1	107	YYQILGVPRNASQ K EIKKAYYQLAKKY	-	-	-	-
2020	Q96EY1	134	HPDTNKDDPKAKE K FSQLAEAYEVLSD	+	-	-	-
2021	P06746	220	QPKLLHQVVEQLQ K VHFITDTLSKGET	-	-	-	-
2022	P06746	72	AKKLPGVGTKIAE K IDEFLATGKLRKL	+	-	-	-
2023	Q9C005	43	IVENEKINAEKSS K QKVDLQSLPTRAY	-	-	-	-
2024	Q9C005	35	GLTDNVERIVENE K INAEKSSKQKVDL	+	-	-	-
2025	Q86UW9	547	PRQCYLPDNAQGR K VLELLKVAWKRRRL	-	-	-	-
2026	Q86UW9	249	SVFGTHQAFAPYN K PSLSGARSAPRLN	+	-	-	-
2027	O00148	221	RDVQEIFRLTPHE K QCMMSATLSKDI	-	-	-	-
2028	O00148	35	PQESTPAPPKKDI K GSYVSIHSSGFRD	+	-	-	-
2029	Q14204	3727	NEVLKAERPVDVE K RSDLLKLQGEFQL	-	-	-	-
2030	Q14204	1125	VQSKVNLKYDSWH K EVLSKFGQMLGSN	+	-	-	-
2031	Q14204	3480	AVEAKVNRSTALL K SLSAERERWEKTS	+	-	-	-
2032	Q14204	4283	ERLFTTTRSFDFEF K LACKVDGHKDIQM	+	-	-	-
2033	P50570	393	DEKDLRREISYAI K NIHGVRTGLFTPD	-	-	-	-
2034	P50570	299	TNHIRESLPALRS K LQSQLLSLEKEVE	+	-	-	-
2035	P50570	598	VFAIFNTEQRNVY K DLRQIELACDSQE	+	-	-	-
2036	Q01094	287	QAVDSSNFQISL K SKQGPIDVFLCPE	-	-	-	-
2037	Q01094	117	SSGPARGRGRHPG K GVKSPGEKSRYET	+	-	-	-
2038	Q01094	120	PARGRGRHPGKG V KSPGEKSRYETSLN	+	-	-	-
2039	Q01094	125	GRHPGKGVKSPGE K SRYETSLNLTTR	+	-	-	-
2040	O75530	342	VCWKPGKMEDDID K IKPSESNTILGR	-	-	-	-
2041	O75530	66	PDTPTNTPNAPGR K SWGKGKWKSKKCK	-	-	+	-
2042	O75530	197	KHYVGHGNAINEL K FHPRDPNLLSVS	-	-	+	-
2043	O75530	268	GMDHSLKLWRINS K RMMNAIKESYDYN	-	-	+	-
2044	O75530	284	MNAIKESYDYNPN K TNRPFISQKIHFP	-	-	+	-
2045	P13639	529	DLPKLVEGLKRLA K SDPMVQCIIESG	-	-	-	-
2046	P13639	152	TETVLRQAIAER I KPVLMMNKMDRALL	-	-	-	+
2047	P13639	235	AFTLKQFAEMYVAK F AAKGEGQLGPAE	+	-	-	-
2048	P13639	239	KQFAEMYVAKFAA K GEGQLGPAERAKK	+	-	-	-
2049	P13639	272	KLWGDRYFDPANG K FSKSATSPEGKKL	+	-	-	+
2050	P13639	275	GDRYFDPANGK F SKSATSPEGKKLPRT	+	-	-	-
2051	P13639	439	KVRIMGPNYTPG K EDLYLKPIQRTIL	+	-	-	-
2052	P13639	445	PNYTPGKKEDLYL K PIQRTILMMGRYV	+	-	-	-
2053	P13639	525	KNPADLPKLVEGL K RLAKSDPMVQCII	-	-	+	-
2054	P13639	572	KDLEEDHACIPI K KSDPVVSRETVESE	-	-	-	+
2055	P13639	619	ARPPFDGLAEDID K GEVSARQELKQRA	+	-	-	-
2056	Q96C19	188	ARLSEIDVSSEGV K GAKSFFEAKVQAI	-	-	-	-
2057	Q96C19	233	KQAEEMKQRKA F ELQSTFKKKKKKK	+	-	-	-
2058	Q13011	131	IDLMDMASDILQ P KGDDVARISWYLRD	-	-	-	-
2059	Q13011	231	NQSLVNELAFTAR K MMADEALGSGLV	-	-	-	+
2060	Q13011	327	TTENKELKTVTF S KLLLLLLLLLLLLLL	+	-	-	-
2061	P40939	255	EVAITFAKGLAD K KISPGRDKGLVEKL	-	-	-	-
2062	P40939	46	SALLTRTHINYGV K GDVAVVRINSPNS	+	-	-	+
2063	P40939	60	GDVAVVRINSPNS K VNTLSKELHSEFS	+	-	-	+
2064	P40939	129	VTQLSQEAQRIVE K LEKSTKPIVAAIN	+	-	-	-
2065	P40939	166	AISCQYRIATKDR K TVLGTPEVLLGAL	+	-	-	+
2066	P40939	213	MMLTGRSIRADRA K MGLVDQLVEPLG	-	-	-	+
2067	P40939	214	MLTGRSIRADRA K MGLVDQLVEPLGP	+	-	-	+
2068	P40939	230	LVDQLVEPLGPGL K PPEERTIEYLEEV	-	-	-	+

2069	P40939	249	TIEYLEEVAITFAKGLADKKISPKRDK	+	-	-	+
2070	P40939	289	PFVRQQVYKKVVEEKVRKQTKGLYPAPL	+	-	-	-
2071	P40939	295	VYKKVVEEKVRKQTKGLYPAPLKIIDVV	+	-	-	-
2072	P40939	303	VRKQTKGLYPAPLKIIDVVKTGIEQGS	+	-	-	+
2073	P40939	326	EQGSDAGYLCESQKFGELVMTKESKAL	+	-	-	+
2074	P40939	334	LCESQKFGELVMTKESKALMGLYHGQV	+	-	-	+
2075	P40939	350	KALMGLYHGQVLCCKNKFGAPQKDVKH	+	-	-	+
2076	P40939	353	MGLYHGQVLCCKNKFGAPQKDVKHLAI	+	-	-	-
2077	P40939	406	TLTALDRGQQQVFGLNDKVKKKALTS	+	-	-	+
2078	P40939	411	DRGQQQVFKGLNDKVKKKALTSFERDS	+	-	-	+
2079	P40939	415	QQVFKGLNDKVKKKALTSFERDSIFSN	-	-	-	+
2080	P40939	440	SNLTGQLDYQGFEKADMVIEAVFEDLS	-	-	-	+
2081	P40939	460	AVFEDLSLKHRLKEVEAVIPDHCIFA	+	-	-	+
2082	P40939	505	EKVIGMHYFSPVDKMLLEIITTEKTS	+	-	-	+
2083	P40939	519	MLLEIITTEKTSKDTASAVAVGLKQ	+	-	-	+
2084	P40939	540	AVGLKQGVIIIVKDGPGFYTTTRCLAP	+	-	-	-
2085	P40939	569	SEVIRILQEGVDPKLDLSLTTSFGFPV	+	-	-	+
2086	P40939	634	QMVSKGFLGRKSGKGFYIYQEGVKRKD	-	-	-	+
2087	P40939	644	KSGKGFYIYQEGVKRKDLNSDMSILA	+	-	-	+
2088	P40939	646	GKGFIYIYQEGVKRKDLNSDMSILASL	-	-	-	+
2089	P40939	664	DMSILASLKLPPKSEVSSDEDIQFRL	+	-	-	+
2090	P40939	728	GGPFRFVDLYGAQKIVDRLKKYEAAYG	+	-	-	+
2091	P40939	735	DLYGAQKIVDRLKKYEAAYGKQFTPCQ	+	-	-	-
2092	P40939	759	PCQLLADHANSNPKFYQQQQQQQQQQ	+	-	-	+
2093	P55084	48	APAVQTKTKKTLAKPNIRNVVVVDGVR	-	-	-	-
2094	P55084	72	GVRTPFLLSGTSYKDLMPHDLARAALT	+	-	-	+
2095	P55084	188	HSRKMRLMLDLNKAQSMGQRLSLISK	+	-	-	+
2096	P55084	190	RKMRLMLDLNKAQSMGQRLSLISKFR	-	-	-	+
2097	P55084	272	GLSDVVPFKVPGKDTVTKDNGIRPSS	-	-	-	+
2098	P55084	291	DNGIRPSSLEQMAKLKPAFIKPYGTVT	-	-	-	+
2099	P55084	293	GIRPSSLEQMAKLKPAFIKPYGTVTAA	+	-	-	+
2100	P55084	298	SLEQMAKLKPAFIKPYGTVTANSSFL	+	-	-	-
2101	P55084	332	LIMAEKALAMGYKPKAYLRDFMYVSQ	+	-	-	+
2102	P55084	348	AYLRDFMYVSQDPKDQLLLGPYATPK	+	-	-	-
2103	P55084	361	KDQLLLGPYATPKVLEKAGLTMNDID	+	-	-	-
2104	Q9NTX5	121	KNTFSSGSDLNAVKS LGTPEDGMVCM	-	-	-	-
2105	Q9NTX5	217	GSRQALKVLSGALKLDSKNALNIGMVE	+	-	-	+
2106	Q9NTX5	301	TVWGGPANLEAIAKKGKFNKKKKKKKK	-	-	-	+
2107	Q6P2E9	119	SSISSKARGSNKVKIQPVAKYDWEQKY	-	-	-	-
2108	Q6P2E9	125	ARGSNKVKIQPVAKYDWEQKYGNLI	+	-	-	-
2109	P24534	130	RLREERLAQYESKAKKPAVAKSSIL	-	-	-	-
2110	P24534	7	MMMMMMMGFGDLKSPAGLQVLNDYLA	+	-	-	-
2111	P43897	103	GWSKAAKLQGRKTEGLIGLLQEGNTT	-	-	-	-
2112	P43897	76	NCKKALETCCGDLKQAEIWLHKEAQKE	-	-	-	+
2113	P43897	133	EVNCETDFVSRNLKFQLLVQQVALGTM	-	-	-	+
2114	P43897	192	EGSLKDQLALAIGKLGEMILKRAAWV	-	-	-	+
2115	Q13347	298	FGPINSVAFHPDGKSYSSGGEDGYVRI	-	-	-	-
2116	Q13347	264	EAMDVTSTSTRIGKFEARFFHLAFEEE	+	-	-	-
2117	Q96DC8	76	NPKKRNALSLAMLKSLQSDILHDADSN	-	-	-	-
2118	Q96DC8	110	SAEGPVFSSGHDLKELTEEQGRDYHAE	-	-	-	+
2119	O75521	305	SPAKATEMLIFGKLTAGEACAQGLVT	-	-	-	-
2120	O75521	51	ASQKDFENSMNQVKLLKDPGNEVKLK	+	-	-	+
2121	O75521	55	DFENSMNQVKLLKDPGNEVKLKLYAL	-	-	-	+
2122	O75521	62	QVKLLKDPGNEVKLKLYALYKQATEG	+	-	-	+
2123	O75521	70	PGNEVKLKLYALYKQATEGPCNMPKPG	-	-	-	+
2124	O75521	81	LYKQATEGPCNMPKPGVFDLINKAKWD	-	-	-	+
2125	O75521	90	CNMPKPGVFDLINKAKWDAWNALGSLP	-	-	-	+
2126	O75521	92	MPKPGVFDLINKAKWDAWNALGSLPKE	+	-	-	+

2127	O75521	161	DGITKIMFNRPKK K NAINTEMYHEIMR	-	-	-	+
2128	O75521	289	GQSPEGCSSYTFP K IMSPAKATEMLIF	-	-	-	+
2129	P68104	219	ANMPWFKGWKVT R KDGNASGTTLLEAL	-	-	-	-
2130	P68104	36	TTGHLIYKCGGID R KRTIEKFEKEAAEM	-	-	+	-
2131	P68104	55	FEKEAAEMGKGSF K YAWVLDKLKAERE	-	-	+	-
2132	P68104	79	ERERGITIDISLW K FETSKYYYVTIIDA	-	-	+	-
2133	P68104	165	VNKMDSTEPPYSQ K RYEEIVKEVSTYI	+	-	+	-
2134	P68104	172	EPPYSQKRYEEIV K EVSTYIKKIGYNP	+	-	-	-
2135	P68104	273	GTVPVGRVETGVL K PGMVVTFAPVNV	+	-	-	-
2136	P68104	318	GDNVGFNVKNVSV K DVRRGNVAGDSKN	-	-	+	-
2137	P68104	392	IDRRSGKKLEDGP K FLKSGDAAIVDMV	+	-	-	+
2138	P68104	439	VRDMRQTVAVGV I KAVDKKAAGAGKVT	+	-	-	-
2139	Q05639	290	VVTFAPVNITTEV K SVMHHEALSEAL	-	-	-	-
2140	Q05639	165	VNKMDSTEPAYSE K RYDEIVKEVSAYI	-	-	+	-
2141	Q05639	179	RYDEIVKEVSAY I KKIGYNPATVPFVP	+	-	-	-
2142	Q05639	439	VRDMRQTVAVGV I KNVEKKSGGAGKVT	+	-	-	-
2143	Q14232	253	PLNQQDVPDKFKY K ADTLKVAQTGQDL	-	-	-	-
2144	Q14232	35	SAVAAIRTLLEFL K RDKGETIQGLRAN	+	-	-	-
2145	Q99613	273	APTTDEDKKA E KREDKAKKKHDRKS	-	-	-	-
2146	Q99613	99	LGKAYGKAKSIVD K EGVPRFYIRILAD	+	-	-	-
2147	Q99613	643	HNALLDIQSSGRA K ELLGQGLLLRSLQ	+	-	-	-
2148	Q7L2H7	129	NTPVRYTVYCSLI K VAASCGAIQYIPT	-	-	-	-
2149	Q7L2H7	254	LTIFVSAKLASYV K FYQNNKDFIDSLG	+	-	-	-
2150	Q92556	408	YIRIVLENS S RED K HECPFGRSSIET	-	-	-	-
2151	Q92556	100	QLHERIQSSSMDA K LEALKDLASLSRD	+	-	-	-
2152	Q92556	105	IQSSSMDAKLEAL K DLASLSRDVTFAQ	+	-	-	-
2153	Q5VTE0	30	DSGKSTTTGHLIY K CGGIDKRTIEKFE	-	-	-	-
2154	Q5VTE0	318	GDNVGFVKNVSV K DVRRGNVAGDSKN	-	-	+	-
2155	Q14152	672	EDLEELDPDFIMA K QVEQLEKEKELQ	-	-	-	-
2156	Q14152	68	LELCVDLRKSHLA K EGLYQYKNICQQV	+	-	-	-
2157	Q15006	248	SASHIASNPKASAK T KKKDNMKYASWAA	-	-	-	-
2158	Q15006	255	NPKASAK T KKDNM K YASWAASQINRAY	+	-	-	-
2159	P13929	105	KFMIELDGTENKS K FGANAILGVSLAV	-	-	-	-
2160	P13929	5	MMMMMMMMMMAMQ K IFAREILDSRGNP	+	-	-	-
2161	P13929	64	DGDKGRYLKGVL K AVENINNTLGPAL	+	-	-	-
2162	P13929	89	ALLQKKLSVVDQ E KVDKFMIELDGTEN	+	-	-	-
2163	P13929	126	GVSLAVCKAGAA E KGVPLYRHADLAG	+	-	-	-
2164	P13929	193	EAMRIGAEVYHHL K GVIKAKYGKDATN	+	-	-	-
2165	P13929	197	IGAEVYHHLKGVI K AKYGKDATNVGDE	+	-	-	-
2166	P13929	199	AEVYHHLKGVI K AKYGKDATNVGDEGG	+	-	-	-
2167	P13929	228	PNILENNEALELL K TAIQAAGYPDKVV	+	-	-	-
2168	P13929	256	GMDVAASEFYRNG K YDLDFKSPDDPAR	+	-	-	-
2169	P13929	281	ARHITGEKLGELY K SFIKNYPVVSIED	+	-	-	-
2170	P13929	285	TGEKLGELYKSFI K KNYPVVSIEDPFDQ	+	-	-	-
2171	P13929	420	YNQLMRIEEALGD K AIFAGRKFARNPKA	+	-	-	-
2172	P29692	265	DKVGTDLLEEEIT K FEEHVQSVDIAAF	-	-	-	-
2173	P29692	17	NFLAHEKIWFDFK F KYDDAERRFYEQMN	+	-	-	-
2174	P29692	107	LRGVVQELQQAIS K LEARLNVLEKSSP	+	-	-	-
2175	P29692	117	AISKLEARLNVLE K SSPGHRATAPQTQ	+	-	-	+
2176	Q96RP9	193	GSNPARALQQMR S KLNHNAAFMQIPMG	-	-	-	-
2177	Q96RP9	175	MKRYNPVFLTFIN K LDRMGSNPARALQ	+	-	-	-
2178	O00303	154	ESEDEVAVDMEFA K NMYELHKKVSPNE	-	-	-	-
2179	O00303	238	GRTMGVMFTPLTV K YAYYDTERIGVDL	+	-	-	-
2180	P30084	234	EAIQCAEKIASNS K IVVAMAKESVNAA	-	-	-	-
2181	P30084	101	TGGDKAFAAGADI K EMQNLSFQDCYSS	+	-	-	+
2182	P30084	115	EMQNLSFQDCYSS K FLKHWDLHTQVKK	+	-	-	+
2183	P30084	118	NLSFQDCYSSK F LKHWDLHTQVKKPVI	+	-	-	-
2184	P30084	204	MVLTGDRISAQDA K QAGLVSKICPVET	-	-	-	+

2185	P30084	211	ISAQDAKQAGLVS K ICPVETLVEEAIQ	+	-	-	-
2186	P26641	57	NRTPEFLRKFPAG K VPAFEGDDGFCVF	-	-	-	-
2187	P26641	147	EVRRILGLLDAYL K TRTFLVGERVTLA	+	-	-	-
2188	P26641	212	QFRAVLGEVKLCE K MAQFDAKKFAETQ	+	-	-	-
2189	P26641	401	PDWQVDYESYTW R KLDPGSEETQTLVR	+	-	-	-
2190	P26641	434	GAFQHVGKAFNQ G KIFKKKKKKKKKKK	+	-	-	-
2191	Q9Y262	87	LQASRVSSDVIDQ K VYEIQDIYENSWT	-	-	-	-
2192	Q9Y262	465	QQQAQLSTIRSFL K LYTTMPVAKLAGF	+	-	-	-
2193	Q9Y262	549	ARRYGDFFIRQ I H K FEELNRTLKKMGQ	+	-	-	-
2194	P49411	238	EGRDPELGLKSVQ K LLDAVDTYIPVPA	-	-	-	-
2195	P49411	79	VDHGKTTTLTA A IT K ILAEGGGAKFKKY	+	-	-	-
2196	P49411	88	AAITKILAEGGG A KFKKYEEIDNAPEE	+	-	-	-
2197	P49411	256	VDTYIPVPARDLE K PFLLPVEAVYSVP	+	-	-	-
2198	P49411	418	KFNLILRQPMILE K GQRFTLRDGNRTI	+	-	-	-
2199	O15371	129	QFNLQILPKSAQ Q KERERIRLQKKFQK	-	-	-	-
2200	O15371	53	GKVADWTGATYQD K RYTNKYSSQFGGG	+	-	-	-
2201	Q14241	269	LGEPHGKGVVSQ N KEHKSSHKDKRPVD	-	-	-	-
2202	Q14241	460	KKIVKTSATALGD K GLKKNDKSTGKN	+	-	-	-
2203	Q86YB7	87	DRQVRVLLFRSGV K GVFCAGADLKERE	-	-	-	-
2204	Q86YB7	97	SGVKGVFCAGADL K EREQMSEAEVGVF	+	-	-	+
2205	P55884	562	MREKQVPVDV V EM K ETIIAFAWEPNGS	-	-	-	-
2206	P55884	209	GPDRLEKLKNV I H K IFSKFGKITNDFY	+	-	-	-
2207	P55884	288	ISDEWDIPEKQ P F K DLGNLRYWLEAAE	+	-	-	-
2208	P55884	364	TFHQRGIALWGGE K FKQIQRFHQGVQ	+	-	-	-
2209	P13804	126	SAFGKNLLPRV A A K LEVAPISDIIAIK	-	-	-	-
2210	P13804	59	RLGGEVSCLVAGT K CDKVAQDLCKVAG	+	-	-	+
2211	P13804	62	GEVSCLVAGTKCD K VQDLCKVAGIAK	+	-	-	-
2212	P13804	69	AGTKCDKVAQDL K VAGIAKVLVAQHD	+	-	-	+
2213	P13804	75	KVAQDLCKVAGIA K VLVAQHDVYKGLL	+	-	-	-
2214	P13804	85	GIAKVLVAQHDVY K GLLPEELTPLILA	+	-	-	+
2215	P13804	101	LPEELTPLILATQ K QFNYYTHICAGASA	+	-	-	-
2216	P13804	139	KLEVAPISDII A I K SPDTFVRTIYAGN	+	-	-	-
2217	P13804	158	VRTIYAGNALCTV K CDEKVKVFSVRGT	+	-	-	+
2218	P13804	164	GNALCTVKCDEKV V FSVRGTSFDAAA	+	-	-	-
2219	P13804	187	DAAATSGGSASSE K ASSTSPVEISEWL	-	-	-	+
2220	P13804	203	STSPVEISEWLDQ K LTKSDRPELTGAK	+	-	-	+
2221	P13804	216	KLTKSDRPELTG A KVVVSGGRGLKSGE	-	-	-	+
2222	P13804	226	TGAKVVVSGGRGL K SGENFKLLYDLAD	+	-	-	+
2223	P13804	232	VSGGRGLKSGENF K LLYDLADQLHAAV	+	-	-	+
2224	P13804	301	AGMKDSKTIVAIN K DPEAPIFQVADYG	-	-	-	+
2225	P41212	366	RYENFIRWEDKES K IFRIVDPNGLARL	-	-	-	-
2226	P41212	11	MMMSETPAQCS I KQERISYTPPESPV	+	-	-	-
2227	P41212	302	QSRLSEDGLHREG P INLSHREDLAYM	+	-	-	-
2228	Q01844	388	DDLADFFKQCGV V KMNKRTGQPMIHIY	-	-	-	-
2229	Q01844	439	AVEWFDGKDFQGS K LKVSLARKKPPMN	+	-	-	-
2230	Q96KQ7	695	QQSKRTPLHAAAQ K GSVEICHVLLQAG	-	-	-	-
2231	Q96KQ7	185	TSPEGQPKVHRAR K TMSKPGNGQPPVP	-	-	+	-
2232	B5ME19	317	RVRGGVPLVKEK P KMFAKGTEITHAVV	-	-	-	-
2233	P09104	120	GANAILGVSLAVC K AGAAERELPLYRH	-	-	-	-
2234	P09104	5	MMMMMMMMMS I E K IWAREILDSRGNP	+	-	-	-
2235	P09104	64	DGDKQRYLGKGVL K AVDHINSTIAPAL	+	-	-	-
2236	P09104	89	ALISSGLSVVEQ E KLDNLMLELDGTEN	+	-	-	-
2237	P09104	193	DAMRLGAEVYHTL K GVIKDKYGKDATN	+	-	-	-
2238	P09104	197	LGAEVYHTLKGVI K DKYGKDATNVGDE	+	-	-	-
2239	P09104	199	AEVYHTLKGVI K DKYGKDATNVGDEGG	+	-	-	-
2240	P09104	228	PNILENSEALELV K EADKAGYTEKIV	+	-	-	-
2241	P09104	233	NSEALELVKEAID K AGYTEKIVIGMDV	+	-	-	-
2242	P09104	256	GMDVAASEFYRDG K YDLDFKSPTDPSR	+	-	-	-

2243	P28715	1027	RLNRAVTCMLRKEKEAAASEIEAVSVA	-	-	-	-
2244	P28715	8	MMMMMMGVQGLWKLLECSGRQVSPEA	+	-	-	-
2245	P30042	214	GGKWPLYAGTAEAIKALGAKHCVKEVVE	-	-	-	-
2246	P30042	151	GAAKNLSTFAVDGKDCKVNKEVERVLK	+	-	-	-
2247	P30042	157	STFAVDGKDCKVNKEVERVLKEFHQAG	+	-	-	-
2248	P30042	164	KDCKVNKEVERVLKEFHQAGKPIGLCC	+	-	-	-
2249	P30042	203	VEVTVGHEQEEGGKWPLYAGTAEAIKAL	+	-	-	+
2250	P30042	219	YAGTAEAIKALGAKHCVKEVVEAHVDQ	+	-	-	-
2251	P30042	223	AEAIALGAKHCVKEVVEAHVDQKNKV	+	-	-	+
2252	P30042	233	HCVKEVVEAHVDQKNKVTTTAPFMCET	+	-	-	+
2253	P14625	161	TDTGVGMTREELVKNLGTIAKSGTSEF	-	-	-	-
2254	P14625	404	TSAPRGLFDEYGSKKS DYIKLYVRRVF	-	-	-	+
2255	P14625	479	RKTLDMIKKIADDKYNDTFWKEFGTNI	+	-	-	-
2256	P14625	633	NWMKDKALKDKIEKAVVSQRLTESPCA	-	-	-	+
2257	Q16134	105	VAHEKDIRVCLVEKAAQIGAHTLSGAC	-	-	-	-
2258	Q16134	96	AAVRLKQLAVAHEKDIRVCLVEKAAQI	+	-	-	-
2259	Q16134	132	LDPGAFKELFPDWKEKGAPLNTPTVED	+	-	-	-
2260	Q16134	223	SVKGIATNDVGIQKDGAPKATFERGLE	+	-	-	-
2261	Q16134	357	KHHPSIRPTLEGGKRIAYGARALNEGG	+	-	-	-
2262	O95571	181	QGCAKTLYHSVHEKIFTLPDGLIYPA	-	-	-	-
2263	O95571	66	PVLETAPRDAQLIKELGLRLLYAVNTH	+	-	-	-
2264	O95571	172	RGCGRTDFQQGCAKTLYHSVHEKIFTL	+	-	-	+
2265	Q06265	355	GVENSWGDLEDESEKEDDEGGGDQAIIL	-	-	-	-
2266	Q06265	297	FAESIANQRITAFKMEKAPIDTSDVEE	+	-	-	-
2267	P15311	133	ETAVLLGSYAVQAKFGDYNKEVHKSGY	-	-	-	-
2268	P15311	60	LHYVDNKGFPDWLKDKKVSAQEVKKE	+	-	-	-
2269	P15311	79	SAQEVKKEENPLQFKFRAKFYPEDVAEE	+	-	-	-
2270	P15311	83	VRKENPLQFKFRAKFYPEDVAEELIQD	-	-	-	+
2271	P15311	139	GSYAVQAKFGDYNKEVHKSGYLSSERL	+	-	-	-
2272	Q9H098	75	RDQVIKQKEEEAQKKSDLEIELLKRQ	-	-	-	-
2273	Q9H098	50	LLMNQKRGLAPQNKPELQKVMKRRKD	+	-	-	-
2274	P09467	202	PAIGEFILVDKDVIKKKKGKIYSLNEG	-	-	-	-
2275	P09467	151	GIYRKKSTDEPSEKDALQPGRNLVAAG	-	-	-	+
2276	O94919	238	CAVPGGGWAMGFVKHTRDSDIIEDVMV	-	-	-	-
2277	O94919	407	LVSIPWKVLKVVAKVIRALLRILCCLL	+	-	-	-
2278	Q9BSJ8	159	VAQVWPFLGQYMEKLLAETVAPAVRGS	-	-	-	-
2279	Q9BSJ8	817	MERAEDLPLRKGTKHLSPYATLTVGDS	+	-	-	-
2280	Q96KP1	532	GALLPLSIRDGEAKQYGGWEVKCELSG	-	-	-	-
2281	Q96KP1	454	WRYKTPHRVAFVEKLTKLVLSQLPNFW	+	-	-	-
2282	P07148	80	EECELETMTGEKVKTVVQLEGDNKLV	-	-	-	-
2283	P07148	31	FMKAIGLPEELIQKGKDIKGVSEIVQN	-	-	-	+
2284	P07148	36	GLPEELIQKGKDIKGVSEIVQNGKHFK	-	-	-	+
2285	P07148	46	KDIKGVSEIVQNGKHFKFTITAGSKVI	-	-	-	+
2286	P07148	57	NGKHFKFTITAGSKVIQNEFTVGEECE	-	-	-	+
2287	P07148	78	VGEECELETMTGEKVKTVVQLEGDNKL	-	-	-	+
2288	P07148	90	EKVKTVVQLEGDNKLVTTFKNIKSVTE	-	-	-	+
2289	P07148	121	IITNTMTLGDIVFKRISKRIIIIIII	-	-	-	+
2290	Q96L91	2978	QLLKLKQQAVQQQKAIQPQAAQGPAAV	-	-	-	-
2291	Q96L91	1472	KASRLFQPVQYGQKPEGRTVAFPTSTHP	+	-	-	-
2292	Q96L91	2349	KKNILLKQQVPFAKPLPTFAKPTAEPG	+	-	-	-
2293	Q96L91	2356	QQVPFAKPLPTFAKPTAEPGQDNPEWL	+	-	-	-
2294	Q86X53	164	HTDGTITISKNKKRKLKKKQQIKRKKAA	-	-	-	-
2295	Q86X53	12	MMMAAHRKHVFVEKVLQRLFPVPSGQ	+	-	-	-
2296	O75477	192	IRRFELMEAEKTKLLIAAQKQKVVEK	-	-	-	-
2297	O75477	267	EKAKADAEYYAAHKYATSNKHKLTPY	+	-	-	-
2298	Q7Z2Z2	396	QTFDSFPPTQALKA AFMCKGSED TAP	-	-	-	-
2299	Q7Z2Z2	528	VARRGKKIFVLGPKYSPLEFLRRVPLG	+	-	-	-
2300	P50502	63	KSEENTKEEKPDSK KVEEDLKADEPSS	-	-	-	-

2301	P50502	353	QNPANMSKYQSNP	KVMNLISKLSAKFG	+	-	-	-
2302	P50502	360	KYQSNPKVMNLISK	LSAKFGGQAAAAA	+	-	-	-
2303	Q8NFF5	468	RYNLQMLEAEGSM	KQALGELQARHPQL	-	-	-	-
2304	Q8NFF5	378	AVYKLAESGSSLG	KKVAGALQTIETSL	+	-	-	+
2305	P41162	465	EDRPGKEPSAPEK	KEDALMPPKLRLLR	-	-	-	-
2306	P41162	388	SIPPRIKVEPASEK	DPESLRQSAREKE	+	-	-	-
2307	O60645	477	LCLQQMNSFLSRY	KDEAQLYKEEHLRN	-	-	-	-
2308	O60645	39	RVAGMLQRPDQLD	KVEQYRRREARKKA	+	-	-	-
2309	Q96A65	388	EDIKLYDMADVWV	KIQDVLQMLLT EYL	-	-	-	-
2310	Q96A65	9	MMMMMMAAEAAGG	KYRSTVSKSKDPSG	+	-	-	-
2311	Q70Z53	201	SWEVNFYIEHGEK	RNALVKLRQCQEC	-	-	-	-
2312	Q70Z53	36	RKKRTVEDDLLLQ	KPFQKEKHGKVAHK	+	-	-	-
2313	Q9GZU8	188	PEPDDKNQEPSSCK	SLGNTSLSGPSIH	-	-	-	-
2314	Q9GZU8	139	QENKKEVEKKLTV	KPIETKNKFSQAKL	+	-	-	-
2315	Q01469	103	TDGALVQHQEWDG	KESTITRKLKD GKL	-	-	-	-
2316	Q01469	17	VQQLEGRWRLVDS	KGFDEYMKELGVGI	+	-	-	-
2317	Q96CS3	395	QSLTVIHDFLFSL	KESPEKFQIEANFP	-	-	-	-
2318	Q96CS3	167	FYQGTYSQALNDA	KRELRFLLVYLHGD	+	-	-	-
2319	Q53R41	739	YHKVDFECILDKR	KKPLPYGSHNIALG	-	-	-	-
2320	Q53R41	360	AMGDMEsrnscli	KRVTSVLHKHLDGY	+	-	-	-
2321	P11474	76	EQGGGKLVLSLPL	KRLCLVCGDVASGY	-	-	-	-
2322	P11474	129	PASNECEITKRRRK	KACQACRFTKCLRV	+	-	-	-
2323	P11474	138	KRRRKACQACRFT	KCLRVGMLKEGVRL	+	-	-	-
2324	P11474	160	EGVRLDRVRGGRQ	KYKRRPEVDPLPFP	+	-	-	-
2325	P11474	162	VRDLRVRGGRQKY	KRRPEVDPLPFP GP	+	-	-	-
2326	Q8NFI4	190	INPDSAQPYKWRG	KAHRLLGHWEEAAH	-	-	-	-
2327	P49327	2436	FYYKLRAAEQYTP	KAKYHGVMMLLRAK	-	-	-	-
2328	P49327	70	LSRFDASFFGVHP	KQAHTMDPQLRLLL	+	-	-	-
2329	P49327	298	ESFEYIEAHGTGT	KVGDPQELNGITRA	+	-	-	-
2330	P49327	436	LLRASGRTPeavQ	KLLEQGLRHSQDLA	+	-	-	-
2331	P49327	528	RFRDSILRSDEAV	KPFGLKVSQLLLST	+	-	-	-
2332	P49327	673	EFVEQLRKEGVFA	KEVRTGGMAFHSYF	+	-	-	-
2333	P49327	992	PTEPLFLAQAEVY	KELRLRGYDYGPHF	+	-	-	-
2334	P49327	1704	LGCRVFTTVGSAE	KRAYLQARFPQLDS	+	-	-	-
2335	P49327	1771	RCLATHGRFLEIG	KFDLSQNHPLGMAI	+	-	-	-
2336	P49327	1847	AQVEDAFRYMAQG	KHIGKVVVQVLAE	+	-	-	-
2337	P49327	1995	NQTPEFFQDVCKP	KYSGTLNLDRVTRE	+	-	-	-
2338	P49327	2391	MEHNRVLEALLPL	KGLEERVAAVDLI	+	-	-	-
2339	P10768	161	HSMGGHGALICAL	KNPGKYKSVSAFAP	-	-	-	-
2340	P10768	4	MMMMMMMMMMMAL	KQISSNCKFGGLQK	-	-	-	+
2341	P10768	200	AFSGYLGTDQSKW	KAYDATHLVKSYPG	+	-	-	-
2342	P38117	19	VLVAVKRVIDYAV	KIRVKPDRTG VTD	-	-	-	-
2343	P38117	200	LNEPRYATLPNIM	KAKKKKIEVIKPGD	+	-	+	-
2344	P38117	203	PRYATLPNIMKAK	KKKIEVIKPGDLGV	-	-	+	-
2345	P38117	210	NIMKAKKKKIEVI	KPGDLGVDLT SKLS	+	-	-	+
2346	P38117	238	ISVEDPPQRTAGV	KVETTEDLVAKLKE	+	-	-	-
2347	P38117	248	AGVKVETTEDLVA	KLKEIGRIIIIIII	+	-	-	+
2348	P14921	134	VGDIWEHLEILQ	KEDVKPYQVNGVNP	-	-	-	-
2349	P14921	8	MMMMMMKAAVDL	KPTLTIIKTEKVDL	+	-	-	-
2350	P14921	15	KAAVDLKPTLTII	KTEKVDLELFPSPD	+	-	-	-
2351	P14921	305	PAALPNHKPKGTF	KDYVRDRADLNKDK	+	-	-	-
2352	Q9UQ84	21	QFIKEASEPIHVR	KYKGQVAVD TYCW	-	-	-	-
2353	Q9UQ84	482	NKKSVSSTPPRTRN	KFATFLQRKNEESG	+	-	-	-
2354	P39748	252	RGIGPKRAVDLIQ	KHKSIEEIVRRLDP	-	-	-	-
2355	P39748	80	MFYRTIRMMENGI	KPVYVFDGKPPQLK	+	-	-	-
2356	P39748	354	DDFFKVTGSLSSA	KRKEPEPKGSTKKK	+	-	-	-
2357	P39748	375	GSTKKKAKTGAAG	KFKRGKKKKKKKKK	+	-	-	-
2358	P39748	377	TKKKAKTGAAGKF	KRGKKKKKKKKKKK	+	-	-	-

2359	P39748	380	KAKTGAAGKFKRGK	+	-	-	-
2360	Q13642	70	KNRFWHDTCFRCAK	-	-	-	-
2361	Q13642	4	MMMMMMMMMAEK	+	-	-	-
2362	Q15024	178	IPRVRVLEDEEGSK	-	-	-	-
2363	Q15024	116	TEIANTLYRIFNNK	+	-	-	-
2364	Q9NZB2	129	RQTAQQIVSHVQNK	-	-	-	-
2365	Q9NZB2	932	CGAFSGSDSSRTSK	+	-	-	-
2366	C9JLW8	76	VEEYVEKVPNPSLK	-	-	-	-
2367	C9JLW8	79	YVEKVPNPSLKTFK	+	-	-	-
2368	Q7L8L6	327	NLEEVGTICLGFFK	-	-	-	-
2369	Q7L8L6	507	LSPGFVRLAQERTK	+	-	-	-
2370	Q9BX63	20	EYTIGGVKIYFPYK	-	-	-	-
2371	Q9BX63	1249	PSPSKNKGMPFGFK	+	-	-	-
2372	Q8NEZ5	137	RKRTSMETALALEK	-	-	-	-
2373	Q8NEZ5	194	QIEGIKIQPFHFIK	+	-	-	-
2374	Q8IVS2	250	VISGHQEALRFLQK	-	-	-	-
2375	Q8IVS2	314	VHAHRYRHPGHIHK	-	-	-	+
2376	Q9UKT8	273	CLNTLTGHTTEWVT	-	-	-	-
2377	Q9UKT8	298	LHSPGDYILLRADK	+	-	-	-
2378	Q5T1M5	864	QITALTKQNEQHIK	-	-	-	-
2379	Q5T1M5	92	AVHAYRYTNGQYVK	+	-	-	-
2380	Q02790	378	AVNDFELARADFQK	-	-	-	-
2381	Q02790	282	QSTIVKERGTVYFK	+	-	-	-
2382	Q13045	952	RYWVPVEYEEEEK	-	-	-	-
2383	Q13045	21	PFVRGVDLSGNDFK	+	-	-	-
2384	Q6P587	145	SAFVPKEKIPDPHK	-	-	-	-
2385	Q6P587	113	CLDMTARDVQDECK	+	-	-	-
2386	Q6P587	115	DMTARDVQDECKK	-	-	-	+
2387	P62942	48	KKFDSSRDNRNPKF	-	-	-	-
2388	P62942	53	SRDRNKPFFKMLGK	+	-	-	+
2389	Q96RU3	157	DCKEADRAQQYFEK	-	-	-	-
2390	Q96RU3	66	YQPKKNSKEEEYKY	+	-	-	-
2391	Q96RU3	110	QIIVDLARYVQELK	+	-	-	-
2392	Q6PIW4	124	KMSSVQKMMQAGK	-	-	-	-
2393	Q6PIW4	339	KSLGASRSRGILGK	+	-	-	-
2394	Q00688	156	TVFDTNIQTSAKK	-	-	-	-
2395	Q00688	99	KNVKLNEDKPKETK	+	-	-	-
2396	Q00688	170	KNAKPLSFKVGVGK	+	-	-	-
2397	Q9Y2H6	948	GAGPFSHMIKLTKL	-	-	-	-
2398	Q9Y2H6	384	PDIPNPPRIANRTK	+	-	-	-
2399	Q8N3X1	935	MPPPEKTKKGRKDK	-	-	-	-
2400	Q8N3X1	290	IYSKEKTISVSSSK	+	-	-	-
2401	Q13643	167	YENKFAPRCARCSK	-	-	-	-
2402	Q13643	157	DKGAHYCVPCYENK	+	-	-	-
2403	Q13643	235	SSCKRPIVGLGGGK	+	-	-	-
2404	Q5VW36	920	GRLGELELQLKHGK	-	-	-	-
2405	Q5VW36	819	QGKTVAGIPNFILK	+	-	-	-
2406	P14324	187	SSLTRRGQICWYQK	-	-	-	-
2407	P14324	123	RLKEVLEYNAIGGK	+	-	-	-
2408	P14324	353	CLQRATPEQYQILK	+	-	-	-
2409	Q9C0B1	275	LEGRDPDIWHVGFK	-	-	-	-
2410	Q9C0B1	216	LLNFMDPQKMPYLK	+	-	-	-
2411	O75369	1423	PFRVPVKDVVDPSK	-	-	-	-
2412	O75369	681	FTVDPKDGAKAPLK	+	-	-	-
2413	O75369	1780	PSGKTATPEIVDNK	+	-	-	-
2414	O75369	2518	IPKASSDASKVTSK	-	-	-	+
2415	O75369	2524	DASKVTSKGAGLSK	-	-	-	+
2416	O75369	2576	HVGNQQYNVTYVVK	+	-	-	-

2417	Q16658	43	GFKVNASASSLKKQIWTLEQPPDEAG	-	-	-	-
2418	Q16658	74	CLRSHLGRYLAADKDGNVTCEREVPGP	+	-	-	-
2419	O60318	674	VPGTDQVDHAAAVKEYSRSSADQEEPL	-	-	-	-
2420	O60318	489	VHFFDHASAAALARKKGKSLHKDMAIFW	+	-	-	-
2421	O60318	490	HFFDHASAAALARKKGKSLHKDMAIFWH	+	-	-	-
2422	Q12778	233	HSKFIRVQNEGTGKSSWWMLNPEGGKS	-	-	-	-
2423	Q12778	245	GKSSWWMLNPEGGKSGKSPRRRAASMD	+	-	-	-
2424	Q12778	248	SWWMLNPEGGKSGKSPRRRAASMDNNS	+	-	-	-
2425	Q12778	262	SPRRRAASMDNNSKFAKSRRAAKKKA	+	-	-	-
2426	Q12778	265	RRAASMDNNSKFAKSRRAAKKASLQ	+	-	-	-
2427	Q12778	274	SKFAKSRRAAKKASLQSGQEGAGDS	+	-	-	-
2428	O43524	569	NMGLSESSSLGSAKHQQQSPVSQSMQT	-	-	-	-
2429	O43524	46	WPLQRPELQASPAKPSGETAADSMIPE	-	-	+	-
2430	O43524	149	PQPGAAGSGGQPRKCSSRRNAWGNLSY	-	-	+	-
2431	O43524	230	HSRFMRVQNEGTGKSSWWIINPDGGKS	-	-	+	-
2432	O43524	242	GKSSWWIINPDGGKSGKAPRRRAVSMD	+	-	-	-
2433	O43524	262	RAVSMDNSNKYTKSRGRAAKKKAALQ	-	-	+	-
2434	O43524	271	NKYTKSRGRAAKKKAALQTAPESADDS	-	-	+	-
2435	O43524	290	APESADDSPSQLSKWPGSPTSRSSDEL	-	-	+	-
2436	O43524	419	GLMQRSSSFYPTTKGSGLSPTSSFN	-	-	+	-
2437	Q9BZS1	227	FLKHCQADHLLDEKGRAQCLLQREMVQ	-	-	-	-
2438	Q9BZS1	31	PSPGASPSWRAAPKASDLLGARGPGGT	+	-	-	-
2439	Q9BZS1	263	KEKLSAMQAHLAGKMALTKASSVASSD	+	-	-	-
2440	Q9BZS1	268	AMQAHLAGKMALTKASSVASSDKGSCC	+	-	-	-
2441	Q92945	281	ILIQDGSQNTNVDKPLRIIGDPYKVQQ	-	-	-	-
2442	Q92945	87	FADAVQRRARQIAAKIGGDAATTNNST	+	-	-	-
2443	P07954	263	GYVQQVKYAMTRIKAAMPRIYELAAGG	-	-	-	-
2444	P07954	61	NSFRIEYDTFGELKVPNDKYYGAQTVR	+	-	-	+
2445	P07954	66	EYDTFGELKVPNDKYYGAQTVRSTMNF	+	-	-	+
2446	P07954	80	YYGAQTVRSTMNFKIGGVTERMPTPVI	+	-	-	+
2447	P07954	94	IGGVTERMPTPVIKAFGILKRAAAEVN	+	-	-	-
2448	P07954	115	AAAEVNQDYGLDPKIANAIMKAADEVA	+	-	-	+
2449	P07954	122	DYGLDPKIANAIMKAADEVAEGKLNDH	+	-	-	+
2450	P07954	213	AIEVHEVLLPGLQKLHDALEDAKKEFA	+	-	-	-
2451	P07954	223	GLQKLHDALEDAKKEFAQIIKIGRTH	+	-	-	+
2452	P07954	256	TLGQEFSGYVQQVKYAMTRIKAAMPRI	+	-	-	-
2453	P07954	292	VGTGLNTRIGFAEKVAAKVAALTGLPF	+	-	-	+
2454	P07954	467	MLVTALNPHIGYDKAAKIAKTAHKN	-	-	-	+
2455	P07954	473	NPHIGYDKAAKIAKTAHKNSTLKET	-	-	-	+
2456	P07954	502	LGYLTAEQFDEWVKPKDMLGPKKKKK	+	-	-	-
2457	P15408	135	EEEEKRRIRRNKLAALKCRNRREL	-	-	-	-
2458	P15408	104	VPGHMALPRPGVIKTIGTTVGRRRDE	+	-	-	-
2459	P04406	309	DAGAGIALNDHFVKLISWYDNEFGYSN	-	-	-	-
2460	P04406	5	MMMMMMMMMGKVGVNGFGRIGRLV	-	-	+	-
2461	P04406	61	QYDSTHGKFHGTVKAENGLVINGNPI	+	-	-	-
2462	P04406	66	HGKFHGTVKAENGLVINGNPITIFQE	-	-	+	-
2463	P04406	194	ITATQKTVDGPGSKLWRDGRGALQNI	+	-	+	-
2464	P04406	215	ALQNIIPASTGAAKAVGKVIPELNGKL	-	-	+	-
2465	P04406	219	IIPASTGAAKAVGKVIPELNGKLTGMA	+	-	-	-
2466	P04406	227	AKAVGKVIPELNGKLTGMAFRVPTANV	+	-	+	-
2467	P04406	254	SVVDLTCRLEKPAKYDDIKKVVKQASE	+	-	-	-
2468	P04406	260	CRLEKPAKYDDIKKVVKQASEGPLKGI	-	-	+	-
2469	P04406	263	EKPAKYDDIKKVVKQASEGPLKGILGY	-	-	+	-
2470	P04406	334	SNRVVDLMAHMASKEEEEEEEEEEEEE	-	-	+	-
2471	P80404	400	SKNLLLAEVINIKREDLLNNAAHAGK	-	-	-	-
2472	P80404	231	HGRTMGCLATTHSKAIHKIDIPSFDWP	-	-	-	+
2473	P80404	252	PSFDWPIAPFPRIKYPLEEFVKENQQE	+	-	-	+
2474	P80404	279	EARCLEEVEDLIVKYRKKKKTVAGIIV	+	-	-	-

2475	P80404	318	SDDFFRKLRLDIAR K HGCAFLVDEVQTG	+	-	-	-
2476	P80404	413	KREDLLNNAAHAG K ALLTGLLDLQARY	+	-	-	+
2477	P80404	452	FCSFDTPDDSI RN KLILIA R NGVVLG	+	-	-	-
2478	P80404	470	ARNKG V VLGGCGD K SIRFRPTLVFRDH	+	-	-	-
2479	O95479	549	PAPMP S DFQVLRA K YRESPLVSAWSEE	-	-	-	-
2480	O95479	208	QEEEMYRVDHYLG K QAVAQILPFRDQN	-	-	-	+
2481	P06744	362	AAYFQQGD M ESNG K YITKSGTRVDHQT	-	-	-	-
2482	P06744	12	MMMAALTRDPQ FQ KLQQWYREHRSELN	+	-	-	-
2483	P06744	142	MKSFCQ R VRSGDW K GYTGKTITDVINI	+	-	-	-
2484	P15976	127	EDSP P QAVEDLDG K GSTSFLET L KTER	-	-	-	-
2485	P15976	233	TGHYLCNACGLYH K MNGQNRPLIRPKK	+	-	-	-
2486	P15976	245	HKMNGQNRPLIR P KRLIVSKRAGTQC	+	-	-	-
2487	P15976	246	KMNGQNRPLIR P KRLIVSKRAGTQCT	+	-	-	-
2488	P15976	252	RPLIRPKRLIV S KRAGTQCTNCQTTT	+	-	-	-
2489	P15976	308	LTMRKDG I QTRNR K ASGKGKKRGSSSL	+	-	-	-
2490	P15976	312	KDGIQTRNRKASG K GKKRGSSSLGGTG	+	-	-	-
2491	P15976	314	GIQTRNRKASGKG K KRGSSSLGGTGAA	+	-	-	-
2492	P15976	315	IQTRNRKASGKG K KRGSSSLGGTGAAE	+	-	-	-
2493	O75879	174	VNGSLIYGVCAG K QSQVIPKTVRIKQ	-	-	-	-
2494	O75879	529	VMDVKNRNPRAIN K LIGLVRKATQSRA	-	-	-	+
2495	P60520	48	KVSGSQIVDIDKR K YLVPSDITVAQFM	-	-	-	-
2496	P60520	24	LEHRCVESAKIR A KYPDRVPVIVEKVS	+	-	-	-
2497	P11413	45	HIFIIMGASGDLA K KKIYPTIWVLF	-	-	-	-
2498	P11413	89	TVADIRKQSEPF F KATPEEK L KLEDF	+	-	-	-
2499	P11413	171	CMSQIGWNRI I VE K PFGRDLQSSDRLS	+	-	-	-
2500	P11413	403	LVIRVQPN E AVYT K MMTKKPGMFFNPE	+	-	-	-
2501	P11413	432	ELDLTYGNRYK N KL P DAYERLILDVF	+	-	-	-
2502	P11413	497	YGSRGPT E ADELM K RVGFQYEGTYKWV	+	-	-	-
2503	P23378	754	GDFGSDVSHLN LH K T FCIPHGGGGPGM	-	-	-	-
2504	P23378	447	FFDTLKIQC G CSV K EVLGRAAQ R QINF	+	-	-	-
2505	P23378	514	MGE E CRGIPGS V F K RTSPFLTHQVFNS	+	-	-	-
2506	P23378	648	QKGEGHRTVCLIP K SAHG T NPASAHMA	+	-	-	-
2507	P23378	664	HGTNPASAHMAG M K I QPVEVDKYGNID	+	-	-	-
2508	O15117	698	LKKQEKEEKDFR K KFYDGEIRVLYST	-	-	-	-
2509	O15117	3	MMMMMMMMMMMA K YNTGGNPTEDVSV	+	-	-	-
2510	Q13283	50	NSSVHGGLDSNG K PADAVYGQKEIHR	-	-	-	-
2511	Q13283	376	YGNVVELRINSGG K LPNFGFVVFDDSE	+	-	-	-
2512	Q8TB36	314	ISAVLPTAFR V AK K RAPKVLGTTLVVG	-	-	-	-
2513	Q8TB36	203	KRLKSKLLDHD N V K YLKKILDELEKVL	+	-	-	-
2514	P06396	289	PKPALPAGTEDTA K EDAANRKLAKLYK	-	-	-	-
2515	P06396	584	NSAGATRAVEV L P K AGALNSNDAFVLK	+	-	-	-
2516	Q9UM11	173	LLRSPRK P TRKIS K IPFKVLDAP E LQD	-	-	-	-
2517	Q9UM11	69	NWSVNFHRIN E NE K SPSQNRKAKDATS	+	-	-	-
2518	Q9UM11	159	SPYSLSPVSN K SQ K LLRSPRK P TRKIS	+	-	-	-
2519	Q9UN86	365	MSFGNVVELRINT K GVGGKLPNFGFVV	-	-	-	-
2520	Q9UN86	392	FDDSEPVQRILIA K PIMFRGEVRLNVE	-	-	-	+
2521	P50395	288	ARCKQLICDPSY V KDRVEKVGQVIRVI	-	-	-	-
2522	P50395	57	ASITPLEDLYKR F KIPGSP P ESMGRGR	-	-	-	+
2523	P50395	112	YLD F KVTEGSFVY K GKKIYKVPSTEAE	+	-	-	-
2524	P50395	269	EEIIVQNGKVIG V K S EGEIARCKQLIC	+	-	-	-
2525	P52565	50	EIQELDKDDESLR K YKEALLGRVAVSA	-	-	-	-
2526	P52565	43	PAQ S IQEIQELD K DDESLRKYKEALL	+	-	-	-
2527	P52565	105	GDLESF K KQSFV L K E GVEYRIKISFRV	+	-	-	-
2528	P52565	127	ISFRVNREIVSG M KYIQHTYRKGVKID	+	-	-	-
2529	P52565	141	YIQHTYRKGVKID K TDYMGVSGYPRAE	+	-	-	+
2530	P52565	178	APKGMLARGSYS I KSRFTDDDKTDHLS	+	-	-	-
2531	P50440	331	SNPDRPCHQID L F K KAGWTIITPPTPI	-	-	-	-
2532	P50440	385	VDANEVPIQ K MF E KLGITTIKVNIRNA	+	-	-	-

2533	O75496	127	LKENEKLHKEIEQKDNEIARLKKENKE	-	-	-	-
2534	O75496	27	ENIKNSSVPRRTLKMIQPSASGSLVGR	+	-	-	-
2535	Q9UI32	188	TGGKVAAYIPQLAKSNPDLWGVSLCTV	-	-	-	-
2536	Q9UI32	97	QERIPHKFTTALKATGLQTS DPRLRD	-	-	-	+
2537	Q9UI32	244	STLGT DYVHKFVGKEPSGLRYNKL SLN	+	-	-	-
2538	Q9UI32	253	KFVGKEPSGLRYNKL SLNNEEGIPHNPM	-	-	-	+
2539	Q9UI32	279	MVNAGAI VVSSLIKMDCNKAEKFDFVL	+	-	-	-
2540	Q9UI32	284	AIVVSSLIKMDCNKAEKFDFVLQYLNK	+	-	-	-
2541	Q9UI32	329	ETGDRNYAIGYYLKEKKCFPGVDMMA	+	-	-	-
2542	Q92947	335	FGVPLARNQLIQKKLADMLTEITLGLH	-	-	-	-
2543	Q92947	240	RCEDGCIRGFLLKGMGRGLSAPRIQ GK	+	-	-	-
2544	Q5VTD9	61	TLFPNQCLDWTNLKREPELEQDQNLAR	-	-	-	-
2545	Q5VTD9	8	MMMMMMMPRSFLVKSKKAHTYHQPRVQ	-	-	+	-
2546	P10070	31	GILEAAGFPDPGK KASPLVAAAAAAA	-	-	-	-
2547	P10070	757	CSWAGPTPHTRNTKLPLPGSGSILEN	+	-	-	-
2548	Q16775	83	TKEAAIVDPVQPQKV VDAARKHGVKLT	-	-	-	-
2549	Q16775	116	HHWDHAGGNEKLVKLESGLKVYGGDDR	+	-	-	-
2550	Q16775	229	RVYCGHEY TINNLKFARHVEPGNAAIR	+	-	-	+
2551	Q8WU03	140	YMKTILFIPELPK KHTSSNDKMELFE	-	-	-	-
2552	Q8WU03	19	NSQKLQILYKSLEKSIPESIKVYGAIF	+	-	-	-
2553	P52566	95	PITMDLTGDLEALKKETIVLKEGSEYR	-	-	-	-
2554	P52566	21	PHVEEDDDDELDSKLNYKPPPQKSLKE	+	-	-	-
2555	P52566	25	EDDDDELDSKLNYKPPPQKSLKELQEM	+	-	-	-
2556	P52566	40	PPQKSLKELQEMDKDES LIKYKKTLL	+	-	-	-
2557	P52566	47	ELQEMDKDES LIKYKKTLLGDGPVVT	+	-	-	-
2558	P52566	102	GDLEALKKETIVLKEGSEYRVKIHFV	+	-	-	-
2559	P52566	124	IHFVNRDIVSGLKYVQHTYRTGVKVD	+	-	-	-
2560	P52566	175	APKGMLARGTYHNKSFFTDDDKQDHL	+	-	-	-
2561	Q8TDQ7	250	FVCDE DATLELRVKT VKYFKGLMHVHN	-	-	-	-
2562	Q8TDQ7	64	KLIEYHKNGHLSFKYVKT FNMDEYVGL	+	-	-	-
2563	P04150	256	EDCKPLILPDTKP KIKDNGDLVLSSPS	-	-	-	-
2564	P04150	480	KIRRKNC PACRYRKCLQAGMNLEARKT	+	-	-	-
2565	P04150	492	RKCLQAGMNLEARKTKKKIKGIQQATT	+	-	-	-
2566	P04150	494	CLQAGMNLEARKTKKKIKGIQQATTGV	+	-	-	-
2567	P04150	495	LQAGMNLEARKTKKKIKGIQQATTGVS	+	-	-	-
2568	P52306	216	LVAFGNLAELESSKEQFASTNIAEELV	-	-	-	-
2569	P52306	230	EQFASTNIAEELVLFKKQIEHDKREM	+	-	-	-
2570	Q9HC38	67	RITEDSF SKPYDGRWSKTMVGF GPEDD	-	-	-	-
2571	Q9HC38	288	AFRELSKMDPEGS KLLDDAMAADKSDE	-	-	-	+
2572	O94925	399	DRNFAIGYYLKEKCFPEGTDMVGILD	-	-	-	-
2573	O94925	130	NSEGKELVASGENKIKQGLLPSLEDLL	-	-	-	+
2574	O94925	164	QEKIPVHKFITALKSTGLRTSDPRLKE	-	-	-	+
2575	O94925	311	NDLGTEYVHRYVGKEPSGLRFNKLFLN	+	-	-	-
2576	P14314	157	LIEDWKKAREEQKKLIELQAGKKSLE	-	-	-	-
2577	P14314	166	EEKQKKLIELQAGKKSLEDQVEMLRTV	-	-	-	+
2578	P21695	313	PETARELYSILQHKLVDKFPLFMVAVY	-	-	-	-
2579	P21695	289	AFARTGKSIEQLEKELNGQKLQGPET	-	-	-	+
2580	P08151	371	NEKPYVCKLP GCTKRYTDPSSLRKHVK	-	-	-	-
2581	P08151	518	QLHQLRP IGTGRLKLP SLSHTGTTVSR	+	-	-	-
2582	Q6IB77	125	NEAIQNLA AIKSFKVKQTQRILYMAAE	-	-	-	-
2583	Q6IB77	16	LPLQGAQMLQMLEKSLRKS LPASLKVY	+	-	-	+
2584	Q6IB77	127	AIQNLA AIKSFKVKQTQRILYMAAETA	+	-	-	+
2585	Q6IB77	141	QTQRILYMAAETAKE LT PFLLSKILS	+	-	-	+
2586	Q6IB77	159	FLLSKILSPNGGKPKAINQEMFKLSS	+	-	-	-
2587	Q6IB77	169	NGGKPKAINQEMFKLSSMDVTHAHLVN	-	-	-	+
2588	Q6IB77	183	LSSMDVTHAHLVNF WHFGGNER SQRF	+	-	-	+
2589	Q6IB77	256	VTYVIYSHAQKLGLGFPVYSHVDYSN	+	-	-	+
2590	O15228	31	PSAVVLLYSKELK KWDEFEDILEERRH	-	-	-	-

2591	O15228	643	NALAACVRLGVVEKKKINNNCIFNVNE	+	-	-	-
2592	P35754	39	CRRAQEILSQLPIKQGLLEFVDITATN	-	-	-	-
2593	P35754	9	MMMMMAQEFVNCIKIQPGKVVFIFKPT	-	-	-	+
2594	Q86SX6	140	QMHQNGDLVEELKKLGIHSALLDEKDD	-	-	-	-
2595	Q86SX6	59	DALVKKDKVVVFLKGTPEQPQCGFSNA	-	-	-	+
2596	Q9UKJ3	1142	GYFGPKLPPSLGNKPVLPLIGKLPATR	-	-	-	-
2597	Q9UKJ3	479	KETSMTEPSEPGSKAEAKKALGGDVSD	+	-	-	-
2598	P18283	20	SFYDLSAISLDGEKVDFTNFRGRAVLI	-	-	-	-
2599	P18283	104	PGGGYQPTFTLVQKCEVNGQNEHPVFA	+	-	-	+
2600	P18283	138	YPYDDPFSLMTDPKLIWSPVRRSDVA	+	-	-	+
2601	P11021	81	FTPEGERLIGDAAKNQLTSNPENTVFD	-	-	-	-
2602	P11021	125	IKFLPFKVVEKKTOPYIQVDIGGGQTK	+	-	-	-
2603	P11021	213	NEPTAAAIAYGLDKREGEKNILVFDLG	+	-	-	-
2604	P11021	271	FDQRMVMEHFILYKKTGKDVRKDNRA	+	-	-	-
2605	P11021	326	YEGEDFSETLTRAKEEELNMDLFRSTM	+	-	-	-
2606	P11021	353	KPVQKVLEDSDLKSDIDEIVLVGGST	+	-	-	-
2607	P11021	447	TKLIPRNTTVVPTKKSQIFSTASDNQPT	-	-	-	+
2608	P11021	585	LKNQIGDKEKLGKLSSEDKETMEKAV	-	-	+	-
2609	Q9HAV7	200	EPGTVALSVKVGYLHGRTLRPALGVV	-	-	-	-
2610	Q9HAV7	94	ALADTENLRQRSQKLVEEAKLYGIQAF	+	-	-	+
2611	Q9HAV7	100	NLRQRSQKLVEEAKLYGIQAFCKDLLE	+	-	-	-
2612	Q9HAV7	120	FCKDLLEVADVLEKATQCVPKKEIKDD	-	-	-	+
2613	Q9HAV7	215	HGRTLRPALVGVEAAAAAAAAAAAAA	+	-	-	+
2614	P48507	94	INPDEREEMKVSARKLFIVESNSSSSSTR	-	-	-	-
2615	P48507	263	YSVIVKSRGIKSKGYILQAKRRGSSS	+	-	-	-
2616	Q9P2T1	190	KVGIGPGSVCTTRKKTGVGYPQLSVM	-	-	-	-
2617	Q9P2T1	291	YAGGVAEYRASEGKTVEVPFKGDVEHT	+	-	-	-
2618	Q14749	264	ASFTELLQAAFGGKCQHSVLGDFKPYK	-	-	-	-
2619	Q14749	46	LYIGDTRSRTAEYKAWLLGLLRQHGCQ	-	-	-	+
2620	Q14749	193	YDHILSTGCAPPKKNIIYKSDLT KDVT	-	-	-	+
2621	Q14749	198	STGCAPPKKNIIYKSDLT KDVTTSVLI	-	-	-	+
2622	Q14749	203	PPGKNIIYKSDLT KDVTTSVLIVNNKA	-	-	-	+
2623	P46926	124	AVDLQAECDAFEEKIKAAGGIELFVGG	-	-	-	-
2624	P46926	64	KLIEYYKNGDLSFKYVKTTFNMDEYVGL	+	-	-	-
2625	Q8N335	39	NNVKKLQKFASTVKMWVFEETVNGRKL	-	-	-	-
2626	Q8N335	291	AFARTGKTIEELEKEMLNGQKLQGPQT	-	-	-	+
2627	O75791	48	FKAELGSQEGYVPKNFIDIQFPKWFHE	-	-	-	-
2628	O75791	106	SISVRHEDDVQHFKVMRDNKGNYFLWT	+	-	-	-
2629	P09211	121	IYTNYEAGKDDYVKALPGQLKPFETLL	-	-	-	-
2630	P09211	103	VDMVNDGVEDLRCKYISLIYTNYEAGK	-	-	-	+
2631	P09211	116	KYISLIYTNYEAGKDDYVKALPGQLKP	-	-	-	+
2632	P09211	128	GKDDYVKALPGQLKPFETLLSQNGGK	+	-	-	-
2633	P34897	340	PHNHAIAAVALKQACTPMFREYSLQ	-	-	-	-
2634	P34897	103	SCLNNKYSEGYPGRYGGAEVVDEIE	+	-	-	-
2635	P34897	181	DGGHLTHGYMSDVKRISATSIFFESMP	+	-	-	-
2636	P34897	196	ISATSIFFESMPYKLNPKTGLIDYNQL	+	-	-	-
2637	P34897	297	GARSGLIFYRKGVKAVDPKTGREIPYT	+	-	-	-
2638	P34897	356	CTPMFREYSLQVLKNARAMADALLERG	+	-	-	-
2639	P34897	464	GVNIGLEVKSATAKLQDFKSFLLDSE	+	-	-	-
2640	P34897	469	LEVKSATAKLQDFKSFLLDSETSQRL	+	-	-	-
2641	P34897	474	KTAKLQDFKSFLLDSETSQRLANLRQ	+	-	-	-
2642	Q9BVP2	477	IEEKDIHEELPKRKERKQEEREDDKDS	-	-	-	-
2643	Q9BVP2	79	LRKQRLEELKQQQKLDQRQKELEKKRKL	+	-	-	-
2644	P62993	124	LRDGAGKYFLWVVKFNSLNELVDYHRS	-	-	-	-
2645	P62993	6	MMMMMMMMMEAIKAYDFKATADDELSF	+	-	-	-
2646	P62993	50	YKAELNGKDGFIKKNYIEMKPHPWFFG	+	-	-	-
2647	P62993	109	SLSVKFGNDVQHFVLRDGAGKYFLWV	+	-	-	-
2648	P78347	380	ELFERKYAQAIKAKGPVTIPYPLFQSH	-	-	-	-

2649	P78347	130	EDYFCFCYGKALGKSTVVPVPYEKMLR	+	-	-	-
2650	P78347	353	NAGKRKVPREFNFENWNRITDLRKQVE	+	-	-	-
2651	P78347	450	ELNSTREDLQLDKASGVKEEWYARI	+	-	-	-
2652	P78347	715	RTPTQTNGSNVPFKPRGREFSFEAWNA	+	-	-	-
2653	Q16777	100	AIRNDEELNKLKGVTIAQGGVLPNIQ	-	-	-	-
2654	Q16777	6	MMMMMMMMMSGRGKQGGKARAKAKSRS	+	-	-	-
2655	Q16777	37	LQFPVGRVHRLLRKGNVAERVGAGAPV	-	+	-	-
2656	Q16777	119	GGVLPNIQAVLLPKKTESHKAKSKKKK	-	+	-	-
2657	Q16777	120	GVLPNIQAVLLPKKTESHKAKSKKKK	-	+	-	-
2658	Q16777	125	IQAVLLPKKTESHKAKSKKKKKKKKK	-	+	-	-
2659	O75367	323	AFPSIGSGRNGFPQTAAQLILKAISS	-	-	-	-
2660	O75367	18	GGKKKSTKTSRSAKAGVIFPVGRMLRY	-	-	+	-
2661	O75367	116	GGVLPNIHPELLAKKRGSKGKLEAIIT	+	-	-	-
2662	O75367	123	HPELLAKKRGSKGKLEAIITPPPAKKA	+	-	+	-
2663	P00390	164	VSRLNAIYQNNLTKSHIEIIRGHAAFT	-	-	-	-
2664	P00390	97	AELGARAADVESHKLGTCVNVGCVPK	+	-	-	-
2665	Q6FI13	96	HLQLAIRNDEELNKLKGVTIAQGGVL	-	-	-	-
2666	Q6FI13	119	GGVLPNIQAVLLPKKTESHKAKGKKK	-	+	-	-
2667	Q6FI13	120	GVLPNIQAVLLPKKTESHKAKGKKK	-	+	-	-
2668	Q6FI13	126	QAVLLPKKTESHKAKGKKKKKKKKK	-	+	-	-
2669	P16104	76	ILELAGNAARDNKTTRIIPRHLQLAIR	-	-	-	-
2670	P16104	6	MMMMMMMMMSGRGKTGGKARAKAKSRS	+	-	-	-
2671	P16104	10	MMMMSGRGKTGGKARAKAKSRSSRAG	+	-	-	-
2672	P16104	37	LQFPVGRVHRLLRKGHYAERVGAGAPV	+	-	-	-
2673	P58876	25	KKGSKKAVTKAQKKGKKRKRSRKESY	-	-	-	-
2674	P58876	6	MMMMMMMMMPEPTKSAPAPKKGSKKAV	+	+	-	-
2675	P58876	12	MMPEPTKSAPAPKKGSKKAVTKAQKK	+	+	-	-
2676	P58876	13	MMPEPTKSAPAPKKGSKKAVTKAQKKD	+	+	-	-
2677	P58876	16	EPTKSAPAPKKGSKAVTKAQKKDGKK	+	+	-	-
2678	P58876	17	PTKSAPAPKKGSKAVTKAQKKDGKKR	+	+	-	-
2679	P06899	31	AVTKAQKKDGKKRKRSRKESYSIYVYK	-	-	-	-
2680	P06899	35	AQKKDGKKRKRKRKESYSIYVYKVLKQ	-	+	-	-
2681	P06899	47	RKESYSIYVYKVLQVHPDTGISSKAM	-	-	+	-
2682	Q6DRA6	6	MMMMMMMMMPEPAKFAPAPKKGSKKAV	+	+	-	-
2683	Q6DRA6	12	MMPEPAKFAPAPKKGSKKAVTKAQKK	+	+	-	-
2684	Q6DRA6	13	MMPEPAKFAPAPKKGSKKAVTKAQKKD	+	+	-	-
2685	Q6DRA6	16	EPAPKFAPAPKKGSKAVTKAQKKDGKK	+	+	-	-
2686	Q6DRA6	17	PAKFAPAPKKGSKAVTKAQKKDGKKR	+	+	-	-
2687	Q6DRA6	35	AQKKDGKKRKRKRKESYSIYVYKVLKR	-	+	-	-
2688	Q6DRA6	47	RKESYSIYVYKVLKRVHPDTGIWCKAM	-	-	+	-
2689	Q6DRA6	58	VLKRVHPDTGIWCKAMGIMNSFLNDIF	-	-	+	-
2690	Q6DRA6	86	RIAGEASRLAHYNKRSTITSRRSRRPC	+	-	+	-
2691	Q8N257	28	SKKAVTKAQKKDGKKRKRGRKESYSIY	-	-	-	-
2692	Q8N257	6	MMMMMMMMMPDPSKSAPAPKKGSKKAV	+	+	-	-
2693	Q8N257	12	MMMPDPSKSAPAPKKGSKKAVTKAQKK	+	+	-	-
2694	Q8N257	13	MMPDPSKSAPAPKKGSKKAVTKAQKKD	+	+	-	-
2695	Q8N257	16	DPSKSAPAPKKGSKAVTKAQKKDGKK	+	+	-	-
2696	Q8N257	17	PSKSAPAPKKGSKAVTKAQKKDGKKR	+	+	-	-
2697	Q8N257	21	APAPKKGSKKAVTKAQKKDGKKRKRGR	+	+	-	-
2698	Q8N257	24	PKKGSKKAVTKAQKKDGKKRKRGRKES	+	+	-	-
2699	Q8N257	35	AQKKDGKKRKRGRKESYSIYVYKVLKQ	-	+	-	-
2700	Q8N257	86	RIASEASRLAHYNKRSTITSREVQTAV	+	-	+	-
2701	Q9HCL2	50	CGFRPTIFRSATLKWKESLMSRKRPFV	-	-	-	-
2702	Q9HCL2	780	VAVYAESATYCLVKNVAMFKDIGVFK	+	-	-	-
2703	Q9HCL2	784	AESATYCLVKNVAMFKDIGVFKETKQ	+	-	-	-
2704	Q8N954	140	YRKKIHMKNQAEEKAAEQFRMLKNKQ	-	-	-	-
2705	Q8N954	123	IGHEASLKRKAEEKLESYRKKIHMKNQ	+	-	-	-
2706	P07203	38	AGGEPVSLGSLRGKVLLIENVASLUGT	-	-	-	-

2707	P07203	88	GFPCNQFGHQENAKNEEILNSLKYVRP	+	-	-	+
2708	P07203	114	PGGGFEPNFMFLFEKCEVNGAGAHPLFA	+	-	-	+
2709	P07203	148	APSDDATAALMTDPKLITWSPVCRNDVA	+	-	-	+
2710	P38646	537	IDANGIVHVSADKGTGREQQIIVIQSS	-	-	-	-
2711	P38646	76	TNSCVAVMEGKQAKVLENAEGARTTPS	+	-	-	-
2712	P38646	135	RLIGRRYDDPEVQKDIKNVPFKIVRAS	+	-	-	+
2713	P38646	138	GRRYDDPEVQKDIKNVPFKIVRASNGD	+	-	-	+
2714	P38646	143	DPEVQKDIKNVPFKIVRASNGDAWVEA	+	-	-	-
2715	P38646	206	VPAYFNDSQRQATKDAGQISGLNVLRV	+	-	-	+
2716	P38646	234	NEPTAAALAYGLDKSEDKVIAYVDLGG	+	-	-	-
2717	P38646	288	GEDFDQALLRHIVKEFKRETGVDLTkd	+	-	-	-
2718	P38646	300	VKEFKRETGVDLTkDNMALQRVREAAE	+	-	-	+
2719	P38646	368	VTDLIRRTIAPCQKAMQDAEVSKSDIG	-	-	-	+
2720	P38646	394	GEVILVGGMTRMPKVQQTVDLFGRAP	-	-	-	+
2721	P38646	567	SKDDIENMVKNAEKYAEEDRRKKERVE	+	-	-	+
2722	P38646	600	GIIHDTETKMEEFKDQLPADECNKLKE	+	-	-	+
2723	P38646	610	EEFKDQLPADECNKLKEEISKMRLLA	-	-	-	+
2724	P38646	612	FKDQLPADECNKLKEEISKMRLLARK	+	-	-	-
2725	P38646	646	IRQAASSLQQASLKLFE MAYKKMASER	+	-	-	+
2726	Q14687	792	AEQPPLKLDTSSEKLEFLQLFGLTTQQ	-	-	-	-
2727	Q14687	496	ATALLIQRRTNEEEKWLARQRRLRQEKE	+	-	-	-
2728	Q14687	739	YDEFLLQRRRLVSKLDLEERRRREAQE	+	-	-	-
2729	Q16772	84	ILNYIASKYNLYGKDIKERALIDMYTE	-	-	-	-
2730	Q16772	4	MMMMMMMMMMAGKPKLHYFNGRGRME	-	-	-	+
2731	Q7RTV2	127	PEERDAKTALVKEKIKNRYFPAFKVL	-	-	-	-
2732	Q7RTV2	4	MMMMMMMMMMMAEKPKLHYSNARGSM	-	-	-	+
2733	Q92522	188	GAGAKKDKGGKAKKTAAAGGKKVKKAA	-	-	-	-
2734	Q92522	47	KKRKNSKKKNQPGKYSQLVETIRRLG	+	-	-	-
2735	P20671	75	EILELAGNAARDNKKTRIIPRHLQLAI	-	-	-	-
2736	P20671	37	LQFPVGRVHRLLRKGNYSERVGAGAPV	-	+	-	-
2737	Q99878	16	GRGKQGGKARAKAKTRSSRAGLQFPVG	-	-	-	-
2738	Q99878	119	GGVLPNIQAVLLPKKTESHHKTKKKKK	-	+	-	-
2739	Q99878	120	GVLPNIQAVLLPKKTESHHKTKKKKK	-	+	-	-
2740	Q99878	126	QAVLLPKKTESHHKTKKKKKKKKKKK	-	+	-	-
2741	P0C0S8	6	MMMMMMMMMSGRGKQGGKARAKAKTRS	+	-	-	-
2742	Q99879	31	AINKAQKKDGKKRKRSRKESYSVYVYK	-	-	-	-
2743	Q99879	6	MMMPPEPVKSAPVKKGSKKAI	+	+	-	-
2744	Q99879	12	MMPEPVKSAPVKKGSKKAINKAQKK	+	+	-	-
2745	Q99879	13	MMPEPVKSAPVKKGSKKAINKAQKKD	+	+	-	-
2746	Q99879	16	EPVKSAPVKKGSKKAINKAQKKDGKK	+	+	-	-
2747	Q99879	17	PVKSAVPKKGSKKAINKAQKKDGKKR	+	+	-	-
2748	Q99879	21	APVKKGSKKAINKAQKKDGKKRKRSR	+	+	-	-
2749	Q99879	24	PKKGSKKAINKAQKKDGKKRKRSRKES	+	+	-	-
2750	Q16695	15	ARTKQTARKSTGGKAPRKQLATKVARK	+	-	-	-
2751	Q16695	19	QTARKSTGGKAPRKQLATKVARKSAPA	+	-	+	-
2752	Q16695	24	STGGKAPRKQLATKVARKSAPATGGVK	+	-	+	-
2753	Q16695	28	KAPRKQLATKVARKSAPATGGVKKPHR	+	-	+	-
2754	Q16695	37	KVARKSAPATGGVKPHRYRPGTVALR	+	-	+	-
2755	Q16695	38	VARKSAPATGGVKPHRYRPGTVALRE	-	-	+	-
2756	Q16695	65	IRRYQKSTELLIRKLFPQRLMREIAQD	-	-	+	-
2757	Q16695	80	PFQRLMREIAQDFKTDLRFQSSAVMAL	+	-	+	-
2758	Q16695	116	GLFEDTNLCVIHAKRVTIMPKDIQLAR	+	-	-	-
2759	Q16695	123	LCVIHAKRVTIMPKDIQLARRIRGERA	+	-	+	-
2760	Q9UJM8	309	KGTDVLKALALGAKAVFVGRPIVWGLA	-	-	-	-
2761	Q9UJM8	184	VRNRFKLPPQLRMKNFETSTLSFSPEE	-	-	-	+
2762	Q13442	41	QAEKQKAREEEEEQKEGGDGAAGDPKKE	-	-	-	-
2763	Q13442	132	KAKERYMKMHLAGKTEQAKADLARLAI	+	-	-	-
2764	Q13442	164	EEAARKKEEERKAKDDATLSGKRMQSL	+	-	-	-

2765	Q8TAA5	71	AERALRVKAVKLEKEVQDLTVRYQRAI	-	-	-	-
2766	Q8TAA5	142	EESEPEDQKLTLEKVFRGLLLLLEAKLK	+	-	-	-
2767	Q9NZM4	1132	VYQGALPSPSDYHKVDEEFETVSTQLL	-	-	-	-
2768	Q9NZM4	1057	TLNVAKAASSGPGKPSGLQYESKLSGL	+	-	-	-
2769	P49915	112	PVLGICYGMQMMNKVFGGTVHKKSVRE	-	-	-	-
2770	P49915	9	MMMMMMALCNGDSKLENAGGDLKDGH	+	-	-	-
2771	Q02539	25	SAAPEKPLAGKKAKKPAKAAAASKKKP	-	-	-	-
2772	Q02539	17	TVPPAPAASAAPEKPLAGKKAKKPAKA	+	-	-	-
2773	Q02539	78	LKKALAAAGYDVEKNNSRIKLGKISLV	+	-	-	-
2774	Q02539	93	NSRIKLGKISLVSKGTLVQTKGTGASG	+	-	-	-
2775	Q02539	125	KKASSVETKPGASKVATKTKATGASKK	+	-	-	-
2776	P16403	139	TKPKKPVGAAKKPKKAAGGATPKKSAK	-	-	-	-
2777	P16403	17	TAPAAPAAAPPAEKAPVKKKAACKAGG	+	-	-	-
2778	P16403	34	KKKAACKAGGTPRKASGPPVSELITKA	-	+	+	-
2779	P16403	64	SKERSGVSLAALKKALAAAGYDVEKNN	-	+	-	-
2780	P16403	85	DVEKNNSRIKLGKSLVSKGTLVQTKG	-	+	-	-
2781	P16403	90	NSRIKLGKSLVSKGTLVQTKGTGASG	-	+	-	-
2782	P16403	97	LKSLVSKGTLVQTKGTGASGSFKLNKK	-	+	-	+
2783	P16403	159	TPKKSAKKTPKKAKKPAAATVTKKVAK	-	+	-	-
2784	P16403	168	PKKAKKPAAATVTKKVAKSPKKAKVAK	-	+	-	-
2785	P16403	187	PKKAKVAKPKKAAKSAKAVKPKAAKP	-	-	+	-
2786	P10412	183	AKSPKKAKAAKPKKAPKSPAKAKAVKP	-	-	-	-
2787	P10412	17	TAPAAPAAPAPAEKTPVKKKARKSAGA	+	-	-	-
2788	P10412	26	APAEKTPVKKKARKSAGAAKRKASGPP	+	-	+	-
2789	P10412	34	KKKARKSAGAAKRKASGPPVSELITKA	-	-	-	+
2790	P16401	158	AAGAKKAVKKTPKKAKKPAAAGVKKVA	-	-	-	-
2791	P16401	17	TAPAETATPAPVEKSPAKKKATKKAAG	+	-	-	-
2792	P16401	27	PVEKSPAKKKATKKAAGAGAAKRKATG	-	-	+	-
2793	P16401	37	ATKKAAGAGAAKRKATGPPVSELITKA	-	-	-	+
2794	P16401	49	RKATGPPVSELITKAVAASKERNGLSL	+	-	-	-
2795	P16401	78	LKKALAAGGYDVEKNNSRIKLGKISLV	+	-	-	-
2796	P16401	168	TPKKAKKPAAAGVKVAKSPKKAKAAA	+	-	-	-
2797	Q96QV6	75	EILELAGNASRDNKKTRIIPRHLQLAI	-	-	-	-
2798	Q96QV6	6	MMMMMMMMMSGRGKQGGKARAKSKSRS	+	-	-	-
2799	Q96QV6	37	LQFPVGR IHRLLRKGNYAERIGAGAPV	-	+	-	-
2800	Q96QV6	119	GGVLPNIQAVLLPKKTESHHHKAQSKK	-	+	-	-
2801	Q96QV6	120	GVLPNIQAVLLPKKTESHHHKAQSKKK	-	+	-	-
2802	Q96QV6	127	AVLLPKKTESHHHKAQSKKKKKKKKKK	-	+	-	-
2803	Q8IUE6	76	IILELAGNAARDNKKTRIIIPRHLQLAVR	-	-	-	-
2804	Q8IUE6	119	GGVLPNIQAVLLPKKTESHKPGKNKKK	-	+	-	-
2805	Q8IUE6	120	GVLPNIQAVLLPKKTESHKPGKNKKKK	-	+	-	-
2806	Q96A08	26	KKGFKKAVVKTQKKEGKKRKRTRKESY	-	-	-	-
2807	Q96A08	7	MMMMMMMPPEVSSKGATISKKGFKKAV	+	+	-	-
2808	Q96A08	13	MMPEVSSKGATISKKGFKKAVVKTQKK	+	+	-	-
2809	Q96A08	14	MPEVSSKGATISKKGFKKAVVKTQKKE	+	+	-	-
2810	Q96A08	17	VSSKGATISKKGFKKAVVKTQKKEGKK	+	+	-	-
2811	Q96A08	18	SSKGATISKKGFKKAVVKTQKKEGKKR	+	+	-	-
2812	Q96A08	22	ATISKKGFKKAVVKTQKKEGKKRKRTR	+	+	-	-
2813	Q96A08	25	SKKGFKKAVVKTQKKEGKKRKRTRKES	+	+	-	-
2814	Q96A08	36	TQKKEGKKRKRTRKESYSIYIYKVLKQ	-	+	-	-
2815	Q96A08	48	RKESYSIYIYKVLKQVHPDTGISSKAM	-	-	+	-
2816	Q96A08	59	VLKQVHPDTGISSKAMSIMNSFVTDIF	-	-	+	-
2817	Q96A08	87	RIASEASRLAHYSKRSTISSREIQTAV	+	-	+	-
2818	O60814	31	AVTKAQKKGKKRKRSRKESYSVYVYK	-	-	-	-
2819	Q99877	6	MMMMMMMPPEPSKSAPAPKKGSKKAV	+	+	-	-
2820	Q99877	12	MMPEPSKSAPAPKKGSKKAVTKAQKK	+	+	-	-
2821	Q99877	13	MMPEPSKSAPAPKKGSKKAVTKAQKKD	+	+	-	-
2822	Q99877	16	EPSKSAPAPKKGSKKAVTKAQKKGKK	+	+	-	-

2823	Q6DN03	152	PSLPPRVAGCFVS	KGSFQGHLLTTSVKE	-	-	-	-
2824	Q5QNW6	25	KKGSKKAVTKVQK	KDGKKRKRSRKESY	-	-	-	-
2825	Q5QNW6	6	MMMMMMMMMPDPA	KSAPAPKKGSKKAV	+	+	-	-
2826	Q5QNW6	12	MMMPDPAKSAPAP	KGSKKAVTKVQKK	+	+	-	-
2827	Q5QNW6	13	MMPDPAKSAPAPK	KGSKKAVTKVQKKD	+	+	-	-
2828	Q5QNW6	16	DPAKSAPAPKKGS	KAVTKVQKKDGKK	+	+	-	-
2829	Q5QNW6	17	PAKSAPAPKKGSK	AVTKVQKKDGKKR	+	+	-	-
2830	Q5QNW6	21	APAPKKGSKKAVT	KVQKKDGKKRKRSR	+	+	-	-
2831	Q5QNW6	24	PKKGSKKAVTKVQ	KDGKKRKRSRKES	+	+	-	-
2832	Q5QNW6	35	VQKKDGKKRKRSR	KESYSVYVYKVLKQ	-	+	-	-
2833	Q9UQL6	294	LLRRKDGTIVISTF	KKRAVEITGAGPGA	-	-	-	-
2834	Q9UQL6	533	FLEKQKQQQLQLG	KILTKTGELPRQPT	+	-	-	-
2835	Q9Y2Q3	62	KDSGNKPPGLLPR	KGLYMANDLKLLRH	-	-	-	-
2836	Q9Y2Q3	49	NLQLRPSLITGIM	KDSGNKPPGLLPRK	-	-	-	+
2837	Q9Y2Q3	71	LLPRKGLYMANDL	KLLRHHLQIPIHFP	+	-	-	-
2838	Q9Y2Q3	85	LLRHHLQIPIHFP	KDFLSVMLEKGSLS	+	-	-	-
2839	Q9Y2Q3	116	LTAVNLEHPEMLE	KASRELWMRVWSRN	+	-	-	+
2840	Q9Y2Q3	144	DITEPQSILAAAE	KAGMSAEQAQGLLE	-	-	-	+
2841	Q9Y2Q3	158	AGMSAEQAQGLLE	KIATPKVKNQLKET	+	-	-	+
2842	Q9Y2Q3	165	AQGLLEKIATPKV	KNQLKETTEAACRY	+	-	-	-
2843	Q9Y2Q3	169	LEKIATPKVKNQL	KETTEAACRYGAFG	+	-	-	-
2844	P16402	140	AKPRKPAGAAKKP	KKVAGAATPKKSIK	-	-	-	-
2845	P16402	17	TAPLAPTIPAPAE	KTPVKKKAKKAGAT	+	-	-	-
2846	Q9BTM1	6	MMMMMMMMMSGRG	KQGGKVRAKAKSRS	+	-	-	-
2847	Q9BTM1	10	MMMMMSGRGKQGG	KVRAKAKSRSSRAG	+	-	-	-
2848	Q9UJ83	251	EQYKLPFLPTPMG	KGVVPDNHPYCVGA	-	-	-	-
2849	Q9UJ83	351	KTPWQYPPEKWW	KTLREKMKSNAAAS	-	-	-	+
2850	Q9UJ83	358	PESKWWKTLREKM	KSNEAASKELASKK	-	-	-	+
2851	Q9UJ83	365	TLREKMKSNAAAS	KELASKKSLPMNYY	-	-	-	+
2852	P68871	18	TPEEKSAVTALWG	KVNVDEVGGEALGR	-	-	-	-
2853	P68871	60	GDLSTPDVAMGNP	KVKAHGKKVLGAFS	+	-	-	-
2854	P68871	83	GAFSDGLAHLN	LKGTFFATLSELHCDK	+	-	-	-
2855	P68871	145	QKVVGAVANALAH	KYHHHHHHHHHHHHH	+	-	-	-
2856	P78417	65	ININLKNKPEWFF	KKNPFGLVPVLENS	-	-	-	-
2857	P78417	57	AKGIRHEVININL	KNKPEWFFKKNPFG	+	-	-	-
2858	P78417	143	FIRSQNKEDYAGL	KKEFRKEFTKLEEV	+	-	-	-
2859	P78417	148	NKEDYAGLKEEFR	KKEFTKLEEVLTNKK	+	-	-	-
2860	P78417	152	YAGLKEEFRKEFT	KLEEVLTNKKTTFF	+	-	-	-
2861	Q71UI9	75	LTAEVLELAGNAS	KDLKVKRITPRHLQ	-	-	-	-
2862	Q71UI9	5	MMMMMMMMMMAGG	KAGKDSGKAKAKAV	+	-	-	-
2863	Q71UI9	8	MMMMMMAGGKAG	KDSGKAKAKAVSRS	+	-	-	-
2864	Q71UI9	12	MMAGGKAGKDSG	KAKAKAVSRSQRAG	+	-	-	-
2865	P0C0S5	78	EVLELAGNASKDL	KVKRITPRHLQLAI	-	-	-	-
2866	P0C0S5	5	MMMMMMMMMMAGG	KAGKDSGKAKTKAV	+	-	+	-
2867	P0C0S5	8	MMMMMMAGGKAG	KDSGKAKTKAVSRS	+	-	+	-
2868	P0C0S5	12	MMAGGKAGKDSG	KAKTKAVSRSQRAG	+	-	-	-
2869	P0C0S5	14	MAGGKAGKDSGK	AKTKAVSRSQRAGLQ	+	-	-	-
2870	P69905	57	FPHFDLSHGSAQV	KGHGKKVADALTNA	-	-	-	-
2871	P69905	8	MMMMMMVLSPADK	KTNVKAAWGKVGHAH	-	-	-	+
2872	P69905	12	MMMVLSPADKTNV	KAAWGKVGHAHAGEY	-	-	-	+
2873	P69905	17	SPADKTNVKAAGW	KVGHAHAGEYGAEAL	+	-	-	+
2874	P69905	41	EALERMFLSFPTT	KTYFPHFDLSHGSA	-	-	-	+
2875	Q9Y450	424	VNWQQERFQEITG	KLGHFLKQAGFKES	-	-	-	-
2876	Q9Y450	622	EPAVIKRLISVLN	KSTGEVTKKKPKFL	+	-	-	-
2877	Q9BSH5	227	PQALDPVVRDSVP	KEHILPSLAHLLPA	-	-	-	-
2878	Q9BSH5	15	AHRLQIRLLTWDV	KDTLLRLRHPLGEA	+	-	-	+
2879	P13716	179	APSDMMDGRVEAI	KEALMAHGLGNRVS	-	-	-	-
2880	P13716	199	GLGNRVSVMSSAK	KFASCFYGPFRDAA	-	-	-	+

2881	P13716	252	DRDVREGADMLMVKPGMPYLDIVREVK	-	-	-	+
2882	P36551	273	NYRYFEVEEADGNKQWWFGGGCDLTPT	-	-	-	-
2883	P36551	404	RYVEFNLLYDRGTKFGFLTTPGSRIESI	+	-	-	+
2884	B2RPK0	65	MSAKEKGKFEDMAKADKTHYERQMPTY	-	-	-	-
2885	B2RPK0	3	MMMMMMMMMMMMMGKGDPPKPRGKMSSY	+	-	-	-
2886	B2RPK0	7	MMMMMMMMMGKGDPPKPRGKMSSYAFFV	+	-	-	-
2887	B2RPK0	8	MMMMMMMMMGKGDPPKPRGKMSSYAFFVQ	+	-	-	-
2888	B2RPK0	12	MMMGKGDPPKPRGKMSSYAFFVQTCRE	+	-	-	-
2889	B2RPK0	28	SYAFFVQTCREEHKKKHSDASVNFSEF	+	-	-	-
2890	B2RPK0	29	YAFFVQTCREEHKKKHSDASVNFSEFS	+	-	-	-
2891	B2RPK0	30	AFFVQTCREEHKKKHSDASVNFSEFSN	+	-	-	-
2892	B2RPK0	90	TYIPPKGETKKKFKDPNAPKRPPSAFF	+	-	-	-
2893	B2RPK0	127	KGEHPGLSIGDVAKKLGEWNNNTAADD	+	-	-	-
2894	B2RPK0	128	GEHPGLSIGDVAKKLGEWNNNTAADDK	+	-	-	-
2895	B2RPK0	141	KLGEWNNNTAADDKQPGEKKAALKKEK	+	-	-	-
2896	B2RPK0	172	IAAYQAKGKPEAAKKGVVKAESKSKKK	+	-	-	-
2897	B2RPK0	173	AAAYQAKGKPEAAKKGVVKAESKSKKKKE	+	-	-	-
2898	B2RPK0	177	AKGKPEAAKKGVVKAESKSKKKKEEEED	+	-	-	-
2899	B2RPK0	180	KPEAAKKGVVKAESKSKKKKEEEDEED	+	-	-	-
2900	B2RPK0	182	EAAKKGVVKAESKSKKKKEEEDEEDEE	+	-	-	-
2901	B2RPK0	183	AAKKGVVKAESKSKKKKEEEDEEDEED	+	-	-	-
2902	B2RPK0	184	AKKGVVKAESKSKKKKEEEDEEDEEDE	+	-	-	-
2903	B2RPK0	185	KKGVVKAESKSKKKKEEEDEEDEEDEE	+	-	-	-
2904	Q6NXT2	19	QTARKSTGGKAPRQLATKAARKSTPS	+	-	+	-
2905	Q6NXT2	24	STGGKAPRKQLATKAARKSTPSTCGVK	+	-	+	-
2906	Q6NXT2	28	KAPRKQLATKAARKSTPSTCGVKPHRY	+	-	+	-
2907	Q6NXT2	37	KAARKSTPSTCGVKPHRYRPGTVALRE	-	-	+	-
2908	Q6NXT2	115	GLLEDTNLCAIHAKRVTIMPKDIQLAR	+	-	-	-
2909	P14317	207	FGGQYGIQKDRVDKSAVGFNEMEAPT	-	-	-	-
2910	P14317	41	VNDISEKEQRWAKTIEGSGRTEHINI	+	-	-	-
2911	P14317	123	HSSQTDAAKGFGGKYGVERDRADKSAV	+	-	-	-
2912	P14317	192	GETEKHESQRDYAKGFGGQYGIQKDRV	+	-	-	-
2913	P14317	241	IEAASSGTRGLKAKFESMAEEKRKREE	+	-	-	-
2914	Q93099	353	SEFMGLIRGHYEAQGGFLPGGSLHS	-	-	-	-
2915	Q93099	98	WDEVDPDPNQLRWKPFEPKASQKKVD	+	-	-	-
2916	Q93099	414	ESSLSLAVTKWGLKASRCLDENYHKCW	-	-	-	+
2917	Q53T59	343	PKPPVAAKPVIPRPAVPPKAGPAEAV	-	-	-	-
2918	Q53T59	337	PKPQLKPKPPVAAKPVIPRPAVPPKA	+	-	-	-
2919	Q96KK5	119	GGVLPNIQAVLLPKKTESHHKAKKKKK	-	+	-	-
2920	Q96KK5	120	GVLNPIQAVLLPKKTESHHKAKKKKKKK	-	+	-	-
2921	Q96KK5	126	QAVLLPKKTESHHKAKKKKKKKKKKKK	-	+	-	-
2922	Q99714	79	TSEKDVQTALALAKGKFGRVDAVNCA	-	-	-	-
2923	Q99714	53	LDLPNSGGEAQAKKLGNNCVFAPADVT	+	-	-	+
2924	Q99714	69	NNCVFAPADVTSEKDVQTALALAKGKF	+	-	-	-
2925	Q99714	99	DVAVNCAIAVASKTYNLKKGQHTTLE	+	-	-	-
2926	Q99714	105	AGIAVASKTYNLKKGQHTTLEDFQRVL	+	-	-	-
2927	Q99714	212	GLFGTPLLTSLPEKVCNFLASQVPFPS	+	-	-	+
2928	Q16836	24	SVSSSSTASASAKIIVKHVTVIGGGL	-	-	-	-
2929	Q16836	80	KKGIEESLRKVAKKKAFAENLKAGDEFV	-	-	-	+
2930	Q16836	81	KGIEESLRKVAKKKAFAENLKAGDEFVE	+	-	-	+
2931	Q16836	87	LRKVAKKKKAFAENLKAGDEFVEKTLSTI	+	-	-	+
2932	Q16836	125	STDLVVEAIVENLKVKNELFKRLDKFA	+	-	-	-
2933	Q16836	136	NLKVKNELFKRLDKFAAEHTIFASNTS	+	-	-	+
2934	Q16836	179	FAGLHFFNPVPVMKLVEVIKTPMTSQK	+	-	-	-
2935	Q16836	185	FNPVPVMKLVEVIKTPMTSQKTFESLV	+	-	-	+
2936	Q16836	192	KLVEVIKTPMTSQKTFESLVDFSALG	+	-	-	+
2937	Q16836	202	TSQKTFESLVDFSALGKHPVSCKDTP	+	-	-	+
2938	Q16836	206	TFESLVDFSALGKHPVSCKDTPGFIV	-	-	-	+

2939	Q16836	212	DFSKALGKHPVSC K DTPGFIVNRLLP	+	-	-	+
2940	Q16836	241	MEAIRLYERGDAS K EDIDTAMKLGAGY	+	-	-	+
2941	Q16836	312	ENKFGKKTGEFY K YKKKKKKKKKKK	+	-	-	+
2942	P51858	151	KLVIDEPAKEKNE K GALKRRAGDLLED	-	-	-	-
2943	P51858	44	DEMPEAAVKSTAN K YQVFFFGTHETAF	+	-	-	-
2944	Q9H0R4	62	TKESKQDLLERLR K LEFDISEDEIFTS	-	-	-	-
2945	Q9H0R4	50	GASVIIRFVTNTT K ESKQDLLERLRKL	-	-	-	+
2946	P49773	25	RPGGDTIFGKIIR K EIPAKIIFEDDRC	-	-	-	-
2947	P49773	21	AQVARPGGDTIFG K IIRKEIPAKIIFE	+	-	-	-
2948	P49773	30	TIFGKIIRKEIPAK I IFEDDRCLAFHD	+	-	-	-
2949	P33778	44	KRSRKESYSIYVY K VLKQVHPDTGISS	-	-	-	-
2950	P33778	6	MMMMMMMMPEPS K SAPAPKKGSKKAI	+	+	-	-
2951	P33778	12	MMPEPSKSAPAP K KGSKKAITKAQKK	+	+	-	-
2952	P33778	13	MMPEPSKSAPAP K KGSKKAITKAQKKD	+	+	-	-
2953	P33778	16	EPSKSAPAPKKG S KAITKAQKKDGKK	+	+	-	-
2954	P33778	17	PSKSAPAPKKG S KAITKAQKKDGKKR	+	+	-	-
2955	P33778	21	APAPKKGSKKAIT K AQKKDGKKRKRSR	+	+	-	-
2956	P33778	24	PKKGSKKAITKAQ K KDGKKRKRSRKES	+	+	-	-
2957	Q93079	44	KRSRKESYSVYVY K VLKQVHPDTGISS	-	-	-	-
2958	Q93079	12	MMMPDPAKSAPAP K KGSKKAVTKAQKK	+	+	-	-
2959	Q93079	13	MMPDPAKSAPAP K KGSKKAVTKAQKKD	+	+	-	-
2960	Q93079	16	DPAKSAPAPKKG S KAVTKAQKKDGKK	+	+	-	-
2961	Q99880	6	MMMMMMMMPELA K SAPAPKKGSKKAV	+	+	-	-
2962	Q99880	12	MMPELAKSAPAP K KGSKKAVTKAQKK	+	+	-	-
2963	Q99880	13	MMPELAKSAPAP K KGSKKAVTKAQKKD	+	+	-	-
2964	Q99880	16	ELAKSAPAPKKG S KAVTKAQKKDGKK	+	+	-	-
2965	Q99880	17	LAKSAPAPKKG S KAVTKAQKKDGKKR	+	+	-	-
2966	Q99880	86	RIASEASRLAHYN K RSTITISREIQTAV	+	-	+	-
2967	P57053	29	KKAVTKAQKKDGR K RKRSRKESYSVYV	-	-	-	-
2968	P57053	16	EPAKSAPAPKKG S KAVTKAQKKDGRK	+	+	-	-
2969	P57053	17	PAKSAPAPKKG S KAVTKAQKKDGRKR	+	+	-	-
2970	P57053	21	APAPKKGSKKAVT K AQKKDGRKRKRSR	+	+	-	-
2971	P57053	24	PKKGSKKAVTKAQ K KDGRKRKRSRKES	+	+	-	-
2972	P57053	35	AQKKDGRKRKR S RKESYSVYVYKVLKQ	-	+	-	-
2973	P57053	86	RIAGEASRLPHY N KRSTITISREIQTAV	+	-	+	-
2974	O14929	364	YRLDIKRRLISPY K KKQDRLAKMRKCL	-	-	-	-
2975	O14929	9	MMMMMAGFGAME K FLVEYKSAVEKKL	+	-	-	-
2976	O14929	15	AGFGAMEKFLVEY K SAVEKKLAEYKCN	+	-	-	-
2977	Q13547	363	MTNQNTNEYLEK I KQRLFENLRMLPHA	-	-	-	-
2978	Q13547	74	AEEMTKYHSDDY I KFLRSIRPDNMSEY	+	-	-	-
2979	Q13547	220	GTGDLRDIGAGKG K YYAVNYPLRDGID	+	-	-	-
2980	P08397	176	FRSIRGNLNRRLR K LDEQQEFSAILA	-	-	-	-
2981	P08397	74	DKILDALTALSKIGE K SLFTKELEHALEK	+	-	-	-
2982	P22830	328	TDESIKGLCERGR K NILLVPIAFTSDH	-	-	-	-
2983	P22830	57	AVTTETAQHAQGA K PQVQPQKRKPKTG	+	-	-	-
2984	P22830	138	RIGGGSPIKIWTS K QEGGMVKLLDELS	-	-	-	+
2985	P22830	415	SCPLCVNPVCRET K SFFTSQQLLLLLL	+	-	-	+
2986	Q14526	642	GGLPGVPDGDGKG K LDFPEGVFAVARL	-	-	-	-
2987	Q14526	333	GRPDGPSLLYRWM K HEPGLGSYGDELG	+	-	-	-
2988	P51610	1863	QLKKQELQPGTAY K FRVAGINACGRGP	-	-	-	-
2989	P51610	288	PLVMDDVKVATHE K EWKCTNTLACLNL	+	-	-	-
2990	P51610	813	TTKVMTSGTGAPAK I ITAVPKIATGHG	+	-	-	-
2991	P51610	2005	GPATQVRWLQETS K DSSGTPANKRPM	+	-	-	-
2992	A6NFD8	51	PMALAKQSSGKLE K AEILEMTVQYLRA	-	-	-	-
2993	A6NFD8	48	KTVPMALAKQSSG K LEKAEILEMTVQY	+	-	-	-
2994	Q9BX68	42	RGAAGVTDGNEVA K AQQATPGGAAPT I	-	-	-	-
2995	Q9BX68	119	EDQQLLGHLLLVA K QTAKAEGLGDGYR	+	-	-	-
2996	Q9BX68	139	GLGDGYRLVINDG K LGAQSVYHLHIHV	+	-	-	-

2997	P09429	152	DDKQPYEKKAAKLKEKYEKDIAAYRAK	-	-	-	-
2998	P09429	28	SYAFFVQTCREEHKKKHPDASVNFSEF	+	-	-	-
2999	P09429	29	YAFFVQTCREEHKKKHPDASVNFSEFS	+	-	-	-
3000	P09429	30	AFFVQTCREEHKKKHPDASVNFSEFSK	+	-	-	-
3001	P09429	43	KHPDASVNFSEFSKKCSERWKTMSAKE	+	-	-	-
3002	P09429	141	KLGEMWNNNTAADDKQPYEKKAALKKEK	+	-	-	-
3003	P09429	172	IAAYRAKGKPDAAKKGVVKAESKSKKK	+	-	-	-
3004	P09429	173	AAAYRAKGKPDAAKKGVVKAESKSKKKKE	+	-	-	-
3005	P09429	177	AKGKPDAAKKGVVKAESKSKKKKEEED	+	-	-	-
3006	P09429	180	KPDAAKKGVVKAESKSKKKKEEEDDEED	+	-	-	-
3007	P09429	182	DAAKKGVVKAESKSKKKKEEEDDEEDEE	+	-	-	-
3008	P35914	97	QMGDHTVLKGIQKFPGINYPVLTPLNL	-	-	-	-
3009	P35914	48	IVEVGPRDGLQNEKNIVSTPVKIKLID	+	-	-	+
3010	P35914	111	FPGINYPVLTPLNLKGFEAAVAAGAKEV	+	-	-	-
3011	P35914	137	VVIFGAASELFTKKNINCSIEESFQRF	+	-	-	+
3012	P35914	179	GYVSCALGCPYEGKISPAKVAEVTKKF	+	-	-	+
3013	P35914	324	NRKTSSKVAQATCKLLLLLLLLLLLLLLL	+	-	-	-
3014	P52597	98	VFKSHRTEMDWVLKHSGPNSADSANDG	-	-	-	-
3015	P52597	200	SQEEVRSYSDPPLKFMSVQRPQPYDRP	+	-	-	-
3016	P52597	224	DRPGTARRYIGIVKQAGLERMRPGAYS	+	-	-	-
3017	P14866	475	GQSYGLEDGSCSYKDFSESRNNRFSTP	-	-	-	-
3018	P14866	269	IYSGCCTLKIEYAKPTRLNVFKNDQDT	+	-	-	-
3019	O60506	338	PIEDPDPEVMAKVVLFRNLANTVTE	-	-	-	-
3020	O60506	221	VTFTCKEAAQEAVKLYNNHEIRSGKHI	+	-	-	-
3021	O60506	363	TEEILEKAFSQFGKLERVKKLKDYAFI	+	-	-	-
3022	Q00839	238	PGAPAAAGDGKTEQKGGDKKRGVKRPRE	-	-	-	-
3023	Q00839	265	DHGRGYFEYIEENKYSRAKSPQPPVEE	+	-	-	-
3024	Q00839	352	KVTEKIPVRHLYTKDIDIHEVRIGWSL	+	-	-	-
3025	Q00839	516	IGLPGAGKTTWVTKHAAENPGKYNILG	+	-	-	-
3026	Q00839	524	TTWVTKHAAENPGKYNILGTNTIMDKM	+	-	-	-
3027	Q00839	551	MVAGFKKQMDTGKLNLTLLQRAPQCLG	+	-	-	-
3028	Q00839	565	LNTLLQRAPQCLGKFIEIAARKKRNF I	+	-	-	-
3029	Q00839	635	EVEGKDLPEHAVLKMKGNF TLPEVAEC	+	-	-	-
3030	Q00839	814	GYNQWQQGQFWGQKPWSQHYHQGYYYY	+	-	-	-
3031	P42858	1604	VLQQCHKENEDKWKRLSRQIADIILPM	-	-	-	-
3032	P42858	9	MMMMMATLEKLMKAFESLSKFQQQQQ	+	-	-	-
3033	P42858	176	LPRLQLELYKEIKKNGAPRSLRAALWR	+	-	-	-
3034	P42858	234	EESVQETLAAAVPKIMASFGNFANDNE	+	-	-	-
3035	P42858	343	KDTSLKGSFGVTRKEMEVSPPSAEQLVQ	+	-	-	-
3036	P42858	442	SSCSPVLSRKQKGKVLGEEEALEDDS	+	-	-	-
3037	Q6NVY1	110	GGDIRVISEAEKAKQKIAPVFFREEYM	-	-	-	-
3038	Q6NVY1	55	KKGCTGVITLNRPKFLNALTLMIRQI	+	-	-	+
3039	Q6NVY1	92	PETFLIIIKGAGGKAFCAGGDIRVISE	+	-	-	+
3040	Q6NVY1	221	YRAGIATHFVDSEKLAMLEEDLLALKS	+	-	-	+
3041	Q6NVY1	257	LENYHTESKIDRDKSFIEEHMDKINS	-	-	-	+
3042	Q6NVY1	297	LQQDGSSFALEQLKVINKMSPTSLKIT	+	-	-	+
3043	Q6NVY1	301	GSSFALEQLKVINKMSPTSLKITLRQL	-	-	-	+
3044	Q6NVY1	353	HDFHEGVRAVLIDKDQSPKWKPADLKE	+	-	-	+
3045	Q6NVY1	360	RAVLIDKDQSPKWKPADLKEVTEEDLN	+	-	-	-
3046	Q6NVY1	365	DKDQSPKWKPADLKEVTEEDLNNHFKS	+	-	-	-
3047	Q6NVY1	377	LKEVTEEDLNNHFKSLGSSDLKFFFFFF	-	-	-	+
3048	Q8IWW8	147	YVAVGGGSTMDTCKAANLYASSPHSDF	-	-	-	-
3049	Q8IWW8	445	ALVKGTLPQERVTKLAPCPQSEEDLAA	+	-	-	-
3050	P26583	28	SYAFFVQTCREEHKKKHPDSSVNFAEF	-	-	-	-
3051	P26583	30	AFFVQTCREEHKKKHPDSSVNFAEFSK	+	-	-	-
3052	P26583	114	AFFLFCSEHRPKIKSEHPGLSIGDTAK	+	-	-	-
3053	P05204	48	PKPEPKPKKAPAKKGEKVPKGKKGKAD	-	-	-	-
3054	P05204	82	PAENGDAKTDQAQKAEGAGDAKKKKKK	+	-	-	-

3055	O00479	31	KDEPQRRSARLSA K PAPPKPEPRPKA	-	-	-	-
3056	O00479	82	PAKNRDASTLQSQ K AEGTGDAKKKKKK	+	-	-	-
3057	O14979	221	LKEHKLDGKLIDP K RAKALKGKEPPKK	-	-	-	-
3058	O14979	161	GKMFIGGLSWDTS K KDLTEYLSRFGEV	-	-	+	-
3059	O14979	216	DKVLELKEHKLDG K LIDPKRAKALKGK	+	-	-	-
3060	Q5SSJ5	501	RGKARPLPKKAPP K AKTPAKKTRPSST	-	-	-	-
3061	Q5SSJ5	190	GASVVAIRKYIIH K YPSLELERRGYLL	+	-	-	-
3062	Q6YN16	295	SKKVESTGAVPEF K EELQLQPKPRSG	-	-	-	-
3063	Q6YN16	116	SAISLTNTLDTPT K RDLMMNVNTRGT	+	-	-	-
3064	Q6YN16	318	PRSGAVEETFFRIV K DSLSDDVVKATQA	-	-	-	+
3065	Q16665	477	SSADPALNQEVAL K LEPNPESLELSFT	-	-	-	-
3066	Q16665	532	YCFYVDSMDVNEF K LELVEKLFADTE	+	-	-	-
3067	Q16665	709	SQRTTVPEEELNP K ILALQNAQRKRKM	+	-	-	-
3068	Q01581	102	RLEVGTETIIDKS K SVKTNLMQLFEES	-	-	-	-
3069	Q01581	46	QAELEKYDGVDA G KYITIGLGQAKMGFC	+	-	-	-
3070	Q01581	273	FMIFHSPYCKLV K SLARMLLNDFLND	+	-	-	-
3071	O15347	50	NFAEFSSKKCSERW K TMSGKEKSKFDEM	-	-	-	-
3072	O15347	30	AFFVQTCREEHKK K NPEVPVNFAEFSK	+	-	-	-
3073	P05114	38	SAKPPAKVEAKP K AAAKDKSSDKKVQ	-	-	-	-
3074	P05114	14	MPKRKVSSAEGAA K EEPKRRSARLSAK	+	-	-	-
3075	P05114	27	KEEPKRRSARLSA K PPAKVEAKPKKAA	+	-	-	-
3076	P05114	82	ETKEDLPAENGET K TEESPASDEAGEK	+	-	-	-
3077	P61978	405	VTIPKDLAGSIIG K GGQRIKQIRHESG	-	-	-	-
3078	P61978	198	CPHSTDRVVLIG G KPDRVVECIKIILD	+	-	-	-
3079	P04792	171	SPEGTLTVEAPMP K LATQSNIEITIPVT	-	-	-	-
3080	P04792	123	TVKTKDGVVEIT G KHEERQDEHGYISR	+	-	-	-
3081	O14964	344	NRNYWEKKQEEAR K SPTPSAPVPLTEP	-	-	-	-
3082	O14964	207	SSKYSTIPKFGIE K EV RVCEPCYEQLN	+	-	-	-
3083	O14964	551	EQEKERQMRLEQ Q KQTVQMRAQMPAFP	-	-	-	+
3084	P54868	46	HQRFSTASAVPLA K TDTPWPKDVGILAL	-	-	-	-
3085	P54868	52	ASAVPLAKTDTPW K DVGILALEVYFPA	-	-	-	+
3086	P54868	83	QTDLEKYNVVEAG K YTVGLGQTRMGFC	+	-	-	+
3087	P54868	221	TGGAGAVAMLIGP K APLALERGLRGTH	-	-	-	+
3088	P54868	243	LRGTHMENVDYF K PNLASEYPIVDGK	+	-	-	-
3089	P54868	256	KPNLASEYPIVDG K LSIQCYLRALDRC	+	-	-	+
3090	P54868	306	DDLQYMIFFHTPF C KMVQKSLARLMFND	+	-	-	-
3091	P54868	310	YMIFHTPFCKMV Q KSLARLMFNDFLSA	+	-	-	+
3092	P54868	333	FLSASDTQTS L YKGLEAFGGGLKLEDT	-	-	-	+
3093	P54868	342	TSLYKGLEAFGG L KLEDITYTNKDLDKA	+	-	-	+
3094	P54868	350	AFGGGLKLEDITY T NKDLDKALLKASQDM	+	-	-	+
3095	P54868	354	LKLEDITYTNKD L DKALLKASQDMFDKK	+	-	-	+
3096	P54868	358	DTYTNKDLDK A LLKASQDMFDKKTAS	+	-	-	+
3097	P54868	437	RVSQDAAPGSPLD K LVSSTSDDLPRKLA	+	-	-	-
3098	P54868	447	PLDKLVSSSTS D LPKRLASRKCVSPEEF	+	-	-	+
3099	P54868	473	FTEIMNQREQFYH K VNFSPPGDTNSLF	+	-	-	+
3100	P41235	300	AYLKAIIFFDPA K GLSDPGKIKRLRS	-	-	-	-
3101	P41235	458	PYKLLPGAVATIV K PLSAIPQPTITKQ	+	-	-	-
3102	P07910	206	LQAIKKELTQIK Q KVDSLLENLEKIEK	-	-	-	-
3103	P07910	176	GNTSRRGKSGFNS K SGQRGSSKSGKLG	+	-	-	-
3104	Q14103	242	TFKEEEPVKKIME K KYHNVGLSKCEIK	-	-	-	-
3105	Q14103	119	WDTTKDKLDYF S KFGEVVDCTLKLDP	-	-	+	-
3106	Q14103	165	DKVMDQKEHKLN G KVIDPKRAKAMTK	+	-	-	-
3107	Q14103	243	FKEEEPVKKIME K KYHNVGLSKCEIKV	+	-	-	-
3108	Q14103	251	KIMEKKYHNVGL S KCEIKVAMSKEQYQ	+	-	-	-
3109	O43390	414	GEEIEIVLAKPPD K KRKERQAARQASR	-	-	-	-
3110	O43390	366	TEEILEKSFSEFG K LERVKKLKDYAFV	+	-	-	-
3111	P32754	247	ESIKMPINEPAPG K KKSQIQEYVDYNG	-	-	-	-
3112	P32754	132	REPWVEQDKFGKV K FAVLQTYGDTTHT	-	-	-	+

3113	O43719	450	GGEFEEGASENNAK ESS PEKEAEEGCP	-	-	-	-
3114	O43719	297	LNEIREDLRVECS K FGQIRKLLLLFDRH	+	-	-	-
3115	P17096	89	TTTPGRKPRGRPK LE KEEEEEGISQES	-	-	-	-
3116	P17096	7	MMMMMMMS ESS SSQPLASKQEKDG	+	-	-	-
3117	P17096	15	SESSSKSSQPLAS K QEKDGTEKRGRGR	+	-	-	-
3118	P52272	219	VFVANLDYKVGWK K LKEVFSMAGVVVR	-	-	-	-
3119	P52272	134	MEESMKKAAEVLN K HSLSGRPLKVKED	+	-	-	-
3120	P52272	277	FNGQLLFDRPMHV K MDERALPKGDFFP	+	-	-	-
3121	P52272	672	NLPFDFTWKMLKD K FNECGHVLYADIK	+	-	-	-
3122	P52272	698	KMENGKSKGCGV V KFESPEVAERACRM	+	-	-	-
3123	Q92598	95	KEKENLSYDLVPL K NGGVGIVMYMGE	-	-	-	-
3124	Q92598	471	KIGRFVVQNVSAQ K DGEKSRVKVKVRV	+	-	-	-
3125	P0DMV8	539	KADEVQRRERSA K NALESYAFNMKSA	-	-	-	-
3126	P0DMV8	108	INDGDKPKVQVSY K GETKAFYPEEISS	+	-	-	-
3127	P0DMV8	246	FDNRLVNHVFVEEF K RKHKKDISQNKRA	+	-	-	-
3128	P0DMV8	348	VLVGGSTRIPKVQ K LLQDFFNGRDLNK	+	-	-	-
3129	P0DMV8	561	NMKSAVEDEGLKG K ISEADKKKVLDKC	-	-	+	-
3130	Q7Z6Z7	1413	ACRKEEEEERKARE K QEEEEEAKCLEKFQ	-	-	-	-
3131	Q7Z6Z7	2267	SRIVNQPSLFGS K SASSKNKSEQDAQ	+	-	-	-
3132	Q2TAA2	72	TRWAKIILPRLIR K GNSLDIPVAVTIF	-	-	-	-
3133	Q2TAA2	63	LNRFSGYNTWAK I IILPRLIRKGNSL	-	-	-	+
3134	Q9UK76	122	DTDLPGSLGQSEE K PVPAAPVPSPVAP	-	-	-	-
3135	Q9UK76	148	PAPVPSRRNPPGG K SSLVLGGGGGGGG	+	-	-	-
3136	P07900	573	KQEEKKTKFENLC K IMKDILEKKVEKV	-	-	-	-
3137	P07900	58	LRELISNSSDALD K IRYESLTDPSKLD	+	-	-	-
3138	P07900	84	DSGKELHINLIPN K QDRTLTIIVDTGIG	+	-	-	-
3139	P07900	443	DKENYKKFYEQFS K NIKLGIHEDSQNR	+	-	-	-
3140	P07900	458	IKLGIHEDSQNR K LSELLRYYTSASG	+	-	-	-
3141	P07900	489	SLKDYCTRMKENQ K HIYYITGETKDQV	+	-	-	-
3142	P07900	585	CKIMKDILEKKVE K VVVSNNRLVTSPCC	+	-	-	-
3143	P20810	594	RQPDPDENKPMED K VKEKAKAEHRDKL	-	-	-	-
3144	P20810	50	KKSQSTKLSVVHE K KSQEGKPKEHTEP	+	-	-	-
3145	P54652	274	RAVRRRLRTACERA K RTLSSSTQASIEI	-	-	-	-
3146	P54652	564	NIKQTVEDEKLRG K ISEQDKNKILDKC	-	-	+	-
3147	Q9Y4L1	642	PVEDGSQPPPEP K GDATEGEKATEK	-	-	-	-
3148	Q9Y4L1	883	ATLAEQAKLPATE K PVLLSKDIEAKMM	+	-	-	-
3149	Q9Y2F5	678	STEPHHSEHKLQT K TLNTLHLQSEPPE	-	-	-	-
3150	Q9Y2F5	1218	EMNKELKASEIGE K YRKQPCEEETLGT	+	-	-	-
3151	O75874	236	FKDIFQEIYDKQY K SQFEAQKIWEHR	-	-	-	-
3152	O75874	81	NVGVKCATITPDE K RVEEFKLQMWKS	+	-	-	-
3153	O75874	126	ICKNIPRLVSGWV K PIIIGRHAYGDQY	-	-	-	+
3154	O75874	224	TKNTILKKYDGRF K DIFQEIYDKQYKS	+	-	-	-
3155	O75874	233	DGRFKDIFQEIYD K QYKSQFEAQKIWY	+	-	-	-
3156	O75874	243	IYDKQYKSQFEAQ K IWYEHRLIDDMVA	+	-	-	-
3157	O75874	321	AHGTVTRHYRMY K GQETSTNPIASIF	+	-	-	-
3158	O75874	400	QRSDYLNTEFMD K LGENLKIKLAQAK	-	-	-	+
3159	Q13907	157	WGEHEIDYILLVR K NVTNLNPDNPNEIKS	-	-	-	-
3160	Q13907	176	PDPNEIKSYCYVS K EELKELLKKAASG	+	-	-	-
3161	P05198	259	EGLSVLSQAMAVI K EKIEEKRGVFNVQ	-	-	-	-
3162	P05198	141	ESLFQRTAWVFDD K YKRPGYGAYDAFK	+	-	-	-
3163	P00492	166	YNPKMVKVASLLV K RTPRSVGYPDFV	-	-	-	-
3164	P00492	103	DRSIPMTVDFIRL K SYCNDQSTGDIKV	+	-	-	-
3165	P0DMV9	384	YGAAVQAAIILMGD K SENVQDLLLLDVA	-	-	-	-
3166	O95757	135	LAKLKETSENAL K KPVADCVISIPSFF	-	-	-	-
3167	O95757	53	SLGSRTRAIGNAA K SQIVTNVRNTIHG	+	-	-	-
3168	O95757	430	CEVFCKNHPAPFS K VITFHKKEPFELE	+	-	-	-
3169	O95757	682	QPKQVYVDKLQEL K KYGQPIQMKYMEH	+	-	-	-
3170	P17066	598	HNQLAEKEEYEHQ K RELEQICRPIFSR	-	-	-	-

3171	P17066	563	HVKGSLQEESLRD K IPEEDRRKMQDKC	-	-	+	-
3172	P34913	530	GHIEDCGHWTQMD K PTEVNQILIKWLD	-	-	-	-
3173	P34913	43	LALPRGLLNDAFQ K GGPEGATTRLMKG	+	-	-	-
3174	P34913	55	QKGGPEGATTRL M KGEITLSQWIPLME	-	-	-	+
3175	P34913	191	SEVVFLDDIGANL K PARDLGMVTILVQ	+	-	-	-
3176	P34913	215	LVQDTDALKELE K VTGIQLLNTAPL	+	-	-	-
3177	P34913	421	LFRASDESVL M H K VCEAGGLFVNSPE	-	-	-	+
3178	P34913	455	VTEEEIQFYVQQF K KSGFRGPLNWYRN	-	-	-	+
3179	P34913	554	WLSDARNPPVVS K MMMMMMMMMMMM	-	-	-	+
3180	P63241	67	AKVHLVGIDIFTG K KYEDICPSTHNMD	-	-	-	-
3181	P63241	47	KGRPCKIVEMSTS K TGKHGHAKVHLVG	+	-	-	-
3182	P63241	121	VREDLRLPEGDLG E IEQKYDCGEEIL	+	-	-	-
3183	P78318	216	ISLEEIESIDQE I KILRERDSSREAST	-	-	-	-
3184	P78318	241	STSNSSRQERPPV K PFILTRNMAQAKV	+	-	-	-
3185	Q9H2S9	122	SSRLGPDERLLE K DDSVIVEDSLSEP	-	-	-	-
3186	Q9H2S9	335	KRKRSTPQKFVGE K QMRFSLSDLPYDV	+	-	-	-
3187	P34932	771	TMDPVVKSKEIEA K IKELTSTCSPIS	-	-	-	-
3188	P34932	53	SFGPKNRSIGAA K SQVISNAKNTVQG	+	-	-	-
3189	P34932	430	CEVFSKNHAAPFS K VLTFFYRKEPFTLE	+	-	-	-
3190	P34932	679	QPKQVYVDKLAEL K NLGQPIKIRFQES	+	-	-	-
3191	O43837	122	VAIGKIHTPMEY K GELASYDMRLRRK	-	-	-	-
3192	O43837	199	LKIVTRAKSQRI A KFAFDYATKKGRGK	+	-	-	-
3193	P48735	205	FKMVFTPKDGS G VKEWEVYNFPAGGVG	-	-	-	-
3194	P48735	45	QEPPRRHYADKR I KVAKPVVEMDGDEM	+	-	-	-
3195	P48735	48	PPRRHYADKR I KVAKPVVEMDGDEMTRI	+	-	-	-
3196	P48735	67	DGDEMTRIIWQF I KEKLILPHVDIQLK	+	-	-	-
3197	P48735	69	DEMTRIIWQF I KEKLILPHVDIQLKYF	+	-	-	-
3198	P48735	80	KEKLILPHVDIQL K YFDLGLPNRDQTD	+	-	-	+
3199	P48735	106	DDQVTIDSALATQ K YSVAVKCATITPD	+	-	-	+
3200	P48735	155	ILGGTVFREPI C KNIPRLVPGWTKPI	+	-	-	-
3201	P48735	166	ICKNIPRLVPGWT P ITIGRHAHGDQY	+	-	-	+
3202	P48735	180	PITIGRHAHGDQY K ATDFVADRAGTFK	+	-	-	+
3203	P48735	193	KATDFVADRAGTF K MVFTPKDGS G VKE	+	-	-	+
3204	P48735	199	ADRAGTFKMVFT P KDGS G VKEWEVYNF	+	-	-	-
3205	P48735	256	KWPLYMSTKNT I LKAYDGRFKDIFQEI	+	-	-	+
3206	P48735	263	TKNTILKAYDGRF K DIFQEIFDKHYKT	+	-	-	-
3207	P48735	272	DGRFKDIFQE I FDKHYKTDFDKNKIWY	+	-	-	-
3208	P48735	275	FKDIFQE I FDKHYKTDFDKNKIWYEHR	+	-	-	-
3209	P48735	280	QE I FDKHYKTDFD K NKIWYEHLIDDM	+	-	-	-
3210	P48735	282	IFDKHYKTDFD K NKIWYEHLIDDMVA	+	-	-	+
3211	P48735	360	AHGTVTRHYREH Q KGRPTSTNPIASIF	+	-	-	-
3212	P48735	384	SIFAWTRGLEHR G KLDGNQDLIRFAQM	+	-	-	+
3213	P48735	400	GNQDLIRFAQM L EKVCVETVESGAMTK	+	-	-	-
3214	P48735	413	KVCVETVESGAMT K DLAGCIHGLSNVK	+	-	-	-
3215	P48735	442	EHFLNTTDFLD T IKSNLDRALGRQQQQ	+	-	-	-
3216	P38919	60	EDLLRGIYAYGF E KPSAIQQRAIKQII	-	-	-	-
3217	P38919	124	ILAPTRELAVQ I QKGLLALGDYMNVC	+	-	-	-
3218	P38919	198	VLDEADEMLNK G FKEQIYDVYRYLPPA	+	-	-	-
3219	P38919	296	FCNTKRKVDWL T EKMREANFTVSSMHG	+	-	-	-
3220	P38919	321	HGDMPQKERES I MKEFRSGASRVLIST	+	-	-	-
3221	Q04637	523	SVPKRRRKIKEL N KKEAVGDLLDAFKE	-	-	-	-
3222	Q04637	602	PGEQKYEYKSDQW K PLNLEEKRYDRE	+	-	-	-
3223	Q04637	1095	NQLFAPGGRLSWG K GSSGGSGAKPSDA	+	-	-	-
3224	Q9H0C8	161	FAVFDGHGGIRAS K FAAQNHLQNLIRK	-	-	-	-
3225	Q9H0C8	210	HTDEEFLKQASS Q KPAWKDGSTATCVL	+	-	-	-
3226	Q13418	223	GRWQGNDIVVK V LKVRDWSTRKSRDFN	-	-	-	-
3227	Q13418	426	IPPGISPHVCK L MKICMNEDPAKRPKF	+	-	-	-
3228	P50213	96	EAKESMDKNKM G LKGPLKTPIAAGHPS	-	-	-	-

3229	P50213	77	EERNVTAIQGPGG K WMIPSEAKESMDK	-	-	-	+
3230	P50213	223	LFLQKCREVAESC K DIKFNEMYLDTVC	+	-	-	-
3231	P50213	343	ACFATIKD GKSLT K DLGGNAKCSDFTE	+	-	-	+
3232	P50213	350	DGKSLTKDLGGNA K CSDFTEEICRRVK	-	-	-	+
3233	P20042	87	NFFNQKKKKKKTK K IFDIDEAEEGVKD	-	-	-	-
3234	P20042	265	GNNQLVIKGRFQQ K QIENVLRRYIKEY	+	-	-	-
3235	P20042	293	TCHTCRSPDTILQ K DTRLYFLQCETCH	+	-	-	-
3236	P60842	381	RKGVAINMVTEED K RTLRLDIETFYNTS	-	-	-	-
3237	P60842	118	VLAPTRELAQQIQ K VVMALGDYMGASC	+	-	-	-
3238	P60842	174	RVFDMLNRRYLSP K YIKMFVLDEADEM	+	-	-	-
3239	P60842	193	VLDEADEMLSRGF K DQIYDIFQKLNSN	+	-	-	-
3240	P60842	238	KKFMRDPIRILVK K EELTLEGIRQFYI	+	-	-	-
3241	Q14240	238	TKKFMRDPIRILV K EELTLEGIKQFY	-	-	-	-
3242	Q14240	119	VLAPTRELAQQIQ K VILALGDYMGATC	+	-	-	-
3243	Q14240	175	RVFDMLNRRYLSP K WIKMFVLDEADEM	+	-	-	-
3244	Q14240	194	VLDEADEMLSRGF K DQIYEIFQKLNTS	+	-	-	-
3245	Q14240	239	KKFMRDPIRILVK K EELTLEGIKQFYI	+	-	-	-
3246	Q14240	292	FLNTRRKVDWLTE K MHARDFTVSALHG	+	-	-	-
3247	Q16666	621	NEVFRVKVFNIDL K EKFTPKKIIAIAIAN	-	-	-	-
3248	Q16666	45	DLKLNLMREEYD K IQIADLMEEKFRG	+	-	-	-
3249	Q16666	99	KLKVKGPALSRKR K KEVDATSPAPSTS	+	-	-	-
3250	Q16666	128	VKTEGAEATPGAQ K RKKSTKEKAGPKG	+	-	-	-
3251	Q16666	214	QKRPVIVKVLSTT K PFEYETPEMEKKI	+	-	-	-
3252	Q16666	444	MPPTTPSSSF T TK K SEDTISKMNDFMR	+	-	-	-
3253	Q16666	451	SSFFTKKSEDTISK M NDFMRMQILKEG	+	-	-	-
3254	Q16666	561	PSSSFLTTLPRL K TEPEEVSIEDSAQ	+	-	-	-
3255	Q16666	598	ATESFVYEPKEQ K KMFHATVATENEVF	+	-	-	-
3256	Q16666	614	HATVATENEVFRV K VFNIDLKEKFTPK	+	-	-	-
3257	P23588	453	RESEKSLNETLN K EEDCHSPTSKPPK	-	-	-	-
3258	P23588	365	SQSTRAASIFGGAK P VDTAAREREVEE	+	-	-	-
3259	P23588	586	APEPKKPEENPAS K FSSASKYAALSVD	+	-	-	-
3260	Q8WYH8	76	ERLQKIQNAYSKC K EYSDDKVQLAMQT	-	-	-	-
3261	Q8WYH8	114	DADLARFEADLKD K MEGSDFESSGGRG	+	-	-	-
3262	P14735	123	CEHMLFLGTTKKYP K ENEYSQFLSEHAG	-	-	-	-
3263	P14735	192	KDREVNADVSEHE K NVMNDAWRLFQLE	-	-	-	+
3264	P14735	697	YYLRLMTTEVAWT K DELKEALDDVTLP	-	-	-	+
3265	Q9UKS7	283	TGNMGKRKSSTPQ K FVGEKLMRFSYDP	-	-	-	-
3266	Q9UKS7	288	KRKSSTPQKFVGE K LMRFSYDPDIHFDM	+	-	-	-
3267	Q14974	859	LLTEGRRSKTNK A KTLATWATKELRKL	-	-	-	-
3268	Q14974	211	LLNSLEFTKANFD K ESERHFIMQVVCE	+	-	-	-
3269	Q14974	835	IGDLCTAFGKDVL K LVEARPMIHELLT	+	-	-	-
3270	Q14974	867	KTNKAKTLATWAT K ELRKLKNQAAAAA	+	-	-	-
3271	Q9UNL4	74	KLALLKQIQEAYG K CKEFGDDKVQLAM	-	-	-	-
3272	Q9UNL4	112	RLDLDLARFEADL K EKQIESSDYDSSS	+	-	-	-
3273	Q9UNL4	127	KQIESSDYDSSSS K GKKKGRTQKEKKA	+	-	-	-
3274	Q9UNL4	129	IESSDYDSSSS K GKKKGRTQKEKKAAR	+	-	-	-
3275	Q9UNL4	146	RTQKEKKAARARS K GKNSDEEAPKTAQ	+	-	-	-
3276	Q9UNL4	148	QKEKKAARARS K GKNSDEEAPKTAQKK	+	-	-	-
3277	Q9UNL4	156	ARSKGKNSDEEAP K TAQKKLKLVRTSP	+	-	-	-
3278	Q9ULG1	213	QQRHLLGPKKKKF K EKKLKLAKLKKVK	-	-	-	-
3279	Q9ULG1	118	ESKCDKGNLYNFS K LKKSRLKWLKSILL	+	-	-	-
3280	Q8N201	819	ILAFEGHLAAAST K QTITESSSLLSQ	-	-	-	-
3281	Q8N201	47	GQANESKTASTLL K PAPSGLPSEKRD	+	-	-	-
3282	O60573	141	ANKNGGKWIIRLR K GLASRCWENLILA	-	-	-	-
3283	O60573	134	KPMWEDDANKNGG K WIIRLRKGLASRC	+	-	-	-
3284	P12268	293	SIFQINMIKIYKD K YPNLQVIGNVVT	-	-	-	-
3285	P12268	511	QVEGGVHSLHSYE K RLFFFFFFFFFFFF	+	-	-	-
3286	Q96HW7	182	KCLQLLGNLGSLE K SVTKDAEGLAARD	-	-	-	-

3287	Q96HW7	26	FTKVVPQEEIATK KL R LT KPSKSAAL	+	-	-	-
3288	P10914	101	LPDIEEVKDQSRN K GSSAVRVYRMLPP	-	-	-	-
3289	P10914	78	YKAGEKEPDPKTW K ANFRCAMNSLPDI	+	-	-	-
3290	Q92985	446	GFGQDLSAGRPKE K SLVLVKLEPWLCR	-	-	-	-
3291	Q92985	92	PPPEAETAERAGW K TNFRCALRSTRRF	+	-	-	-
3292	Q12906	257	GPLRGWPLELLCE K SIGTANRPMGAGE	-	-	-	-
3293	Q12906	100	RTL R GVMRVGLV A K GLLLKGDLDLELV	+	-	-	-
3294	Q12906	460	GPSKKTAKLHVAV K VLQDMGLPTGAEG	+	-	-	-
3295	Q13572	59	PIEEQGPLDVIIH K LT D VILEADQNDS	-	-	-	-
3296	Q13572	340	MAATGDVALLRHS K LLAEPAGGLVGER	+	-	-	-
3297	Q13572	383	APWKAEADAGGTAK L PHQRLGCNAGVS	+	-	-	-
3298	Q13572	410	PSFQQHCVASLAT K ASSQQQQQQQQQQ	+	-	-	-
3299	Q9NWZ3	338	AKISDFGLARASE K FAQTVMTSRIVGT	-	-	-	-
3300	Q9NWZ3	34	KLSDFIDPQEGW K LAVAIKKPSGDDR	+	-	-	-
3301	P05556	770	IHDRREFAKFEKE K MNAKWD T GENPIY	-	-	-	-
3302	P05556	794	PIYKSAVTTV V NP K YEGKKKKKKKKKK	+	-	-	-
3303	P30740	110	TYNFLPEFLVSTQ K TYGADLASVDFQH	-	-	-	-
3304	P30740	137	ASEDARKTINQWV K GQTEGKIPELLAS	+	-	-	-
3305	P30740	177	AIYFKGNWKDKFM K EATTNAPFRLNKK	+	-	-	-
3306	Q6IE81	635	EGMVVPESFLGLE K TFAEARLISAQQK	-	-	-	-
3307	Q6IE81	609	KRDPLQNSPGSEG K TLLKQPDLCGRRE	+	-	-	-
3308	Q9H2U2	276	FALEVIKSTHQCW K ALLMKKCNGGAIN	-	-	-	-
3309	Q9H2U2	216	KLIAINANDPEAS K FHDIDDVKKFKPG	-	-	-	+
3310	Q9H2U2	224	DPEASKFHDIDDV K KFKPGYLEATLNW	+	-	-	-
3311	Q9H2U2	259	GKPENQFAFNGEF K NKAFALEVIKSTH	-	-	-	+
3312	Q9H2U2	261	PENQFAFNGEF K NKAFALEVIKSTHQ	+	-	-	-
3313	Q15181	238	DHWKALVT K KTNG K GISCMNTTLSESP	-	-	-	-
3314	Q15181	57	FHMVVEVPRWSNA K MEIATKDPLNPIK	+	-	-	-
3315	Q15181	228	FAIDI I KSTHDHW K ALVT K KTNGKGIS	+	-	-	-
3316	P14316	64	DAPLFRNWA I HTG K HQPGVDKPD P KTW	-	-	-	-
3317	P14316	75	TGKHQPGVDKPD P KTW K ANFRCAMNSL	+	-	-	-
3318	P14316	78	HQPGVDKPD P KTW K ANFRCAMNSLPDI	+	-	-	-
3319	Q96CN7	53	SVPHGAGYELLIQ K FLSLYGDQIDMHR	-	-	-	-
3320	Q96CN7	279	LLQLVADKDH P KF K EIQNLIKASAPES	-	-	-	+
3321	Q9NQC1	604	ARKARGRTRLP A K K PPPPPPQDGP	-	-	-	-
3322	Q9NQC1	32	DSHATSTSASRCS K LPSS T SGWPRQN	+	-	-	-
3323	Q9NQC1	38	TSASRCSKLPSS T SGWPRQNEKKPSE	+	-	-	-
3324	Q9NQC1	298	VSIGCPEKMEPIT K ISHIPASRWALSC	+	-	-	-
3325	P05412	309	STANMLREQVAQL K QKVMNHVNSGCQL	-	-	-	-
3326	P05412	56	ADPVGSLKPHLRA K NSDLLTSPDVGLL	+	-	-	-
3327	P05412	271	KRMNRRIAASKCR K RKLERIARLEEKV	+	-	-	-
3328	Q96AT1	36	ERVGYREGPTVET K RIQPQPPDEDGDH	-	-	-	-
3329	Q96AT1	108	IIYRKPVKHP S DE K YSGLTASSKKKKP	+	-	-	-
3330	P05787	304	SLAGKHGDDLRR T K TEISEMNRNISRL	-	-	-	-
3331	P05787	207	VLIKKDVDEAYM N K VELESRL E GLTDE	+	-	-	-
3332	P05787	295	YQIKYEELQSLAG K HGDDLRR T KT E IS	+	-	-	-
3333	P05787	325	RNISRLQAEIEGL K GQRASLEAAIADA	+	-	-	-
3334	P54819	147	LLIR R ITGR L IHP K SGRSYHEEFNPPK	-	-	-	-
3335	P54819	62	MLRAMVASGSELG K KLKATMDAGKLVS	-	-	-	+
3336	P54819	93	VELIEKNLETPLC K NGFLLDGFPRTVR	-	-	-	+
3337	P54819	181	TGEPLIRRSDDNE K ALKIRLQAYHTQT	+	-	-	-
3338	Q9UIJ7	122	DTVINLNV P FEV I K QRLTARWIHPASG	-	-	-	-
3339	Q9UIJ7	20	LLRAVIMGAPGSG K GTVSSRITTHFEL	-	-	-	+
3340	Q9UIJ7	34	GTVSSRITTHFEL K H L SSGDLLRDNML	+	-	-	-
3341	Q9UIJ7	57	DNMLRGTEIGVLA K AFIDQGKLIPDDV	-	-	-	+
3342	Q9UIJ7	64	EIGVLA K AFIDQ G K LIPDDVMTRLALH	+	-	-	+
3343	Q9UIJ7	80	PDDVMTRLALHE L K NLTQYSWLLDGFP	+	-	-	+
3344	Q9UIJ7	174	REDDK P ETV I KRL K AYEDQTKPVLEY	+	-	-	+

3345	Q9UIJ7	189	YEDQTKPVLEYQ K KGVLTFSGTETN	+	-	-	+
3346	Q9UIJ7	203	KGVLTFSGTETN K IWPYVYAFLQTKV	+	-	-	-
3347	Q6YP21	38	KILGFSTSAKMSL K FTNAKRIEGLDSN	-	-	-	-
3348	Q6YP21	116	HPSLVKALSYLE K LYQKQIDSNKEIL	+	-	-	+
3349	Q92794	344	YTNPIGRPKNRL K QNTVSKGPFSKVR	-	-	-	-
3350	Q92794	172	RLLKDGPLYRLNT K ATNVDGKESCESL	+	-	-	-
3351	Q92794	350	RPKNRLKKQNTVS K GPFSKVRTGPGRG	+	-	-	-
3352	Q92794	355	LKKQNTVSKGPFS K VRTGPGRGRKRKI	+	-	-	-
3353	Q92794	604	QNLCLLAKFLDH K TLYYDVEPFLFYV	+	-	-	-
3354	Q92794	815	PQCQERELEISVG K SVSHENKEQDSYS	+	-	-	-
3355	Q92794	1007	PESPRSSSPILT K PTLKRKKPFLHRR	+	-	-	-
3356	Q8WYB5	109	RGSCNDLRNVDWN K LLRRAIEGLEEPN	-	-	-	-
3357	Q8WYB5	1038	ILSTRANSRQSPAK V QSKNKYLHSPES	+	-	-	-
3358	Q8WYB5	1042	RANSRQSPAKVQ S KNKYLHSPESRPVT	+	-	-	-
3359	Q8WYB5	1044	NSRQSPAKVQSK N KYLHSPESRPVTGE	+	-	-	-
3360	Q9NXR8	71	REEQMASIKKDY K ALEDADEKVQLAN	-	-	-	-
3361	Q9NXR8	181	SEALLSTLTSDAS K ENTLGCRNNNSTA	+	-	-	-
3362	Q9NXR8	264	SYEAFKNND F QLG K EFSMARETVGYSS	+	-	-	-
3363	O95050	130	LEGNSGRWEEK E KLRAAVKRVLKCDV	-	-	-	-
3364	O95050	13	MMKGGFTGGDEY Q KHFLPRDYLATYYS	-	-	-	+
3365	O95050	96	LSDFTDNRNREE L KWLKKEPGAYDWT	-	-	-	+
3366	Q9ULR0	238	EGSQEKGGDS Q Q K FAHVPVPSQQEI	-	-	-	-
3367	Q9ULR0	127	VPGNRGYKYFGAA K DLPGVRELFEKEP	+	-	-	-
3368	Q92613	39	MYRIKSKIPNEH K PAEVFRKDLISAM	-	-	-	-
3369	Q92613	30	PSTSFTSGSMYR I KSKIPNEHKKPAEV	+	-	-	-
3370	Q92613	32	TSFTSGSMYR I KSKIPNEHKKPAEVFR	+	-	-	-
3371	Q92613	601	MRTKSYPRYP L ES K NNRLLASLSHSRS	+	-	-	-
3372	Q92613	638	TPSSECYHGQSLG K PLVLQAALHGQSS	+	-	-	-
3373	Q92613	735	RWVKNTEDLQCY V KPTKNMSPKEQFWG	+	-	-	-
3374	Q92833	31	SDGIPWSEERVVR K VLYLSLKEFKNSQ	-	-	-	-
3375	Q92833	378	HKPSSAVNHTISG K TESSNAKTRKQVL	+	-	-	-
3376	Q92993	359	CKGFHIVGYFS K EKESTEDYNVACILT	-	-	-	-
3377	Q92993	52	GRKLFYVHYIDFN K RLDEWVTHERLDL	+	-	-	-
3378	Q92993	327	QNLCLLAKCFLDH K TLYYDTPFLFYV	+	-	-	-
3379	O75600	193	DMADLEAKLQEA Q KHRLRLVATDGAFS	-	-	-	-
3380	O75600	45	EGELEGIRGAGTW K SERVITSRQGPHI	+	-	-	+
3381	O75600	187	YRYRHLDMA D LEAKLQEAQKHRLRLVA	+	-	-	+
3382	O75600	326	LMGSNTIVQSM A K T QFRFSKMEAAGF	-	-	-	+
3383	O75600	368	DARLASRMADD M L K RGIFVIGFSYPVV	-	-	-	+
3384	O75600	383	GIFVIGFSYPV V P K GKARIRVQISAVH	+	-	-	+
3385	P08729	117	SFIDKVRFL E QQ N KLLETKWTLLEQK	-	-	-	-
3386	P08729	179	LRSMQDVVEDF K N K YEDEINHRTAAEN	+	-	-	-
3387	Q7Z3B3	180	HSDHDNSTSLNGG K RALTSSALHGGEM	-	-	-	-
3388	Q7Z3B3	104	PSKESLKLQGV F S K QTVLKSHPLLSQS	+	-	-	-
3389	P30085	160	SLEKRIQTYLQ S T K PIIDLYEEMGKVK	-	-	-	-
3390	P30085	43	THLSAGELLRDER K NPDSQYGELIEKY	+	-	-	-
3391	P30085	55	RKNPDSQYGELIE K YIKEGKIVPEIT	+	-	-	-
3392	P30085	106	GFPRNQDNLQGW N K T MDGKADVSVFLF	-	-	-	+
3393	P05783	215	EIEALKEELLFM K NHHEEVKGLQAQI	-	-	-	-
3394	P05783	131	KKGPQVRDWSHY F K IIEDLRAQIFANT	+	-	-	-
3395	P05783	426	IVDGKVVSETND T K VLRHHHHHHHHHH	+	-	-	-
3396	P04264	257	QLKSDQSR L DSEL K NMQDMVEDYRNKY	-	-	-	-
3397	P04264	276	VEDYRNKY E DEIN K RTNAENEFVTIKK	-	-	+	-
3398	O95251	413	RKGSISVFEVDG K K NKIYCQNLCLLAK	-	-	-	-
3399	O95251	199	PTPGCNSLGH L TG K HERHFSISGCPLY	+	-	-	-
3400	O95251	277	VAELRKKRNSGL S K EQKEKMEHRQTY	+	-	-	-
3401	Q9H7Z6	218	PKLWLCEYCL K Y M KYEKSYRFHLGQCQ	-	-	-	-
3402	Q9H7Z6	113	LDEWVDKNRLAL T K TVKDAVQKNSEKY	+	-	-	-

3403	Q9H7Z6	274	QNLCLLAKLFLDHDKTLTYFDVEPFVFI	+	-	-	-
3404	Q8N752	111	EDLFNFCSRRTMTKTVLMLADQMISRI	-	-	-	-
3405	Q8N752	8	MMMMMMMTNNSGSKAELVVGKYLVR	+	-	-	-
3406	P52732	34	VVVRCPFNLAERKASAHSIVECDPVR	-	-	-	-
3407	P52732	146	AGIIPRTLHQIFEKLTNDNGTEFSVKVS	+	-	-	-
3408	P26440	193	AEKKGNHYILNGNKFWITNGPDADVLI	-	-	-	-
3409	P26440	55	LSEEQRLRQTMAKFLQEHLAPKAQEI	+	-	-	+
3410	P26440	64	QTMAKFLQEHLAPKAQEIDRSNEFKNL	+	-	-	+
3411	P26440	75	APKAQEIDRSNEFKNLREFWKQLGNLG	+	-	-	+
3412	P26440	238	FIVEKGMPPGFSTSKKLDKLGMRGSNTC	+	-	-	-
3413	P26440	259	RGSNTCELIFEDCKIPAANILGHENKG	+	-	-	+
3414	P26440	315	TIPYLHVREAFGQKIGHFQLMQGMAD	-	-	-	+
3415	P17275	148	FADGFVKALDDLHKMNHVTPPNVSLGA	-	-	-	-
3416	P17275	240	PAQLGLGRGASTFKEEPQTVPEARSRD	+	-	-	-
3417	P27144	102	GFPRTLQAEALDKICEVDLVISLNIP	-	-	-	-
3418	P27144	60	STEVGEMAKQYIEKSLLPDHSVITRLM	-	-	-	+
3419	P27144	175	DKPEAVALRLRQYKDVAKPVIELYKSR	+	-	-	-
3420	P27144	179	AAVALRLRQYKDVAKPVIELYKSRGVLH	+	-	-	+
3421	P27144	186	QYKDVAKPVIELYKSRGVLHQFSGTET	+	-	-	+
3422	Q13303	254	MTWSPLACGIVSGKYDSGIPPYSRASL	-	-	-	-
3423	Q13303	124	SSLVITTKIFWGGKAETERGLSRKHII	+	-	-	-
3424	Q07666	206	AKISVLGKGSMDKAKEEELRKGGDPK	-	-	-	-
3425	Q07666	175	IPVKQYPKFNFBVGKILGPQGNITIKRLQ	+	-	-	-
3426	A0AUZ9	936	KGEDMAALLCQDEKDKQVERSSTAFHG	-	-	-	-
3427	A0AUZ9	859	QSKWHRNSRAYSKNVEGQDLLLLKEYP	+	-	-	-
3428	Q7LBC6	788	GFLSSPADFSQENKAPFEAVKRFSLDE	-	-	-	-
3429	Q7LBC6	361	PQINRNIRFATYTKENGRTLVVQDEPV	+	-	-	-
3430	O94953	389	KRSQPKKPKPEDPKFPGEGTAGAALLE	-	-	-	-
3431	O94953	602	ARAGEGQAPSTFSKLKMEIKKSRRHPL	+	-	-	-
3432	Q9UGL1	1102	VLCPRCDIGLLGLKRRQKRLKEPLPNG	-	-	-	-
3433	Q9UGL1	832	NGKRQTRYRSGGGSQNLQTLVNELRQF	+	-	-	-
3434	O00139	260	TIPSKDVVMVHEPKQKVDLTRYLENQT	-	-	-	-
3435	O00139	102	NKIVKNRRTVASIKNDPPSRDNRVVG	+	-	-	-
3436	O60870	17	SDFLTPKAIANRIKSKGLQKLWYQCM	-	-	-	-
3437	O60870	135	LGREGLCVKDETPKGWYIQYIDRDPET	-	-	+	-
3438	P48729	250	SEKKMSTPVEVLCKGFPAEFAMYLNYC	-	-	-	-
3439	P48729	8	MMMMMMMASSSGSKAEFIVGGKYLVR	+	-	-	-
3440	Q03164	2400	QSANSSPDEDTEVKTLKLSGMSNRSSI	-	-	-	-
3441	Q03164	239	PTFPGVKIKITHGKDISELPGKNKEDS	+	-	-	-
3442	Q03164	373	IIPSSKRTDATIAKQLLQRAKKAQKK	+	-	-	-
3443	Q03164	636	KHSRSEPQYFSSAKYAKEGLIRKPIFD	+	-	-	-
3444	Q03164	1130	AGSEDAEPLAPPIKPIKPVTRNKAPQE	+	-	-	-
3445	Q03164	1235	TSEKKDSKESVVKNVVDSSQKPTPSA	+	-	-	-
3446	Q03164	2958	NPSRLAVISDSGEKRVITITEKSVASSE	+	-	-	-
3447	Q03164	3462	HYQLQHVNQLLASKTGIHSSQRDLDSA	+	-	-	-
3448	P17252	103	DKGPDTPDRSKHKFKIHTYGSPTFCD	-	-	-	-
3449	P17252	628	KPKVCGKGAENFDKFFTRGQPVLTTPD	+	-	-	-
3450	Q13557	49	TGQEYAAKIINTKLSARDHQKLEREA	-	-	-	-
3451	Q13557	318	LTTMLATRNFSAAKSLLKKPDGVKEST	+	-	-	-
3452	O14686	2509	AALPAGPAGELHAKVPSGQPPNFVRSP	-	-	-	-
3453	O14686	2246	TPRHQPSTPDPLKPRCPSLDNLAVPE	+	-	-	-
3454	O14686	3079	FNEHLRLVESANEKAEREALLRGVEPG	+	-	-	-
3455	O14686	3433	IIDPIAKAKMVALKGIKKVMAQGSIGV	+	-	-	-
3456	O14686	4465	AGPRSEAGHLLQKLLRAKNVQLSTGR	+	-	-	-
3457	O14686	4776	LEVPGKLPVTTWEKKGSEVSVMLTVS	+	-	-	-
3458	P30613	465	TEVTAIGAVEAAFKCCAAAIIVLTITG	-	-	-	-
3459	P30613	105	ATIGPASRSVERLKEMIKAGMNIARLN	+	-	-	-
3460	P30613	309	AVRAALGPEGHGIIISKIENHEGVKR	+	-	-	-

3461	Q9H9P8	175	PGLRLIQQEDIKK K EPYCRGLMAIDCP	-	-	-	-
3462	Q9H9P8	104	GHNSGVIHSGIYY K PESLKAKLCVQGA	+	-	-	-
3463	Q9H9P8	155	EQEEIPRLQALYE K GLQNGVPGLRLIQ	+	-	-	-
3464	Q9H9P8	173	GVPGLRLIQQEDI K KKEPYCRGLMAID	+	-	-	-
3465	O95232	354	RKHRSRSDRRRS K SRDRKSYKHSKS	-	-	-	-
3466	O95232	231	MGYAKIKATVEEL K EKLKRTEEPDRD	+	-	-	-
3467	Q9Y4C1	353	QSLPEEISSCLNT K SEALRTKPDVCKA	-	-	-	-
3468	Q9Y4C1	895	SGFLRNLLNSSTG K TENGLKNTPKILD	+	-	-	-
3469	P46013	2040	QTHRETAGDGKSI K AFKESAKQMLDPA	-	-	-	-
3470	P46013	1639	PASSKRRLKTSLG K VGVKEELLAVGKL	+	-	-	-
3471	P46013	2005	PTSSKQRLKISLG K VGVKEEVLPGVKL	+	-	-	-
3472	Q8NEZ4	4164	SANPPRLVSSYRL K QPNVPFPPTSNGL	-	-	-	-
3473	Q8NEZ4	758	IEGCVKDVSYQGG K SIKLSSETESSFS	+	-	-	-
3474	Q8NEZ4	1508	ELDKMVTDGAILG K LYKIPELGGKDVE	+	-	-	-
3475	Q8NEZ4	1772	QKSKQQAIEATQ K LEQVKNEQQQQQQ	+	-	-	-
3476	Q8NEZ4	2009	KGPIAAGTSDHFT K PSPRADVFQRQRI	+	-	-	-
3477	Q8NEZ4	2802	CVSVEPKKKEQEN K TLVLSDKHSPQKK	+	-	-	-
3478	Q8NEZ4	2809	KKEQENKTLVLS D KHSPQKKSTVTNEV	+	-	-	-
3479	Q8NEZ4	2832	TNEVKTEVLSPNS K VESKCETEKNDEN	+	-	-	-
3480	Q8NEZ4	2867	SQASAHSDLNDGE K TSLHPCDPDLFEK	+	-	-	-
3481	Q8NEZ4	3714	NSEVDKLSMETPA K TEEIKLEKAETES	+	-	-	-
3482	P23919	60	TEIGKLLSSYLQ K SDVEDHSVHLLFS	-	-	-	-
3483	P23919	169	FQERALRCFHQLM K DTTLNWKMVDAK	+	-	-	-
3484	Q14847	27	PTEKVNCLDKFWH K ACFHCETCKMTLN	-	-	-	-
3485	Q14847	42	CFHCETCKMTLNM K NYKGYEKKPYCNA	+	-	-	-
3486	Q14847	112	SVVADTPELQRI K TQDQISNIKYHEE	-	-	-	+
3487	Q53H82	185	TVFEDLYDYMNSL K ELLKIKADIIPYGP	-	-	-	-
3488	Q53H82	102	ICKSINNDTTYCI K KLPRNPQREEIIG	+	-	-	-
3489	Q53H82	273	NLLLHLKKLEKEG K IFSNTDPDKKWA	-	-	-	+
3490	Q53H82	282	EKEGKIFSNTDPD K KWKAHLLLLLLLLL	+	-	-	-
3491	P83111	379	PVIYNRARFYVYN K KKRLVNTPYVDNS	-	-	-	-
3492	P83111	283	ENEACRNSKPG K KNDFEQGELYLRE	-	-	-	+
3493	P83111	284	NEACRNSKPG K KNDFEQGELYLREK	-	-	-	+
3494	P83111	297	KNDFEQGELYLRE K FENSIESLRLFKN	+	-	-	-
3495	P83111	342	TLLAAIVERASG K YLDYMQKIFHDLD	+	-	-	-
3496	P42167	191	NDSDRYSDNEEDS K IELKLEKREPLKG	-	-	-	-
3497	P42167	207	LKLEKREPLKGR A KTPVTLKQRRVEHN	+	-	-	-
3498	P42167	389	ELSDFRMEESFSS K YVPKYVPLADVKS	+	-	-	-
3499	Q92615	684	EQKPNTVGCCKEE K KLAEPARYREPP	-	-	-	-
3500	Q92615	724	RPAGGRPSPSAMG K RLSREQSTPPKSP	+	-	-	-
3501	Q9NS87	309	GQVITALVDVGNG K QRHVCYRDSKLTf	-	-	-	-
3502	Q9NS87	1009	TSVCEKTETIDTL K QELKDINCKYNSA	+	-	-	-
3503	Q13351	265	AEDPGVIAETAPS K RGRRSWARKRQAA	-	-	-	-
3504	Q13351	274	TAPSKRGRRSWAR K RQAHTCAHPGCG	+	-	-	-
3505	Q13351	288	RQAHTCAHPGCG K SYTKSSHLKAHLR	+	-	-	-
3506	P23443	299	MLTGAPPFTGENR K KTIDKILCKLNL	-	-	-	-
3507	P23443	516	SGPYKKQAFPMIS K RPEHLRMNLLLLL	+	-	-	-
3508	P09382	100	EVCITFDQANLTV K LPDGYEFKFPNRL	-	-	-	-
3509	P09382	13	MMACGLVASNLNL K PGECLRVGEVAP	+	-	-	-
3510	P09382	29	ECLRVGEVAPDA K SFVLNLGKDSNNL	+	-	-	-
3511	P09382	108	ANLTVKLPDGYEF K FPNRLNLEAINYM	+	-	-	+
3512	P09382	128	LEAINYMAADGDF K IKCVAFDDDDDDDD	+	-	-	-
3513	P42166	358	SHISDQSPSSKR K ALEESESSQLISP	-	-	-	-
3514	P42166	656	MGNATVGRRYLWL K DCKINLASKNKLA	+	-	-	-
3515	Q14739	116	QADIKEARREVEV K LTPILKPFGNSI	-	-	-	-
3516	Q14739	55	KDGTELELKENDI K PLTSFRQRKGGST	+	-	-	-
3517	Q14739	594	VHREARDEYHCK K KYGVAWEKYCQRP	+	-	-	-
3518	Q14739	601	EYHCKKKYGVAW K KYCQRPYRIFPYI	+	-	-	-

3519	Q6PKG0	1001	YGLEKFWAFLKYSKAKNLDIDPKLQEY	-	-	-	-
3520	Q6PKG0	892	LLKENGFTQHVYHKYRRRCLNERKRLG	+	-	-	-
3521	Q6PKG0	1017	NLDIDPKLQEYLGKFRRLDFRVDPPM	+	-	-	-
3522	P05455	41	FNLPRDKFLKEQIKLDEGWVPLEIMIK	-	-	-	-
3523	P05455	116	EYKNDVKNRSVYIKGFPTDATLDDIKE	+	-	-	-
3524	P05455	128	IKGFPTDATLDDIKEWLEDKGQVLNIQ	+	-	-	-
3525	P05455	328	LKKIIEDQQESLNKWKSGRRFKGKGK	+	-	-	-
3526	P05455	341	KWKSGRRFKGKGKGNKAAQPGSGKGK	+	-	-	-
3527	P05455	360	QPGSGKGKVQFQGGKTKFASDDEHDEH	+	-	-	-
3528	O95202	331	LDNLTRPQLVALCKLLELQSIGTNNFL	-	-	-	-
3529	O95202	597	QEIKKELSKTGEEKYVEESKASKRLTK	+	-	-	-
3530	Q04760	140	HIGIAVPDVYSACKRFEELGVKFVKKP	-	-	-	-
3531	Q04760	88	YEDKNDIPKEKDEKIAWALSRKATLEL	-	-	-	+
3532	Q04760	148	VYSACKRFEELGVKFVKKPDDGKMKGL	+	-	-	+
3533	O43813	350	NLTQDMKYLYRACKFAEWCLEYGEHGC	-	-	-	-
3534	O43813	142	QAEDCITRLIHLNKKIDPHAPNEMLYGR	+	-	-	-
3535	P00338	265	IGLSVADLAESIMKNLRRVHPVSTMIK	-	-	-	-
3536	P00338	5	MMMMMMMMMATLKDQLIYNLLKEEQT	+	-	-	+
3537	P00338	14	MATLKDQLIYNLLKEEQTPQNKITVVG	+	-	-	-
3538	P00338	57	LADELALVDVIEDKLGEMMDLQHGSL	+	-	-	-
3539	P00338	81	GSLFLRTPKIVSGKDYNVTANSKLVII	+	-	-	-
3540	P00338	118	SRLNLVQRNVNIFKFIIPNVVKYSPNC	+	-	-	+
3541	P00338	126	NVNIFKFIIPNVVKYSPNCKLLIVSNP	+	-	-	-
3542	P00338	224	LKTLHPDLGTDKDKQWKEVHKQVVES	+	-	-	-
3543	P00338	232	GTDKDKQWKEVHKQVVESAYEVIKLLK	+	-	-	-
3544	P00338	243	VHKQVVESAYEVIKLGYSWAIGLSV	+	-	-	-
3545	P00338	318	KVTLTSEEEARLKKSADTLWGIQKELQ	+	-	-	+
3546	P07195	23	APVAEEEEATVPNNKITVVGVGQVGMAC	-	-	-	-
3547	P07195	5	MMMMMMMMMATLKEKLIAPVAEEEEAT	+	-	-	-
3548	P07195	7	MMMMMMMMMATLKEKLIAPVAEEEEATVP	+	-	-	-
3549	P07195	58	LADELALVDVLEDKLGEMMDLQHGSL	+	-	-	-
3550	P07195	82	GSLFLQTPKIVADKDYSVTANSKIVVV	+	-	-	-
3551	P07195	119	SRLNLVQRNVNFKFIIPQIVKYSPDC	+	-	-	-
3552	P07195	127	NVNFKFIIPQIVKYSPDCIIIVVSNP	+	-	-	-
3553	P07195	319	NQKLKDDEVAQLKKSADTLWDIQKDLK	+	-	-	-
3554	P07195	329	QLKKSADTLWDIQKDLKLLLLLLLLLL	+	-	-	-
3555	Q03252	133	EIGKLRAELDEVNKSARKREGELTVAQ	-	-	-	-
3556	Q03252	81	ELENDRLLLKISEKEEVTTREVSGIKA	+	-	-	-
3557	Q6UWP7	306	LPTSKEDLQLWCHKRWEEKEERLRSFY	-	-	-	-
3558	Q6UWP7	221	TENSKSRSNFAEKNGLQKYEYVLHPR	+	-	-	-
3559	Q6JVE6	114	SGHLWASLSVKGVKAFHVLSTDYSYGL	-	-	-	-
3560	Q6JVE6	170	KEFMDACDILGLSKAAVILPKDASRTH	+	-	-	-
3561	Q9BYZ2	71	IERFTSEKPVHHSKVSIIIGTGSVGMAC	-	-	-	-
3562	Q9BYZ2	54	TWLFTPVS KMATVKSELIERFTSEKPV	+	-	-	-
3563	Q9BYZ2	106	LSDELALVDLDEDKLGGETMDLQHGSP	+	-	-	-
3564	Q9BYZ2	130	GSPFTKMPNIVCSKDYFVTANSNLVII	+	-	-	-
3565	Q9BYZ2	167	TRLNLVQRNVAIFKLMISSIVQYSPHC	+	-	-	-
3566	Q9BYZ2	367	KIKLTPEEEAHLKKSATLWEIQNKLLK	+	-	-	-
3567	Q86WU2	22	TWELFPWRGYCSQKAKGELCRDFVEAL	-	-	-	-
3568	Q86WU2	36	AKGELCRDFVEALKAVVGGSHVSTAAV	+	-	-	-
3569	Q86WU2	315	LDEVMDACNRYSKLNCLVAPTFLFLEF	+	-	-	-
3570	Q86WU2	358	IVQQNGASDFSWAKEAEERSRLWTARH	+	-	-	+
3571	Q86WU2	445	LVNPDDAEELGRVKAFAEQLGRRALAL	+	-	-	-
3572	Q86WU2	472	HGTCTGEHGIGMGKRQLLQEEVGAVGV	+	-	-	-
3573	Q86W92	591	PSPDSKKKSRGIMKLFGLRRSQSTTF	-	-	-	-
3574	Q86W92	322	KKAVESLMAANEEKDRKIEDLRQCLNR	+	-	-	-
3575	Q9UHB6	359	SQVKSEVQQPVHPKPLSPDSRASSLSE	-	-	-	-
3576	Q9UHB6	439	LGTYASLHGR.IYCKPHFNQLFKSKGNY	-	-	-	+

3577	Q6MZP7	691	NSGGGKLPFTFVTKEVAEATCNCLLAQ	-	-	-	-
3578	Q6MZP7	244	KKPRTPTSGPVITKLIFAKPINSKAVT	+	-	-	-
3579	Q6MZP7	249	PTSGPVITKLIFAKPINSKAVTGQTTQ	+	-	-	-
3580	P09960	580	FTRPLFKDLAAFDKSHDQAVRTYQEHK	-	-	-	-
3581	P09960	73	LTIEKVINGQEVKYALGERQSYKGSP	+	-	-	-
3582	P09960	337	YLERHICGRLFGFKFRHFNALGGWGEL	+	-	-	-
3583	P09960	414	PEIFLGFLKAYVEKFSYKSITDDWKD	+	-	-	-
3584	P09960	573	TEQGRMKFTRPLFKDLAAFDKSHDQAV	+	-	-	-
3585	Q93052	530	DAGGLIHCIEDFHKKFAPRCVCKEPI	-	-	-	-
3586	Q93052	108	DEEAFKVQGNPGBKLEERRSSSLDAEI	+	-	-	-
3587	P33241	216	ESLNRSIEKSNSVKKSQPDLPISKIDQ	-	-	-	-
3588	P33241	327	SGKRYKFVATGHGKYEKVLVEGGPAPP	+	-	-	-
3589	Q86UE4	121	NLRSEEQKKKNRKLESEKPKPNGRTVE	-	-	-	-
3590	Q86UE4	264	SHLNVQVSNFKSGKGDSTLQVSSGLNE	+	-	-	-
3591	P62312	57	ALEQTEEYVNGQLKNKYGDAFIRGNNV	-	-	-	-
3592	P62312	59	EQTEEYVNGQLKNKYGDAFIRGNNVLY	+	-	-	-
3593	Q9HD34	58	NVKDPVEIQTLVNKAARDLGVIRRVH	-	-	-	-
3594	Q9HD34	47	RRIRDAFRENKNVNDPVEIQTLVNKAK	-	-	-	+
3595	Q9UI17	750	PLEAGLEYFVKLNKPADFIGKQALKQI	-	-	-	-
3596	Q9UI17	114	PGINLKKIHYDSIKLYEKLEETGQVV	+	-	-	-
3597	Q9UI17	148	IRLATTPVRVDEFKYQMTRTGWHATEQ	+	-	-	+
3598	Q9UI17	168	GWHATEQYLIPEKIQEMFLLNMNKV	+	-	-	-
3599	Q9UI17	223	GALLKYPAPVTSIKARSDGTWVETPQ	+	-	-	-
3600	Q9UI17	317	RDGLLFGPYESQEKMKVQDSWVTNGVP	-	-	-	+
3601	Q9UI17	319	GLLFGPYESQEKMKVQDSWVTNGVPPG	-	-	-	+
3602	Q9UI17	335	DSWVTNGVPPGFGKELFESDLDRIMEH	+	-	-	-
3603	Q9UI17	360	EHKAAMEMVPVLKADIINVNGPIT	+	-	-	-
3604	Q9UI17	434	PFDLIELDPNRYGKWTTTQYTEAKARE	+	-	-	+
3605	Q9UI17	523	RRTNWFEPVGSEYKQVMQRVAVTDLSP	+	-	-	+
3606	Q9UI17	655	QKLTSEDLSDDVFKFLQTKSLKVSNI	+	-	-	+
3607	Q9UI17	764	PADFIGKQALKQIKAKGLKRRLVCLTL	+	-	-	-
3608	Q9UI17	795	VDPEGNESIWYNGKVVGNTTSGSYSYS	-	-	-	+
3609	P43034	71	VIRLQKKVMELESKLNEAKEEFTSGGP	-	-	-	-
3610	P43034	53	NEELDKKYAGLLEKKWTSVIRLQKKVM	+	-	-	-
3611	P42704	702	LCSEENMQKALELKAKEYSDMVTGGYA	-	-	-	-
3612	P42704	155	RTEFAHR IWDTLQKLGAVYDVSHYNAL	+	-	-	-
3613	P42704	187	QNEYKFSPTDFLAKMEEANIQPNRVTY	+	-	-	-
3614	P42704	226	IEGASKILGFMKTDLDPVTEAVFSALV	+	-	-	-
3615	P42704	292	EKGIDIDHVKQTLKVEKSELHLMRDRL	+	-	-	-
3616	P42704	463	RKEKNVQGIIEILKGMQELGVHPDQET	+	-	-	-
3617	P42704	613	KEEHLRQYFHQLEKMNVKIPENIYRGI	+	-	-	-
3618	P42704	726	GAAALINLCCRHDKVEDALNLKEEFDR	+	-	-	-
3619	P42704	750	FDRLDSSAVLDTGKYVGLVRVLAKHGK	+	-	-	-
3620	Q9BS40	111	NPDEEDNTFYQRLKSMKEPLEAQNIPD	-	-	-	-
3621	Q9BS40	55	MEDIPGRGHKYHLKFAVEEIIQKQVKV	+	-	-	-
3622	O75608	105	AAENIKALIDQEVKNGIPSNRIILGGF	-	-	-	-
3623	O75608	224	CQQEMMDVKQFIDKLLPPIDDDDDDDDD	+	-	-	-
3624	Q02978	244	LVTTAASMPVDIAKTRIQNMRMIDGKP	-	-	-	-
3625	Q02978	57	LVKNRMQLSGEGAKTREYKTSFHALTS	-	-	-	+
3626	Q02978	73	EYKTSFHALTSILKAELRGIIYTGLSA	+	-	-	-
3627	Q02978	256	AKTRIQNMRMIDGKPEYKNGLDVLFKV	+	-	-	-
3628	O43708	120	AGGIQPLQNLSQLKQVGEEMQLTWAQN	-	-	-	-
3629	O43708	32	RVRIALALKGIDYKTVPINLIKDRGQQ	+	-	-	-
3630	O43708	57	QQFSKDFQALNPMKQVPTLKIDGITH	-	-	-	+
3631	O43708	177	LCLVPQVANAERFKVDLTPYPTISSIN	-	-	-	+
3632	P20700	222	KSMYEEEINETRRKHETRLVEVDSGRQ	-	-	-	-
3633	P20700	111	RERAKLQIELGKCKAEHDQLLLNYAKK	+	-	-	-
3634	P20700	157	SKDAALATALGDKSLEGLDLEDLKQDI	+	-	-	-

3635	P20700	271	RLYKEELEQTYHAKLENARLSSEMNTS	+	-	-	-
3636	P20700	330	CLERIQELEDLLAKEKDNSRRMLTDKE	+	-	-	-
3637	P20700	483	EMIRKIGDTSVSYKYTSRYVLKAGQTV	+	-	-	-
3638	Q96AG4	235	NQAPKSKSGSRPRKPPPRKHTRSWAVL	-	-	-	-
3639	Q96AG4	73	GLTHLVKLDLSKNKLQQLPADFGRLVN	-	-	-	+
3640	Q96AG4	135	PVLAKVAGDCLDEKQCKQCANKVLQHM	+	-	-	-
3641	Q07954	436	LYATNSDNANAQQKTSVIRVNRFNSTE	-	-	-	-
3642	Q07954	2009	GSFRYVVISQGLDKPRAITVHPEKGYL	+	-	-	-
3643	O15525	110	NASMKLELDALRSKYEALQTFARTVAR	-	-	-	-
3644	O15525	53	HLRGLSKEEIVQLKQRRRTLKNRGYAA	+	-	-	-
3645	O15525	60	EEIVQLKQRRRTLKNRGYAASCRVKRV	+	-	-	-
3646	O15525	71	TLKNRGYAASCRVKRVTKKEELEKQKA	+	-	-	-
3647	O15525	76	GYAASCRVKRVTKKEELEKQKAELQQE	+	-	-	-
3648	Q9NS73	208	ARTDAIFTPYPGFKSHVKVSRVNTYG	-	-	-	-
3649	Q9NS73	301	ISPEYFQSVSFSGKRRKVQPPQQNYSL	+	-	-	-
3650	Q05BQ5	69	MCGMVGVRDAFYSKTKRFCSVSCRSY	-	-	-	-
3651	Q05BQ5	115	KKAKVLQKQPLVAKLAAYAQYQATLQN	+	-	-	-
3652	O43772	234	IFNWAVAIPPDVLKSRFQTAPPGKYPN	-	-	-	-
3653	O43772	148	KCLLQIQASSGESKYTGTLDCAKKLYQ	+	-	-	-
3654	O43772	157	SGESKYTGTLDCAKKLYQEFGIRGIYK	+	-	-	-
3655	O43772	170	KKLYQEFGIRGIYKGTVLTLMRDVPAS	+	-	-	+
3656	Q96RQ3	669	TIEKV FVKAGDKVKAGDSLVMMIAMKM	-	-	-	-
3657	Q96RQ3	237	FQEQLSARREAKKSFNDDAMLIEKFV	+	-	-	-
3658	Q96RQ3	494	AGNVHTDFIPQHHKQLLLSRKAAAKES	+	-	-	-
3659	Q96RQ3	581	YNHDGSYSMQIEDKTFQVLGNLYSEG	+	-	-	+
3660	P25205	153	KVVRSVHYCPATKKTIERYSDLTTLV	-	-	-	-
3661	P25205	293	DIAKIKKFSKTRSKDIFDQLAKSLAPS	+	-	-	-
3662	P25205	547	FSQEDQQDTQIYEKHDNLLHGTKKKKE	+	-	-	-
3663	P33992	449	LADGGVVCIDEFDKMREDDRVAIHEAM	-	-	-	-
3664	P33992	392	MLGDPGTAKSQLLK FVEKCSPIGVYTS	+	-	-	-
3665	P33992	396	PGTAKSQLLK FVEKCSPIGVYTSKGGS	+	-	-	-
3666	P33992	696	FAIGSQVSEHSIIKDFTKQKYPEHAIH	+	-	-	-
3667	Q9UPN3	284	LDAEDVDVPSPDEKSVITYVSSIYDAF	-	-	-	-
3668	Q9UPN3	6210	LTELKHLWENLGEKIAHRQHKLEGALL	+	-	-	-
3669	Q92585	139	QQNGYGDLFPGHKKTREAPLGVAISS	-	-	-	-
3670	Q92585	822	QQHNKGTLNPGLTKPPVPRVSPAMGGQ	+	-	-	-
3671	P49736	868	QDTIEVPEKDLVDKARQINIHNLSAFY	-	-	-	-
3672	P49736	216	LRTHVDSHGHNFKERISDMCKENRES	+	-	-	-
3673	Q96JK9	272	CSDLEDSFTILQSKDLKQEPLDDPTCI	-	-	-	-
3674	Q96JK9	603	LNKQHNILTYGNTKPLTHFNADLSQRM	+	-	-	-
3675	Q969Z3	229	TDASLVDLNRMEKMKMENFRPNIVV	-	-	-	-
3676	Q969Z3	156	NKLHNCRIFGLDIKGRDCGNEAAKWFT	+	-	-	-
3677	Q9BQG0	344	RHYGEHVCTAKLPKQFKFAPEMDDYVG	-	-	-	-
3678	Q9BQG0	71	LEYLRGRPKGSEMKYALKRLITGLGVG	+	-	-	-
3679	Q9BQG0	158	QSGRLVKDQEALMKSVKLLQALAQYQN	+	-	-	-
3680	P51608	363	SPKGRSSSASSPPKKEHHHHHHHSESP	-	-	-	-
3681	P51608	321	TRETVSIEVKEVVKPLLVLSTLGEKSGK	+	-	-	-
3682	P51608	449	TQPAVATAATAAEKYKHRGEGERKDIV	+	-	-	-
3683	P43243	565	CLKKALWFQGRCVKVDLSEKYKKLVLR	-	-	-	-
3684	P43243	3	MMMMMMMMMMMSKSFQQSSLRDSQG	+	-	-	-
3685	P43243	522	SDSAVLKLAEPYGIKKNYILMRMKSQA	+	-	-	-
3686	P43243	571	WFQGRCVKVDLSEKYKKLVLRIPNRGI	+	-	-	-
3687	P43243	836	SLPHYQKLKKFLNKLAEERRQKKETTT	+	-	-	-
3688	O43324	21	SLLEKSLGLSKGNKYSAQGERQIPVLQ	-	-	-	-
3689	O43324	138	HRFIVDLTVQEKEKYNVSRWFCHIQH	+	-	-	-
3690	Q96EZ8	121	SPAPAPGLTKRVKKSKQPLQVTKDLGR	-	-	-	-
3691	Q96EZ8	123	APAPGLTKRVKKSKQPLQVTKDLGRWK	+	-	-	-
3692	Q96EZ8	130	KRVKSKQPLQVTKDLGRWKPADDLLL	+	-	-	-

3693	Q8NE86	316	FHKGAKKS RFDLEKYNQLKDAIAQAEM	-	-	-	-
3694	Q8NE86	332	QLKDAIAQAEMDLKRLRDPLQVHLPLR	+	-	-	-
3695	Q9BQ69	295	IVLATLREWLEQHKDKVDRLIICVFLE	-	-	-	-
3696	Q9BQ69	96	MAAKVDLSTSTDWKEAKSFLKGLSDKQ	-	-	-	+
3697	Q9BQ69	103	STSTDWKEAKSFLKGLSDKQREEHYFC	-	-	-	+
3698	Q9BQ69	129	CKDFVRLKKIPTWKEMAKGVAVKVEEP	-	-	-	+
3699	Q9BQ69	163	LNEKISLLRSDITKLEVDAIVNAANSS	+	-	-	-
3700	Q14676	1894	LRRTKLNQESTAPKVLFTGVVDARGER	-	-	-	-
3701	Q14676	812	PMGIQGRGRQTVDKVMGIPKETAERVG	+	-	-	-
3702	Q14676	1402	SRATRGRKNRSSGKTPETLVPTAPKLE	+	-	-	-
3703	Q9BV79	290	ARGGTMVTYGGMAKQPVVASVSLLIFK	-	-	-	-
3704	Q9BV79	61	YGHGDPKAVVELKNLELAAVRGSDVR	+	-	-	+
3705	Q9BV79	252	EEELRRPEMKNFFKDMPQPRALNCVG	+	-	-	+
3706	Q9BV79	267	MPQPRALNCVGGKSSTELLRQLARGG	+	-	-	+
3707	Q9BV79	316	KDLKLRGFWLSQWKDHDSPDQFKELIL	-	-	-	+
3708	Q06413	90	ESRTNSDIVETLRKKGKLGCDSPDPDA	-	-	-	-
3709	Q06413	4	MMMMMMMMMMGRKKIQITRIMDERNR	+	-	-	-
3710	Q06413	116	ADDSVGHSPESDKYRKINEDIDLMIS	+	-	-	-
3711	Q06413	119	SVGHSPESDKYRKINEDIDLMISRQR	+	-	-	-
3712	Q06413	234	NSPGLLVSPGNLNKNMQAKSPPPMNLG	+	-	-	-
3713	Q06413	239	LVSPGNLNKNMQAKSPPPMNLGMNNRK	+	-	-	-
3714	Q06413	252	KSPPPMNLGMNNRKPDLRVLIPPGSKN	+	-	-	-
3715	Q06413	264	RKPDLRVLIPPGSKNTMPSPVSEDVDLL	+	-	-	-
3716	P23368	339	SMVENGLSEQEAQKKIWMFDKYGLLVK	-	-	-	-
3717	P23368	156	VRSIVDNWPENHVKAVVTDGERILGL	+	-	-	-
3718	P23368	224	ALLKDPFYMGLYQKRDRTQQYDDLIDE	+	-	-	-
3719	P23368	240	RTQQYDDLIDEFMKAITDRYGRNTLIQ	+	-	-	-
3720	P23368	272	NHNAFRFLRKYREKYCTFNDDIQGTAA	+	-	-	-
3721	P23368	346	SEQEAQKKIWMFDKYGLLVKGRKAKID	+	-	-	-
3722	Q02078	68	FQYASTDMDKVLLKYTEYNEPHESRTN	-	-	-	-
3723	Q02078	249	PNLIGATGANS LGKVMPTKSPPPPGGG	+	-	-	-
3724	Q02078	403	SNLSINTNQNISIKSEPISPPRDRMTP	+	-	-	-
3725	Q14814	279	RKPDLRVITSQAGKGLMHHLTEDHLDL	-	-	-	-
3726	Q14814	245	PGLLPVANGNSLNKVIPAKSPPPPTHS	+	-	-	-
3727	Q14814	439	AALTVTTHPHISIKSEPVSPSRERSPA	+	-	-	-
3728	Q9Y4C4	712	RLQSALSYLHESGKLLYFEDSPALKEH	-	-	-	-
3729	Q9Y4C4	601	SASPHAAYYGVSDKNLRRRKAHFQYLL	+	-	-	-
3730	P61244	127	NYPSSDNSLYTNAKGSTISAFDGGSDS	-	-	-	-
3731	P61244	66	LQGEKASRAQILDKATEYIQYMRRKNH	+	-	-	-
3732	P61244	153	SSSESEPEEPQSRKCLRMEASSSSSSSS	+	-	-	-
3733	P61244	154	SSESEPEEPQSRKCLRMEASSSSSSSS	+	-	-	-
3734	Q9HCC0	512	SADAAALKEPIIKKFEEEGNPYYSSAR	-	-	-	-
3735	Q9HCC0	70	HERVEHIKLGGEKARALHISRGKLLP	+	-	-	+
3736	Q9HCC0	141	GVECMIIANDATVKG GAYYPVTVKKQL	-	-	-	+
3737	Q9HCC0	495	LATITKDQRAREGKQFSSADEAALKEP	+	-	-	+
3738	Q9HCC0	511	SSADEAALKEPIIKKFEEEGNPYYSSA	+	-	-	-
3739	P33991	746	QLESLIRLAEAHAKVRLSNKVEAIDVE	-	-	-	-
3740	P33991	220	FLNVNCEHIKSFDKNLYRQLISYPQEV	+	-	-	-
3741	P33991	450	EQKLFSEKRVELLKELSRKPDIERLA	+	-	-	-
3742	P33991	858	RALADDDFLTVTGKTVRLLLLLLLLLLLL	+	-	-	-
3743	Q14566	744	LKRVEEEEDESALKRSELVNWYLKEIE	-	-	-	-
3744	Q14566	643	AMARMHCCDEVQPKHVKEAFRLLNKSI	+	-	-	-
3745	O75586	163	KDHEEQDKVRPKAKRKEEPSSIFQRQR	-	-	-	-
3746	O75586	236	KETTKNVQQTVS AKGPPEKRMRLQQQQ	+	-	-	-
3747	O75586	241	NVQQTVS AKGPPEKRMRLQQQQQQQQQ	+	-	-	-
3748	Q96PE7	60	RLNHVAIAVPDLEKAAAFYKNILGAQV	-	-	-	-
3749	Q96PE7	114	PLGRDSPIAGFLQKNKAGGMHHICIEV	-	-	-	+
3750	Q96PE7	150	LKKKKIRSLSEEVKIGAHGKPVIFLHP	+	-	-	+

3751	Q15648	283	IAPLINGSHVPDNKWTPSFSSITSANS	-	-	-	-
3752	Q15648	1177	SSGSSSTKMKPQKGKPSLLMNP SL SKPN	+	-	-	-
3753	Q15648	1529	RDKDRDKKKSHSIKPESWSKSPISSDQ	+	-	-	-
3754	Q9Y6D9	181	ELQWSVMDQEMRVKRLESEKQELQEQL	-	-	-	-
3755	Q9Y6D9	61	SMQLEERAEQIRS KSHLIQVEREKMQM	+	-	-	-
3756	P40925	201	SSTQYPDVNHAKVKLQKKEVGVYEALK	-	-	-	-
3757	P40925	110	ERKDLLKANVKIFK SQGAALDKYAKKS	-	-	-	+
3758	P40925	118	NVKIFKSQGAALDKYAKKSVKVI VGN	+	-	-	-
3759	P40925	121	IFKSQGAALDKYAKKSVKVI VGNPAN	+	-	-	-
3760	P40925	214	KLQKKEVGVYEALKDDSWLKGEFVTTV	-	-	-	+
3761	P40925	298	LYSFPVVIKNTWK FVEGLPINDFSRE	+	-	-	+
3762	P40925	318	INDFSREKMDLTAKELTEEKESAFEFL	-	-	-	+
3763	Q9NU22	4717	QKGQEKDKEDPDSKSDIKGEDNAIEMS	-	-	-	-
3764	Q9NU22	1683	KRLAKIVRLTEYQKNELKIYDRMKAKE	+	-	-	-
3765	Q93074	200	TQIITKYLWEQLQKMAEYYRPGPAGSG	-	-	-	-
3766	Q93074	80	AKISSNFSSIIAEKLR CNTLPDTGRRK	+	-	-	-
3767	Q93074	1798	KSTKGKKRSQPATKTEDYGMGPGRSGP	+	-	-	-
3768	Q8N4P3	93	AQVRRLV EEVTD DKTLPKLERKRLQVE	-	-	-	-
3769	Q8N4P3	25	ADFAARKHRQRRKDPEGTPYINHPIG	+	-	-	-
3770	Q8N4P3	97	RLVEEVTDDKTLPKLERKRLQVEQAPH	+	-	-	-
3771	Q8N4P3	123	HSSPGAKLVKLADKLYNLRLDLNRCTPE	+	-	-	-
3772	P31153	340	PLSISIFHYGTSQKSERELLEIVKKNF	-	-	-	-
3773	P31153	81	AGEITSRAAVDYQKVREAVKHIGYDD	+	-	-	-
3774	Q16891	344	LHNMIVDLDNVVKVQAAQSEAKVVSQ	-	-	-	-
3775	Q16891	211	PPEEVAARLAQQEKQEQVKIESLAKSL	+	-	-	-
3776	Q16891	222	QEKQEQVKIESLAKSLEDALRQTASVT	+	-	-	-
3777	Q16891	451	KLEEKRAFDSAVAKALEHHRSEIQAEQ	+	-	-	-
3778	Q99797	87	PEGFHIAQEALRKTELLVDRACSTPP	-	-	-	-
3779	Q99797	126	DSL CRVADLADFVKIAHPEPAFREAAE	+	-	-	-
3780	Q02252	255	HEAVNFICDHPDIKAISFVGSNKAGEY	-	-	-	-
3781	Q02252	47	SSSVPTVKLFIGGKFVESKSDKWIDIH	+	-	-	+
3782	Q02252	52	TVKLFIGGKFVESKSDKWIDIHNPATN	+	-	-	+
3783	Q02252	55	LFIGGKFVESKSDKWIDIHNPATNEVI	+	-	-	+
3784	Q02252	76	ATNEVIGRVPQATKAEMDAAIASCKRA	+	-	-	+
3785	Q02252	87	ATKAEMDAAIASCKRAFPWADTSVLS	+	-	-	-
3786	Q02252	117	VLLRYQQLIKENLKEIAKLITL EQGKT	+	-	-	+
3787	Q02252	129	LKEIAKLITL EQGKT LADAEGDVFRGL	+	-	-	+
3788	Q02252	298	GAKNHGVMPDANKENTLNQLVGAAFG	+	-	-	-
3789	Q02252	330	CMALSTAVLVGEAKKWLPELVEHAKNL	+	-	-	-
3790	Q02252	331	MALSTAVLVGEAKKWLPELVEHAKNLR	+	-	-	-
3791	Q02252	364	PGADLGPLITPQAKERV CNLIDSGTKE	+	-	-	+
3792	Q02252	376	AKERV CNLIDSGTKEGASILLDGRKIK	+	-	-	+
3793	Q02252	391	GASILLDGRKIKVKG YENGNFVGPTII	-	-	-	+
3794	Q02252	500	SRSSFRTGDTNFYKGQGIQFYTQLKTIT	+	-	-	-
3795	Q02252	517	QFYTQLKTITTSQWKEEDATLSSPAVVM	-	-	-	+
3796	P10620	26	FMAFASYATIILSKMMLMSTATAFYRL	-	-	-	-
3797	P10620	42	LMSTATAFYRLTRKFANPEDCVAFGK	+	-	-	-
3798	P10620	55	KVFANPEDCVAFGKGENAKYLRTDDR	+	-	-	-
3799	P10620	60	PEDCVAFGKGENAKYLRTDDRVERVR	+	-	-	-
3800	Q96T76	1007	PQVIRALAKPLDDKRLVRKEAVSARG	-	-	-	-
3801	Q96T76	496	ELAVGHLYRLSFLKEDSQSCRVAALEA	+	-	-	-
3802	P26038	254	PWSEIRNISFNDK FVIKPIDKKAPDF	-	-	-	-
3803	P26038	60	LQYQDTKGFSTWLKLNKKVTAQDVRKE	+	-	-	-
3804	P26038	79	TAQDVRKESPLLKFRAKFYPEDVSEE	+	-	-	-
3805	P26038	83	VRKESPLLKFRAKFYPEDVSEELIQD	-	-	-	+
3806	P26038	139	ASYAVQSKYGDFNKEVHKSGYLAGDKL	+	-	-	-
3807	P26038	165	LLPQRVLEQHKLNKDQWEERI QVWHEE	+	-	-	-
3808	Q9NX63	189	RYESH PVCADLQAKILQCYRENTHTL	-	-	-	-

3809	Q9NX63	142	EKDRV LKKQDAFYKEQLARLEERSSEF	+	-	-	-
3810	Q16539	79	KRTYRELRL LKHMKHENVIGLLDVFTP	-	-	-	-
3811	Q16539	53	AAFDTKTGLRVAVK KLSRPFQSI IHAK	+	-	-	-
3812	Q16539	152	KYIHSADI IHRDLKPSNLAVNEDCELK	+	-	-	-
3813	Q9H3L0	23	RLVSYLPGFCSLVKRVVNP KAFSTAGS	-	-	-	-
3814	Q9H3L0	203	SEEVEIEREV LLEKFINGAKEICYALR	+	-	-	-
3815	Q9HCE1	489	VAPRDVPLLPSDV K LKLYDRSLESNPE	-	-	-	-
3816	Q9HCE1	148	RDGQLLIRLDLNRKEVLT LRLRNGGTQ	+	-	-	-
3817	P14174	67	SEPCALCSLHSIGKIGGAQNR SYSKLL	-	-	-	-
3818	P14174	78	IGKIGGAQNR SYSKLLCGLLAERLRIS	+	-	-	+
3819	P52701	824	LLKKLPDLERLLSK IHNVGSP LKSQNH	-	-	-	-
3820	P52701	70	PRPLARSASPPKAKNLNGGLRRSVAPA	+	-	-	-
3821	P52701	504	MMEARCRKMAHISKYDRVVRREICRII	+	-	-	-
3822	Q96EY8	177	LPPLTAFILPSGGKISSALHFCRAVCR	-	-	-	-
3823	Q96EY8	211	PLVQMGETDANVAKFLNRLSDYLF TLA	-	-	-	+
3824	Q96EY8	230	SDYLF T LARYAAMKEGNQEKIYMKNDP	+	-	-	+
3825	Q9UBU8	38	LYEAKCVKVAIKDKQVKYFIHYS GWNK	-	-	-	-
3826	Q9UBU8	143	GAAPGKKTSGLQQKNVEVKTKKNKQKT	+	-	-	-
3827	Q10713	473	KLPHELCTLIRNVKPEDVKRVASKMLR	-	-	-	-
3828	Q10713	64	VPKPVFATVDGQEK FETKVTTLDNGLR	-	-	-	+
3829	Q10713	299	IDRSVAQYTG GIAKLERDMSNVSLGPT	+	-	-	-
3830	P43246	531	QFGYYFRVTCKEEKVL RNNKNFSTVDI	-	-	-	-
3831	P43246	555	VDIQKNGVKFTNSKLTSLNEEYTKNKT	+	-	-	-
3832	P43246	567	SKLTSLNEEYTKNKTEYEEAQDAIVKE	+	-	-	-
3833	Q9NZB8	186	SAINISLDTLVPAKFEFIVRRKG FHKV	-	-	-	-
3834	Q9NZB8	198	AKFEFIVRRKG FHKVMEGIHKAIELGY	+	-	-	-
3835	Q9NZB8	528	GPVAFKLVQQNQLKKG DALVVAQLAGV	+	-	-	-
3836	Q9Y5U8	45	ANWGLPIAAINDMKKSPEIISGRMTFA	-	-	-	-
3837	Q9Y5U8	72	LCCYSLTFMRFAYKVQPRNWLLFACHA	+	-	-	-
3838	O00566	203	GQGKPREKSIVDDKFFKLSEMEAYLEN	-	-	-	-
3839	O00566	609	RKLEKSSVDQAGKYSKTVASEKLKQL	+	-	-	-
3840	Q9Y2G1	492	LHFSETTANNMRKKGKPNPDQRYFMLV	-	-	-	-
3841	Q9Y2G1	123	APKPFPGGTGPP IKAEPKAPYAPGTLP	+	-	-	-
3842	O94776	311	KSLASIVQFYMWKT TDRYIQQRLKA	-	-	-	-
3843	O94776	152	TLLADQGEIRVGCKYQAEIPDRLVEGE	+	-	-	-
3844	O94776	460	LAKNRQTFL LQTTKLTRLARRMCRDLL	+	-	-	-
3845	O94776	522	IHPLVRLPLATIVKDLVAQAPLKP KTP	+	-	-	-
3846	O94776	531	ATIVKDLVAQAPLKP KTPRGTKTPINR	+	-	-	-
3847	P13995	286	DVGINRVHDPVTA KPKLVGDVDFEGVR	-	-	-	-
3848	P13995	50	AVVISGRKLAQQIKQEV RQEVEEWVAS	+	-	-	-
3849	Q00325	313	SLVLKRLGFKGVWKGLFARIIMIGTLT	-	-	-	-
3850	Q00325	99	LDLVKCRMQVDPQKYKGIFNGFSVTLK	+	-	-	-
3851	Q00325	209	YANTLRDAAPKMYKEEGLKAFYKGVAP	+	-	-	-
3852	P33527	406	MRIKTAVIGAVYRKALVITNSARKSST	-	-	-	-
3853	P33527	503	YQVAHMKSKDNRIKLMNEILNGIKVLK	-	-	-	+
3854	Q68DK7	245	LIEQQQQQLQAKEKEIEELKSERDTLL	-	-	-	-
3855	Q68DK7	353	RKTPVKKLAPEFSKVKT KTPKHSPIKE	+	-	-	-
3856	Q9UJ68	176	PTSAKQMEALSSKENYQKVLSEHGFG	-	-	-	-
3857	Q9UJ68	106	VGFAGGYTSNPTYKEVCSEKTGHAEVV	+	-	-	+
3858	Q13126	157	FCPKTREVL IETAKKLGLRCHSKGTMV	-	-	-	-
3859	Q13126	51	FGKPSDALILGKIKNVDCVLLARHGRQ	+	-	-	-
3860	P11717	59	PELCSYTWEAVDTKNNVLYKINICGSV	-	-	-	-
3861	P11717	2352	LTCCRSSNVSYKYSKVNKEETDEN	+	-	-	-
3862	Q8IXL7	65	KRLTPLQYHVTQEKGTESAFEGEYTHH	-	-	-	-
3863	Q8IXL7	42	SAQSGSCRDKKNCKVVFSSQQLRKRLT	+	-	-	-
3864	P42345	226	LRACLILT TQREPKEMQKPQWYRHTFE	-	-	-	-
3865	P42345	1218	NHORYDVLICRIVKGYTLADEEEDPLI	+	-	-	-
3866	P58546	94	VSCVKLLLSKGADKTVKGPDGLTAFEAF	-	-	-	-

3867	P58546	4	MMMMMMMMMMCDKEFMWALKNGDLDE	+	-	-	-
3868	P58546	11	MMMMCDEKFMWALKNGDLDEVKDYVAK	+	-	-	-
3869	P58546	24	KNGDLDEVKDYVAKGEDVNRTLEGGRK	+	-	-	-
3870	Q9Y4I5	472	TCACLLAQGEEAEKEHCSKCLAEQMIL	-	-	-	-
3871	Q9Y4I5	40	PFASENIGLKAPVKYEEDEFHVFKEAY	+	-	-	-
3872	P10243	692	QDINSTNKTYTLTKKKPNPNTSKVVKL	-	-	-	-
3873	P10243	394	SDAAASPIKSTPVKLMRIQHNEGAMEC	+	-	-	-
3874	Q8NCE2	101	HIVFLEYESSEKEKDTFESTVQVSKLQ	-	-	-	-
3875	Q8NCE2	194	DCALRSGDTHLFDKVRGYDIKLLRYS	+	-	-	-
3876	Q15746	1503	WAGKFFKAYSACEKENIRQEISIMNCL	-	-	-	-
3877	Q15746	608	SAWVTVHEKKSSRKSEYLLPVAPSKPT	+	-	-	-
3878	O00159	188	LQSNPVLEAFGNAKTLRNDNSSRFGKY	-	-	-	-
3879	O00159	383	NLEQAAYARDALAKAVYSRTFTWLVGK	-	-	+	-
3880	O00159	486	YFNNKIIICDLVEEKFKGIISILDEECL	+	-	-	-
3881	Q13330	352	QKRLKAAEAESKIKQVYIPNYNKPNN	-	-	-	-
3882	Q13330	626	RHMGPSRNLLNGKSYPTKVRLIRGGS	+	-	-	-
3883	Q9UDX5	61	ASSYVLADAIDKGKAGEVPSPEAGRS	-	-	-	-
3884	Q9UDX5	123	VLGTATRWPLAVRKWTTTALGLLTPI	-	-	-	+
3885	P22033	121	RQYAGFSTVEESNKFYKDNKAGQQGL	-	-	-	-
3886	P22033	89	RDMDLPEELPGVKPFTRGPYPTMYTF	+	-	-	-
3887	P22033	212	FIVTGEEQGVKPKLTGTIQNDILKEF	+	-	-	-
3888	P22033	335	MRAGRRLWAHLIEKMFQPKNSKSLLR	+	-	-	-
3889	P22033	343	AHLIEKMFQPKNSKSLLRHCQTSWG	-	-	-	+
3890	P22033	595	MVSGAYRQEFGESKEITSAIKRVHKFM	-	-	-	+
3891	P22033	602	QEFGESKEITSAIKRVHKFMERGRRP	+	-	-	-
3892	Q7Z406	1799	LTTELSAERSFSAKAESGRQQLERQIQ	-	-	-	-
3893	Q7Z406	1662	QMASAGQGKEEAVKQLRKMQAQMKELW	+	-	-	-
3894	Q9GZZ1	17	SRIELGDVTPHNIKQLKRLNQVIFPVS	-	-	-	-
3895	Q9GZZ1	34	RLNQVIFPVSYNDFYKDVLEVGEALAK	+	-	-	-
3896	Q9GZZ1	37	QVIFPVSYNDFYKDVLEVGEALAKLAY	+	-	-	-
3897	P49321	526	GNLELAWDMLDLAKIIFKRQETKEAQL	-	-	-	-
3898	P49321	33	KIEDVPAPSTSADKVESLDVDSEAKKL	+	-	-	-
3899	P49321	243	GKPEQEVPADEEEKSVSGTDVQEECRE	+	-	-	-
3900	P49321	288	KEVSEEQPVVTLKQGTAVEVEAESLD	+	-	-	-
3901	P00387	126	YFKDTHPKFPAGGKMSQYLESMQIGDT	-	-	-	-
3902	P00387	42	RSTPAITLESPIKDYPLRLIDREIISH	+	-	-	-
3903	P00387	120	DLVIKVFYKDTHPKFPAGGKMSQYLES	+	-	-	-
3904	A2RRP1	1801	LKKFKVVASGLNYKCLTDENMSPLEAL	-	-	-	-
3905	A2RRP1	1057	LSVSELLEKHGLEKPISFVKNTQSSSE	+	-	-	-
3906	P01106	269	QEDEEEIDVVSVEKRQAPGKRSESGSP	-	-	-	-
3907	P01106	143	IQDCMWSGFSAALKLVSEKLASYQAAR	+	-	-	-
3908	P01106	148	WSGFSAAAKLVSSEKLASYQAARKDSGS	+	-	-	-
3909	P01106	157	LVSEKLASYQAARKDSGSPNPARGHSV	+	-	-	-
3910	P01106	275	IDVVSVEKRQAPGKRSESGSPSAGGHS	+	-	-	-
3911	P01106	317	THQHNYAAPPSTRKDYPAAKRVKLDV	+	-	-	-
3912	P01106	323	AAPPSTRKDYPAAKRVKLDVSVRLRQI	+	-	-	-
3913	P01106	371	THNVLERQRRNELKRSFFALRDQIPEL	+	-	-	-
3914	P15172	242	AYYNEAPSEPRPGKSAVSSLDCLSSI	-	-	-	-
3915	P15172	104	GRCLLWACKACKRKTTNADRRKAATMR	-	-	+	-
3916	P35580	1281	VSEGDRRLVELAEKASKLQNELDNVST	-	-	-	-
3917	P35580	442	YERLFRWLVRINKALDRTKRQGASFI	+	-	-	-
3918	P35580	1241	GLETDNKEACEVKVLQQVKAESEHKKR	+	-	-	-
3919	P35580	1301	ELDNVSTLLEEAEKKGIFAKDAASLE	+	-	-	-
3920	P35580	1645	QIEAANKARDEVIKQLRKLQAQMKDYQ	+	-	-	-
3921	Q9NZM1	1013	PPDHKPKSWAAEKMYHTRRRRLVRK	-	-	-	-
3922	Q9NZM1	553	ELATFLEKTPPDKKLEPISNDDLLVVE	+	-	-	-
3923	Q9NZM1	884	FGKWGTSGLVGRHKFSDVTGKIKLKRE	+	-	-	-
3924	Q9NZM1	1507	LTDFSDFKLYRGKSDENEDPSVVGFE	+	-	-	-

3925	Q9BXJ9	111	EAIKCYRNALKWDKDNLQILRDLSSLQ	-	-	-	-
3926	Q9BXJ9	262	GLQERNPENWAYYKGLEKALKPANMLE	+	-	-	-
3927	Q9BXJ9	735	ESKDLSDTVTVTLKQEMNRLFATNPK	+	-	-	-
3928	Q9BXJ9	756	GATNPKNFNETFLKRNSDSLPHRLSAA	+	-	-	-
3929	Q9H7X0	72	YRGAIVGMIVAEIKNRTKIHKEDGDIL	-	-	-	-
3930	Q9H7X0	79	MIVAEIKNRTKIHKEDGDILASNFSVD	+	-	-	-
3931	Q9H7X0	105	DTQVAYILSLGVVKEFRKHGIGSLLLE	+	-	-	-
3932	Q9H7X0	109	AYILSLGVVKEFRKHGIGSLLLES�KD	+	-	-	-
3933	Q9H7X0	121	RKHGIGSLLLESIKDHISTTAQDHCKA	+	-	-	-
3934	Q9H7X0	156	NNTAINFYENRDFKQHHYLPYYYSIRG	+	-	-	-
3935	Q13765	113	KNILFVITKPDVYKSPASDTYIVFGEA	-	-	-	-
3936	Q13765	142	EDLSQQAQLAAAEKFKVQGEAVSNIQE	+	-	-	-
3937	Q15596	713	PVDLAKLTAEATGKDLSEQSSSTAPGS	-	-	-	-
3938	Q15596	636	SERADGQSR LHDSKGQTKLLQLLTTKS	+	-	-	-
3939	Q15596	640	DGQSR LHDSKGQTKLLQLLTTKSDQME	+	-	-	-
3940	Q15596	780	ERLDSKTDPASNTKLIAMKTEKEEMSF	+	-	-	-
3941	Q15596	785	KTDPASNTKLIAMKTEKEEMSFEPGDQ	+	-	-	-
3942	P10242	128	WSVIAKHLKGRIGKQCRERWHNHLNPE	-	-	-	-
3943	P10242	471	SILESSPRTPTPFKHALAAQEIKYGPL	+	-	-	-
3944	P10242	480	PTPFKHALAAQEIKYGPLKMLPQTPSH	+	-	-	-
3945	Q9HB07	128	TMSSSLSPGKPWQTKLSSAGLIYLFHGH	-	-	-	-
3946	Q9HB07	267	FQVDPSGEIVELAKGACPWKEHLYHLE	+	-	-	-
3947	Q9HB07	273	GEIVELAKGACPWKEHLYHLESGLSPP	+	-	-	-
3948	E9PAV3	416	TSFSLSPTTSLILKSSPNATYHYPLVA	-	-	-	-
3949	Q09161	741	CETDGTSLTPWYKNCIERLQQIFLQH	-	-	-	-
3950	Q09161	204	EMDRIFANTESYLKRRQKTHVPMQVW	+	-	-	-
3951	Q09161	698	DGVLEEQIERLQEKVESAQSEQKNLFL	+	-	-	-
3952	Q14686	513	GPQSLHPGLGGMPKRLPPGFSAGQANP	-	-	-	-
3953	Q14686	1819	NRRSPVSSSKGKGKVDKIGQILLTKAC	+	-	-	-
3954	Q14686	1822	SPVSSSKGKGKVDKIGQILLTKACKKV	+	-	-	-
3955	Q9Y618	195	EITMVEQQISKLKQKQQLEEEAAKPP	-	-	-	-
3956	Q9Y618	878	ECTEEAEEGPAKKGDAEAAEATAEGAL	+	-	-	-
3957	Q9Y618	959	TPTGDPRANASPQKPLDLKQLKQRAAA	+	-	-	-
3958	Q9Y618	1218	GTALGSVPGGSTITKGIPSTRVPSDSAI	+	-	-	-
3959	Q9Y618	1248	GSITHGTPADVLYKGTITRIIGEDSPS	+	-	-	-
3960	Q9Y618	1970	ERPRADTGHAFLAKPPARSGLEPASSP	+	-	-	-
3961	Q9Y618	2037	ASASDPHREKTQSKPFSIQELELRSLG	+	-	-	-
3962	Q16718	67	EKLAMVKAEPDVKKLEDQLQGGQLEEV	-	-	-	-
3963	Q16718	30	CNTPHERLRILYTKILDVLEEIPKNAA	+	-	-	-
3964	Q16718	46	DVLEEIPKNAAAYRYTEQITNEKLAMV	+	-	-	-
3965	Q16718	60	YTEQITNEKLAMVKAEPDVKKLEDQLQ	+	-	-	-
3966	Q16718	98	EHELNLARKMREWKLWEPLVEEPPADQ	+	-	-	+
3967	O95299	243	TSAYLQDIENAYKKTFLPEMSEKCEVL	-	-	-	-
3968	O95299	285	DIEYLKFDKGPWLKQDNRTLYHLRLLV	-	-	-	+
3969	P60660	56	PTNAEVLKVLGNPKSDEMNVKVLDFEH	-	-	-	-
3970	P60660	81	EHFLPMLQTVAKNKDQGTIEDYVEGLR	+	-	-	-
3971	Q9H0A0	931	MVAAKDVMPEPTMTLSDDLDEAAKEF	-	-	-	-
3972	Q9H0A0	426	INGYEGTGRSLSIKLIQQLRQQSAQSQ	+	-	-	-
3973	O95182	33	LQGKLQLRYQEISKRTQPPPKLPVGPS	-	-	-	-
3974	O95182	40	RYQEISKRTQPPPKLPVGPSHKLSNNY	+	-	-	-
3975	O95139	100	KYHVSEKPYGIVEKKSRIFGDTILET	-	-	-	-
3976	O95139	24	RLQQRLRELRRRWLKDQELSPREPVLPP	+	-	-	-
3977	P49821	98	LRGRGGAGFPTGLKWSFMNKP SDGRP K	-	-	-	-
3978	P49821	81	ILLKGPDWILGEIKTSGLRGRGGAGFP	+	-	-	+
3979	P49821	104	AGFPTGLKWSFMNKP SDGRP KYLVVNA	+	-	-	-
3980	P49821	375	DIVKAIARLIEFYKHESCGQCTPCREG	+	-	-	-
3981	P19404	100	QRQNGWLPISAMNKVAEVLQVPPMRVY	-	-	-	-
3982	P19404	61	NPDTPFDFTPENYKRIEAIVKNYPEGH	+	-	-	-

3983	Q147X3	128	TATPDGGPRATATKAGVHSGERPPHS	-	-	-	-
3984	Q147X3	233	SELQMPDIMRLITKDLSEPYSIYTRY	+	-	-	-
3985	Q4G0N4	304	YEISVDDGPWEKQSSGLNLCTGTGSK	-	-	-	-
3986	Q4G0N4	76	DGGFRPSRVVVAKTTRYEFEQQRYY	+	-	-	+
3987	Q4G0N4	302	SYYEISVDDGPWEKQSSGLNLCTGTG	-	-	-	+
3988	Q4G0N4	317	KSSGLNLCTGTGSKAWSFNINRVATQA	+	-	-	+
3989	Q4G0N4	397	RVFSSSRQRCFSSKVCVRSRCWDACMV	+	-	-	-
3990	O75376	670	KSEAQCKNFYFNYKRRHNLNLLQQHK	-	-	-	-
3991	O75376	1336	PPIRAFEGAITKGKPYDGITTIKEMGR	+	-	-	-
3992	O75376	1412	IKHNVKSLITGPSKLSRGMPPLEIVPE	+	-	-	-
3993	O00483	63	PEPWNKLGPNQYKFYSVNVDSKLLK	-	-	-	-
3994	O00483	10	MMMMMLRQIIGQAKKHPSLIPLFVFIG	+	-	-	-
3995	O43676	69	GFAKSVSFSDVFFKGFKWGFAAFVAV	-	-	-	-
3996	O43676	23	GHHKMELPDYRQWKIEGTPLETIQKKL	+	-	-	+
3997	O43676	34	QWKIEGTPLETIQKLAAGLRDPWGR	+	-	-	+
3998	O75306	372	DDAKVSPPKRAEMKTSMESLIHHFKLY	-	-	-	-
3999	O75306	62	GAVMYPKETAHWKPPPWNVDVPPKDT	+	-	-	-
4000	Q9BYT8	174	EARRYLEKSIKMGKRNGLHLPEQVQNE	-	-	-	-
4001	Q9BYT8	664	FKKEGIMNPEVGMKYRNLIKPGGSLD	+	-	-	-
4002	O94916	200	STSSYNDNTEVPRKSRKRNPKQRPVK	-	-	-	-
4003	O94916	122	SSAVGVSNRGVSEKQLTSNTVQQHPST	+	-	-	-
4004	P19838	896	EAIEVIQAASSPVKTTSQAHSLPLSPA	-	-	-	-
4005	P19838	431	TFHPGTTKSNAGMKHGTMDTESKKDPE	+	-	-	-
4006	P19838	440	NAGMKHGTMDTESKKDPEGCDKSDDKN	+	-	-	-
4007	P19838	441	AGMKHGTMDTESKKDPEGCDKSDDKNT	+	-	-	-
4008	Q9Y6Q9	599	QSNRDHLSDKESKESSEGAENQRP	-	-	-	-
4009	Q9Y6Q9	616	VEGAENQRPLESKGHKLLQLLTCSS	+	-	-	-
4010	Q9Y6Q9	619	AENQRPLESKGHKLLQLLTCSSDDR	+	-	-	-
4011	Q9Y6Q9	620	ENQRPLESKGHKLLQLLTCSSDDRG	+	-	-	-
4012	Q9Y6Q9	687	HGSLLEKHRIHLKLLQNGNSPAEVAK	+	-	-	-
4013	Q9UMX5	102	NALTGKDSTRGVAKMSLDPADLTHDTT	-	-	-	-
4014	Q9UMX5	136	EALDEVFTKVYKAKYPIVGYTARRILN	+	-	-	-
4015	Q8N5F7	255	KKHRSKKYKKRSKSRKESDSSSKE	-	-	-	-
4016	Q8N5F7	112	VYYGSYSRPYGS DKPWPSLLDKEREES	+	-	-	-
4017	Q8WX92	105	KLEDLLEKSFSLVKMPSLQPVVMCVMK	-	-	-	-
4018	Q8WX92	519	RLLIHLHPRVAPSKLEALQKALEPTGQ	+	-	-	-
4019	Q9BPW8	97	LDAYNSLTEAVLPKLHLEDEYPCSLVG	-	-	-	-
4020	Q9BPW8	65	VDPRKDAHSTLLSKKETSNNLYKIQFHN	+	-	-	-
4021	Q9BPW8	66	DPRKDAHSTLLSKKETSNNLYKIQFHN	+	-	-	-
4022	Q9BPW8	73	STLLSKKETSNNLYKIQFHNVPKPEYLD	+	-	-	-
4023	Q9BPW8	80	ETSNNLYKIQFHNVPKPEYLDAYNSLTEA	+	-	-	-
4024	Q9BPW8	143	GGYPALMDCMNKLKNNKEYLEFRRERS	+	-	-	-
4025	Q9BPW8	146	PALMDCMNKLKNNKEYLEFRRERSQML	+	-	-	+
4026	Q9BPW8	191	PRMGPNIELRTYKLPKPGTMIEWGNNW	+	-	-	-
4027	Q9BPW8	193	MGPNIYELRTYKLPKPGTMIEWGNNWAR	+	-	-	+
4028	Q9BPW8	279	LVRHMEIRIMIPLKISPLQQQQQQQQQ	+	-	-	-
4029	Q8NCW5	269	HYLGGRFVPPALEKKYQLNLPPYPDTE	-	-	-	-
4030	Q8NCW5	144	LKLFGEPTIYYPKRPKNPLFTALVTQ	-	-	-	+
4031	P55209	161	EKAKIEDEKKDEEKEDPKGIPEFWLTV	-	-	-	-
4032	P55209	116	ERKYAVLYQPLFDKRFEIINAIYEPT	+	-	-	-
4033	Q99733	258	VDCDGTIDWKKGNVTVKTIKKQKH	-	-	-	-
4034	Q99733	146	LAGDMKSKVVVTEKAAATAEEDPKGI	+	-	-	-
4035	O43678	45	GVRDFIEKRYVELKANPDLPIILIREC	-	-	-	-
4036	O43678	64	LPILIRECSDVQPKLWARYAFGQETNV	+	-	-	+
4037	O75380	108	GHPKVYINLDKETKTGTGCGYCLQFRQ	-	-	-	-
4038	O75380	98	IACDGGGGALGHPKVYINLDKETKTGT	+	-	-	-
4039	Q969S2	288	KFQGRPQHTQVYQKEQCPAGHQVMKEA	-	-	-	-
4040	Q969S2	50	LQSLWLQDTQVHGKKLFLRFDLDEEMG	+	-	-	-

4041	Q969S2	154	VWVNDFSRAKKAN K RGDWRDPSRLVL	+	-	-	-
4042	Q86UQ8	136	EDPTGTWTVSGPC K DHPHPFLSQSNPP	-	-	-	-
4043	Q86UQ8	43	RSSSPVDLPLRPR K QATAAGQRKLLSL	+	-	-	-
4044	Q9NQR4	112	VFGPDGTLLAKYR K IHLFDIDVPGKIT	-	-	-	-
4045	Q9NQR4	68	PEYAEKIPGESTQ K LSEVAKECSIYLI	+	-	-	+
4046	Q9NQR4	123	YRKIHLFDIDVPG K ITFQESKTLSPGD	-	-	-	+
4047	Q9NQR4	130	DIDVPGKITFQES K TLSPGDSFSTFDT	-	-	-	+
4048	P06748	54	QLSLRTVSLGAGAK K DELHIVEAEAMNY	-	-	-	-
4049	P06748	32	FGCELKADKDYHF K VDNDENEHQLSLR	+	-	-	-
4050	P06748	150	SISGKRSAPGGGS K VPQKKVKLAADED	+	-	-	-
4051	P06748	154	KRSAPGGGSKVPQ K KVKLAADEDDEDDDD	+	-	-	-
4052	P06748	212	TPAKNAQKSNQNG K DSKPSSTPRSKGQ	+	-	-	-
4053	P06748	229	PSSTPRSKGQESF K KQEKTPTKTPKGPS	+	-	-	-
4054	P06748	230	SSTPRSKGQESF K KQEKTPTKTPKGPS	+	-	-	-
4055	P06748	250	TPKGPSSVEDIKAK M QASIEKGGSLPK	+	-	-	-
4056	P06748	257	VEDIKAKMQASIE K GGSLPKVEAKFIN	+	-	-	-
4057	P06748	267	SIEKGGSLPKVEAK F INYVKNCFRMTD	+	-	-	-
4058	P06748	273	SLPKVEAKFINYV K NCFRMTDQEIQD	+	-	-	-
4059	P06748	292	TDQEAIQDLWQWR K SLLLLLLLLLLLLLL	+	-	-	-
4060	P22392	85	PVVAMVWEGLNVV K TGRVMLGETNPAD	-	-	-	-
4061	P22392	128	NIIHGSDSVKSAE K EISLWFKPEELVD	+	-	-	-
4062	P28331	471	GSHPFSQLKEAK K PMVVLGSSALQRN	-	-	-	-
4063	P28331	84	VAGNCRMCLVEIE K APKVVAACAMPVM	+	-	-	-
4064	P28331	467	DIASGSHPFSQL K EAKKPMVVLGSSA	+	-	-	-
4065	P28331	499	GAAILAAVSSIAQ K IRMTSGVTGDWKV	+	-	-	-
4066	P28331	709	MTDSISRASQTMA K CVKAVTEGAQAVE	+	-	-	-
4067	Q9GZT8	84	NDLTEEVMEEVLO K KADLILSYHPPIF	-	-	-	-
4068	Q9GZT8	109	IFRPMKRITWNTW K ERLVIRALENRVG	+	-	-	-
4069	Q15233	190	AVVIVDDRGRPSG K GIVEFGSKPAARK	-	-	-	-
4070	Q15233	5	MMMMMMMMMMQSN K TFNLEKQNHTPRK	+	-	-	-
4071	Q15233	11	MMMMQSNKTFNLE K QNHTPRKHHQH	+	-	-	-
4072	Q15233	198	GRPSGKGIVEFGS K PAARKALDRCSEG	+	-	-	-
4073	Q15233	295	QDQVDRNIKEARE K LEMEMEAAARHEHQ	+	-	-	-
4074	Q15233	371	QQEEMMRQQEGF K GTFPDAREQEIRM	+	-	-	-
4075	Q14207	1398	SSKNLTNSSIPMK K KKIKKKKLPSFP	-	-	-	-
4076	Q14207	1228	SNNKNVLSVGTAV K DLKQEQTKSASSL	+	-	-	-
4077	Q8TAT6	302	EDPKAEVVDEIAA K LGLRKVGWIFTDL	-	-	-	-
4078	Q8TAT6	179	AYIRKLTGGADKG K FVALENISCKIKS	+	-	-	-
4079	Q16795	147	WETKNFDFEDVFV K IPQAIAQLSKEAG	-	-	-	-
4080	Q16795	175	EKFIHVSHLNANI K SSSRYLRNKAVGE	-	-	-	+
4081	Q16795	189	SSSRYLRNKAVGE K VVRDAFPEAIIVK	+	-	-	-
4082	Q16795	370	RTYRWLSAEIEDV K PAKTVNIIIIII	+	-	-	-
4083	Q15843	54	QRLIYSGKQMNDE K TAADYKILGGSVL	-	-	-	-
4084	Q15843	48	GIPPQQRLIYSG K QMNDEKTAADYKI	+	-	-	-
4085	Q16236	219	KLVETTMVPSPEAK K LTEVDNYHFYSSI	-	-	-	-
4086	Q16236	596	LQQTRDGNVFLVP K SKKPDVKKNNNNN	+	-	-	-
4087	Q16236	599	TRDGNVFLVPKSK K PDVKKNNNNNNNN	+	-	-	-
4088	Q6P4R8	931	IIKQVAITGQLGV K PQTGNSIPLTATN	-	-	-	-
4089	Q6P4R8	1237	TTMPAGTKLIAGN K PVSFLTAQQLQQL	+	-	-	-
4090	P55769	76	LEIILHLPLLCED K NVPYVFVRSKQAL	-	-	-	-
4091	P55769	21	PKAYPLADAHLT K LLDLVQQSCNYKQ	+	-	-	-
4092	P61916	103	PDGCKSGINCPIQ K DKTYSYLNKLPVK	-	-	-	-
4093	P61916	116	KDKTYSYLNKLPV K SEYPSIKLVVEWQ	+	-	-	-
4094	P49116	48	IQIVTAVDASGSP K QQFILTSPDGAGT	-	-	-	-
4095	P49116	231	RSPLIATPTFVAD K DGARQTGLLDPGM	+	-	-	-
4096	Q9NP64	188	KPDPTRNPSRKRK K EKKKKKHRDRKSS	-	-	-	-
4097	Q9NP64	144	TTCKKCGCKGHFA K DCFMQPGGTKYSL	+	-	-	-
4098	Q9UFN0	136	KQESEITYLVPWC K LEKPPKEGVYELA	-	-	-	-

4099	Q9UFN0	48	IFYEFRSYLLKPSKMNFELENFEKNAH	+	-	-	-
4100	Q9UFN0	166	MKPGGPALWGDAFKRAVHAHVNLGYTK	+	-	-	-
4101	Q9BZ95	1038	SFAEGQTSINKTFKKALEEAARFQEL	-	-	-	-
4102	Q9BZ95	790	ACVRKFPTAIFESKGFRCPPQHCCSACS	+	-	-	-
4103	Q6KC79	862	SSRNEHGIKSDSSKTDKLERKHRHESG	-	-	-	-
4104	Q6KC79	1082	VKMNKRKRSTVNEKPKYAEISSDEDND	+	-	-	-
4105	P40261	123	VVTYVCDLEGNRVKGPEKEEKLQAVK	-	-	-	-
4106	P40261	39	KFGSRHSAESQILKHLLENLKFIFCLD	+	-	-	-
4107	Q13423	901	ILGGYGTSTAGGKPMESGTHTEINL	-	-	-	-
4108	Q13423	70	LTVGVPKEIFQNEKRVALLSPAGVQNLV	+	-	-	-
4109	Q13423	117	DHYRVAGAQIQGAKEVLASDLVVKVRA	-	-	-	+
4110	Q13423	224	FGRFFTGTITAAGKVPKAKILIVGGGV	-	-	-	+
4111	Q13423	294	SGEGQGGYAKEMSKFIEAEMKLFQQ	-	-	-	+
4112	Q13423	331	ALIPGKKAPVLFNKEMIESMKEGSSVV	-	-	-	+
4113	Q13423	397	ASTLYSNNITKLLKAISPDKDNFYFDV	+	-	-	-
4114	Q13423	1079	LGDAKKTCDALQAKVRESYQKKKKKKK	-	-	-	+
4115	Q9BZE4	290	PLFINKPLIVVANCDVKRIAELSEDD	-	-	-	-
4116	Q9BZE4	103	DHYKLALGQINIAKNLVDNVAKDYVRL	+	-	-	-
4117	Q9BZE4	522	PRTAKKVQRTVLEKEMRSLGVDMDDKD	+	-	-	-
4118	Q9Y3C1	72	AVDPNRAVPLRKRKVKAMEVDIEERP	-	-	-	-
4119	Q9Y3C1	90	EVDIEERPKELVKPYVLNDLEAEASL	+	-	-	-
4120	P46087	22	KEKRGPGRKARKQKGAETELVRFLPAV	-	-	-	-
4121	P46087	649	LQKQHPKKASFQKLNKISKGADSELS	+	-	-	-
4122	Q14995	230	EQTALPAQEQLRPKPQLEQENIKSSSP	-	-	-	-
4123	Q14995	162	MRMNRNRCQQCRFKKCLSVGMSRDAVR	+	-	-	-
4124	Q14995	163	RMNRNRCQQCRFKKCLSVGMSRDAVRF	+	-	-	-
4125	Q96RI1	120	YQGETEVAEMPVTKKPRMGASAGRIKG	-	-	-	-
4126	Q96RI1	167	CEGCKGFFRRSITKNVYKCKNGGNCV	+	-	-	-
4127	Q96RI1	220	MYTGLLTEIQCKSKRLRKNVKQHADQT	-	-	+	-
4128	Q96RI1	227	EIQCKSKRLRKNVKQHADQTVNEDSEG	+	-	-	-
4129	P46459	104	CIGTMTIEIDFLQKKSIDSNPYDTDKM	-	-	-	-
4130	P46459	105	IGTMTIEIDFLQKKSIDSNPYDTDKMA	+	-	-	-
4131	Q9BSD7	27	GKTTLIHKASEVLKSSGVPVDGFYTEE	-	-	-	-
4132	Q9BSD7	165	LALVEEIRNRKDVVFNVTKENRNHLL	+	-	-	-
4133	Q14978	448	EEKTKKMVATTKPKATAKAALSLPAKQ	-	-	-	-
4134	Q14978	33	GFLRDNQLSEVANFAKATGATQQDAN	+	-	-	-
4135	Q14978	415	PAAAPKQPVGGGQKLLTRKADSSSSEE	+	-	-	-
4136	Q14978	663	AAGDWGERANQVLKFTKGKSFRHEKTK	+	-	-	-
4137	O00567	505	QENGMEPSISFSKPKKKKSFSKEELM	-	-	-	-
4138	O00567	561	EEAGHRSGSKKKRKFSKEEPVSSGPPE	+	-	-	-
4139	Q9BS92	58	KPSNMNAFMENLKNIHRLTSYSELVG	-	-	-	-
4140	Q9BS92	45	YDGTIFYEFRTYYLKPSNMNAFMENLKK	-	-	-	+
4141	Q9BS92	57	LKPSNMNAFMENLKNIHRLTSYSELV	-	-	-	+
4142	P61970	55	EGQQFQGKAAIVEKLSSLPFQKIQHSI	-	-	-	-
4143	P61970	4	MMMMMMMMMMMGDKPIWEQIGSSFIQH	+	-	-	-
4144	Q9BW27	95	LQRIDEELTGKSRKSQLVRVSKNYRSV	-	-	-	-
4145	Q9BW27	92	FLGLQRIDEELTGSRKSQLVRVSKNY	+	-	-	-
4146	P20393	167	GFFRSIQQNIQYKRCCLKNENCIVRI	-	-	-	-
4147	P20393	191	VRINRNRCQQCRFKKCLSVGMSRDAVR	+	-	-	-
4148	P20393	192	RINRNRCQQCRFKKCLSVGMSRDAVRF	+	-	-	-
4149	P20393	400	RLCPHVVYAAPEGKAPANSRQGN SKN	+	-	-	-
4150	P20393	591	RPLETSRFTKLLKLPLDLRTLNNMHSE	+	-	-	-
4151	Q08J23	557	PRMNLTRTTEGKQRQLYMVSKELRNV	-	-	-	-
4152	Q08J23	586	NNSEKMKVINTGIVWCRNNSGEEFDC	+	-	-	-
4153	Q9UKX7	376	CKLFYKKDNEFKEKGIGTLHLKPTANQ	-	-	-	-
4154	Q9UKX7	8	MMMMMMMAKRNAEKELTDRNWDQEDEA	+	-	-	-
4155	Q9UKX7	83	GGRFSGFGSGAGGKPLEGLSNGNNITS	+	-	-	-
4156	Q9UKX7	127	GSLAANGPTTLVDKVSNPKTNGDSQQP	+	-	-	-

4157	Q9UKX7	450	KNATMPVTMLIRVKTSEDADDELHKILL	+	-	-	-
4158	P48552	1087	KGGNSVTSRETQDKDIWREASSAESVS	-	-	-	-
4159	P48552	111	RKRLSDSIMNLNVKEALLAGMVDSVP	+	-	-	-
4160	P48552	158	QTVALSQQIRQSLKEQGYALSHDSLKV	+	-	-	-
4161	P48552	286	EAHLQQYSREHALKTQNNQAASERLA	+	-	-	-
4162	P48552	310	RLAAMARLQENGQKDVGSYQLPKGMSS	+	-	-	-
4163	P48552	446	SSYSNCVPIDLSCKHRTEKSESDQPVS	+	-	-	-
4164	P48552	481	LNTWDPKVPDVIDKEDQDTSKNSKLNS	+	-	-	-
4165	P48552	528	KNTSPQGVHNDVSKFNTQNYARTSVIE	+	-	-	-
4166	P48552	606	NTASNHSMDLTKS KDPPGEKPAQNEGA	+	-	-	-
4167	P48552	931	ASESEHRSWARES KSFNVLKQLLLSEN	+	-	-	-
4168	Q8TEA1	24	PEVENYLKEGFMNKEIVTALGKQEAER	-	-	-	-
4169	Q8TEA1	419	EGMRGAGLSCEQLKQLQRFDPSPVPLP	+	-	-	-
4170	Q5TFE4	299	SQGNVHLYELLKMTGKPEPKVVYFG	-	-	-	-
4171	Q5TFE4	171	FWKDIVAAIQHNYKMSAFKENCGIYFP	+	-	-	-
4172	Q8WUM0	532	IKLLKAAFLQYCRKDLGHAQMVVDLFL	-	-	-	-
4173	Q8WUM0	787	IRTVIIRQHEIVLKVAYPQADSNLRNI	+	-	-	-
4174	P49790	1016	SNLGQEEKKEELPKSSSAGFSFGTGVI	-	-	-	-
4175	P49790	384	KPVSIAATNRSVYFKPSLTGPSGEFRKTN	+	-	-	-
4176	P49790	718	KTTLASAGTGFGDKFKPVIGTWDCDTC	+	-	-	-
4177	P49790	954	GSINPMSEGFKFSKPIGDFKFGVSSES	+	-	-	-
4178	P0C024	189	EYTNPEDGVTYQIKGMTANLAVLVAFI	-	-	-	-
4179	P0C024	20	PEEPVRNSLLDDAKARLRKYDIGGKYS	-	-	-	+
4180	Q14980	1223	KAQVARGRQEAERKNSLISSLEEEVSI	-	-	-	-
4181	Q14980	379	LSAALQDKKCLEEKNEILQGKLSQLEE	+	-	-	-
4182	Q14980	891	HANLARALQQVQKEVRAQKLADDLST	+	-	-	-
4183	Q14980	1511	AQSTARELEVMTAKYEGAKVKVLEERQ	+	-	-	-
4184	P04181	315	SAVLCDDDIMLTIKPGHEHGSTYGGNPL	-	-	-	-
4185	P04181	49	GPPTSDDIFEREYKYGAHNYHPLPVAL	+	-	-	-
4186	P04181	66	HNYHPLPVALERGGIYLWDVEGRKYF	+	-	-	-
4187	P04181	102	NQGHCHPKIVNALKSQVDKLTLTSTRAF	-	-	-	+
4188	P04181	107	HPKIVNALKSQVDKLTLTSTRAFYNNVL	+	-	-	+
4189	P04181	362	ADKLGIIILRNELMKLPSDVVTAVRGKG	+	-	-	+
4190	P04181	386	GKGLLNAIVIKETKDWDAWKVCLRLRD	+	-	-	-
4191	P04181	392	AIVIKETKDWDAWKVCLRLRDNGLLAK	+	-	-	-
4192	P04181	405	KVCLRLRDNGLLAKPTHGDIIRFAPPL	+	-	-	+
4193	P04181	421	HGDIIRFAPPLVIKEDELRESIEIINK	+	-	-	-
4194	P11182	360	AMDTEQGLIVPNVKNVQICSIFDIATE	-	-	-	-
4195	P11182	133	KLYYNLDDIAYVGKPLVDIETEALKDS	-	-	-	+
4196	P11182	196	ENNIKLESEVVGSGKDGRIKEDILNYL	+	-	-	+
4197	P11182	202	SEVVGSGKDGRIKEDILNYLEKQTGA	+	-	-	-
4198	P11182	243	PKPKDMTPVILVSKPPVFTGKDKTEPI	+	-	-	-
4199	P11182	250	VPILVSKPPVFTGKDKTEPIKGFQKAM	+	-	-	-
4200	P11182	261	TGKDKTEPIKGFQKAMVKTMSAALKIP	-	-	-	+
4201	P11182	289	FGYCDEIDLTELVKLREELKPIAFARG	+	-	-	+
4202	P11182	295	IDLTELVKLREELKPIAFARGIKLSFM	+	-	-	-
4203	P11182	304	REELKPIAFARGIKLSFMPFFLKAASL	+	-	-	-
4204	P11182	435	ALGSIKAIPRFNQKGEVYKAQIMNVSW	+	-	-	-
4205	P11182	440	KAIPRFNQKGEVYKAQIMNVSWSADHR	+	-	-	+
4206	P52948	1052	SKTRSLVGGLLQSKFTSGAFLSPSVSV	-	-	-	-
4207	P52948	603	AFMPKKSIIKKLVKLNLSNLFSNVNR	+	-	-	-
4208	Q9BXS6	194	TTPNFKKLHEAHFKEMESIDQYIERKK	-	-	-	-
4209	Q9BXS6	411	FYKKTYKQPHLQTKKEEQKKREQERKE	+	-	-	-
4210	Q9UKG9	515	GFDRHLLGLLLIAKEEGLPVPELFTDP	-	-	-	-
4211	Q9UKG9	40	SLEESLKKYLESVKPFANQEYKKTTEE	-	-	-	+
4212	Q9UKG9	57	NQEYKKTTEEIVQKFQSGIGEKHLHQKL	-	-	-	+
4213	Q9UKG9	406	DLQIAAAYFTSFGKKLTKNMLHPDTF	+	-	-	+
4214	P36957	133	NGVIEALLVPDGGKVEGGTPLFTLRKT	-	-	-	-

4215	P36957	154	FTLRKTGAAPAKA K PAEAPAAAAPKAE	+	-	-	-
4216	P36957	267	IDMSNIQEMRARH K EAFLLKHNLLKLG	+	-	-	-
4217	P36957	272	IQEMRARHKEAFL K KHNLLKLGFM SAFV	+	-	-	-
4218	P36957	273	QEMRARHKEAFL K KHNLLKLGFM SAFVK	+	-	-	-
4219	P36957	277	ARHKEAFLKHN L KLGFM SAFVKASAF	+	-	-	-
4220	P36957	307	EQPVVNAVIDDT T KEVVYRDYIDISVA	+	-	-	-
4221	O60313	614	ILDEVISLSQVTP K HWEEILQQSLWER	-	-	-	-
4222	O60313	228	IDQLQEELLHTQ L KYQRILERLEKENK	+	-	-	-
4223	P19338	362	FGYVDFESAED L EKALELTGLKVFGNE	-	-	-	-
4224	P19338	9	MMMMMMVKLAKAG K NQGDPKKMAPPPK	+	-	-	-
4225	P19338	15	VKLAKAGKNQGD P KMAPPPKEVEEDS	+	-	-	-
4226	P19338	16	KLAKAGKNQGD P KMAPPPKEVEEDSE	+	-	-	-
4227	P19338	96	VTPGKKAATPA K KTVPKAVTTPGK	+	-	-	-
4228	P19338	102	AAATPAKKTVP A KAVTTPGKKGATPG	+	-	-	-
4229	P19338	109	KTVTPAKAVTTP G KKGATPGKALVATP	+	-	-	-
4230	P19338	116	AVTTPGKKGAT P GKALVATPGKKGAAI	+	-	-	-
4231	P19338	124	GATPGKALVAT P GKGAAPAKGAKNG	+	-	-	-
4232	P19338	318	TAFNLFVGNLNF N KSAPELKTGISDVF	+	-	-	-
4233	P19338	348	DLAVVDVRIGM T RKFGYVDFESAEDLE	+	-	-	-
4234	P19338	377	LELTGLKVFGNE I KLEKPKGKDSKKER	+	-	-	-
4235	P19338	398	DSKKERDARTLL A KNLPYKVTQDELKE	+	-	-	-
4236	P19338	403	RDARTLLAKNLP Y KVTQDELKEVFEDA	+	-	-	-
4237	P19338	427	EDAAEIRLVSKDG K SKGIAYIEFKTEA	+	-	-	-
4238	P19338	444	IAYIEFKTEAD A EKTFEKQGTIDGR	+	-	-	-
4239	P19338	467	IDGRSISLYYT G EKGQNQDYRGKNST	+	-	-	-
4240	P19338	477	TGEKGQNQDYRG G KNSTWSGESKTLVL	+	-	-	-
4241	P19338	513	ETLQEVFEKAT F IKVPQNQNGSKGYA	+	-	-	-
4242	P19338	521	KATFIKVPQN Q NGSKGYAFIEFASFE	+	-	-	-
4243	P19338	572	GPRGSPNARS Q PSKTLFVKGLSEDTTE	+	-	-	-
4244	P19338	577	PNARSQPSK T LFVKGLSEDTTEETLKE	+	-	-	-
4245	P19338	646	GEIDGNKVTL D WAKPKGEGGFGRGGG	+	-	-	-
4246	Q9BQG2	142	KSEKRNSDWLL A KESH PATVFILFSD	-	-	-	-
4247	Q9BQG2	185	PEVRLCQLNY T DIKDYL AQPEKITLIF	-	-	-	+
4248	Q9BQG2	292	SRYKFCPTCG N ATKIEEGGYKRLCLKE	-	-	-	+
4249	Q9Y266	268	SRLVSSDPEIN T KKINPENSKLSDLDS	-	-	-	-
4250	Q9Y266	239	VKVEESSW L IEDGKVVTVHLEKINKME	+	-	-	-
4251	Q9UKK9	30	IISEELISEG K WVKLEKTTYMDPTGKT	-	-	-	-
4252	Q9UKK9	210	VYSYALALKH A NAKPFEVPFLKFFFFF	+	-	-	-
4253	Q9UKK9	218	KHANAKPFE V PFLKFFFFFFFFFFFFFFF	+	-	-	-
4254	Q8WV74	61	LYTLRSSRL T GRHKGDVSFPGGKCDPA	-	-	-	-
4255	Q8WV74	70	TGRHKGDVS F PGGKCDPADQDVVHTAL	-	-	-	+
4256	O15381	73	EKVFSII S SEKELKNLTELEDEHLAKR	-	-	-	-
4257	O15381	70	IQVEKVFSII S SEKELKNLTELEDEHL	+	-	-	-
4258	O15381	156	QRETTSS T PRISSKTGSIPLKTPAKDS	+	-	-	-
4259	P29728	91	VLFFSDLK Q FQDQKRSQRDILDKTGDK	-	-	-	-
4260	P29728	378	QIDSAVNI I RTFLKENCFRQSTAKIQI	+	-	-	-
4261	P21953	166	IFPAFDQIV N EAAKYRYSGLDFNCGS	-	-	-	-
4262	P21953	232	FQAKGLLL S CIEDKNPCIFFEPKILYR	+	-	-	-
4263	P21953	241	CIEDKNPC I FFEPKILYRAAAEEVPIE	+	-	-	-
4264	P08559	142	LSVREILAE L TGRKGGCAKGKGGSMHM	-	-	-	-
4265	P08559	63	PPVTTVLT R EDGLKYRMMQTVRRMEL	+	-	-	+
4266	P08559	244	TSVERAA A STDYKRGDFIPGLRVDGM	+	-	-	+
4267	P08559	277	EATRF A AAAYCRSGKGPILMELQTYRYH	-	-	-	+
4268	P08559	313	SYRTREEI Q EVRSKSDPIMLLKDRMVN	+	-	-	+
4269	P08559	321	QEVRSKSD P IMLLKDRMVNSNLASVEE	+	-	-	-
4270	P08559	336	RMVNSNLAS V EELKEIDVEVRKEIEDA	+	-	-	-
4271	P08559	385	DPPFEVRGAN Q WIKFKSVSSSSSSSSSS	-	-	-	+
4272	P11177	285	RPMDMETIE A SVMKTNHLVTVEGGWPQ	-	-	-	-

4273	P11177	354	NSIPQVKDIIFAIKKTLLNIIIIIIII	+	-	-	-
4274	Q56VL3	21	GNQDKDAHFPFPPSKQSLLFCPKSKLHI	-	-	-	-
4275	Q56VL3	41	PKSKLHIHRAEISKIMRECQEESEFWKR	+	-	-	-
4276	P12694	51	PPRQQQQFSSSLDDKPQFPGASAEFIDK	-	-	-	-
4277	P12694	356	SAYRSVDEVNYWDKQDHPISRLRHYYLL	+	-	-	+
4278	P12694	380	YLLSQGWWDDEEQEKAWRKQSRKVM EA	-	-	-	+
4279	P10515	596	PQACILAIGASEDKLVPADNEKGFDVA	-	-	-	-
4280	P10515	466	NMGEVLLVRKELNKILEGRSKISVNDF	+	-	-	-
4281	P10515	473	VRKELNKILEGRSKISVNDFIIKASAL	-	-	-	+
4282	P10515	547	VETIANDVVS LATKAREGKLQPHEFQG	-	-	-	+
4283	Q9NTK5	349	TDFEKGFI MAEVMKYEDFKEEGSENAV	-	-	-	-
4284	Q9NTK5	294	KYLEANMTQSALPKIIKAGFAALQLEY	+	-	-	-
4285	Q9Y3B8	149	LCPLAGNSVHEDKFLDKYMPQFMKHL	-	-	-	-
4286	Q9Y3B8	173	KHLHYRIIDVSTVKELCRRWYPEEYEF	+	-	-	-
4287	Q02218	296	CEVLIPALKTIIDKSSENGVDYVIMGM	-	-	-	-
4288	Q02218	74	MYCAWLENPKSVHKSWDIFFRNTNAGA	-	-	-	+
4289	Q02218	401	TKAEQFYCGDTEGKKVMSILLHGDAAF	+	-	-	-
4290	Q02218	564	NQPEYEEEISKYDKICEEAFARSKDEK	-	-	-	+
4291	Q02218	970	QEEHKNQGYDYVKPRLRTTISRAPV	+	-	-	-
4292	A8MW92	297	LLASKAVGVDGAEEKEDYNETAPMLEQ	-	-	-	-
4293	A8MW92	909	FHMRSKNSLQYSAKEHGMPEKNPAEGN	+	-	-	-
4294	Q6IN85	355	SQTLQPQNRDAFFKTLNMGILPALEV	-	-	-	-
4295	Q6IN85	655	LRFEQQRERQDNPKLDSMRSILRNHRY	+	-	-	-
4296	P11940	259	KAVDEMNGKELNGKQIYVGRAQKKVER	-	-	-	-
4297	P11940	299	DRITRYQGVNLYVKNLDDGIDDERLRK	-	-	+	-
4298	P11940	361	KAVTEMNGRIVATKPLYVALAQRKEER	-	-	+	-
4299	P11940	512	AAATPAVRTVPQYKYAAGVRNPQQHLN	+	-	-	-
4300	Q15004	46	TNSTSVSSRKAENKYAGGNPVCVRPTP	-	-	-	-
4301	Q15004	24	GTYRKVVAARAPRKVLGSSTSATNSTS	+	-	-	-
4302	Q13415	37	RKLHYQTYREMCVKTEGCSTEIHIQIG	-	-	-	-
4303	Q13415	326	EHRIILRTRIAASKTIDIREERTLTPI	+	-	-	-
4304	P54886	124	EMMLVTSGAVAFGKQRLRHEILLSQSV	-	-	-	-
4305	P54886	311	GTKSRVGMGGMEAKVKAALWALQGGTS	-	-	-	+
4306	P54886	347	KVSGHVITDIVEGKKVGTFFSEVKPAG	-	-	-	+
4307	P54886	550	NTREEVEDLCRLDKMIDLIIPRGSSQL	-	-	-	+
4308	Q13310	615	LLHMLESPESLRSKVDEAVAVLQAHHA	-	-	-	-
4309	Q13310	299	ERISRYQGVNLYIKNLDDTIDDEKLRK	-	-	+	-
4310	Q13310	361	KAVTEMNGRIVGSKPLYVALAQRKEER	-	-	+	-
4311	Q13310	524	AVAAAAPRAVAPYKYASSVRSPHPAIQ	+	-	-	-
4312	Q9BWT3	490	KEGMKIEATHVKKKQLHHYLP AEILQK	-	-	-	-
4313	Q9BWT3	2	MMMMMMMMMMMMMKEMSANTVLDSQRQ	+	-	-	-
4314	O43252	171	VDAPLHVCEQRDVKGLYKKARAGEIKG	-	-	-	-
4315	O43252	12	MMMEIPGSLCKKVKLSNNAQNWGMQRA	+	-	-	-
4316	Q53GL7	436	SLEKAGPVSPGCVKLAGQEGLVEMVLL	-	-	-	-
4317	Q53GL7	916	NRSFCGRNATVYGKGVYFARRASLSVQ	+	-	-	-
4318	O00330	334	KDDIKVSVNDFIIKAAAVTLKQMPDVN	-	-	-	-
4319	O00330	194	RFRLSPAARNILEKHSLDASQGTATGP	+	-	-	-
4320	O00330	394	AAAKGIQEIADSVKALSKKARDGKLLP	-	-	-	+
4321	Q9H4B0	275	KIIMKKEKEEGIEKGQILSSAADIAAT	-	-	-	-
4322	Q9H4B0	299	AATVQHTMACHLVKRTTHRAILFCKQRD	+	-	-	-
4323	Q9NWU1	197	LVNMAAGQVSIRYKLGPNHAVSTACT	-	-	-	-
4324	Q9NWU1	109	SDEGQFNEQNFVSKSDIKSMSSPTIMA	+	-	-	+
4325	Q9NWU1	113	QFNEQNFVSKSDIKSMSSPTIMAIGAA	-	-	-	+
4326	Q9NWU1	174	SETALNFQTKGYNKVSPFFVPKILVNM	+	-	-	+
4327	O15460	57	LKEYILVEEAKLSKIKSWANKMEALTS	-	-	-	-
4328	O15460	480	TVFPDLGAAIWPKGKTAVFWYNLLRSG	-	-	-	+
4329	Q86U86	717	MDMEKIRSHMMANKYQDIDSMVEDFVM	-	-	-	-
4330	Q86U86	414	GQLIAEPFYHLPSKKKYPDYYQQIKMP	+	-	-	-

4331	Q9BY11	102	TEADKVSELHQEVKNNLLNEDLEKVKN	-	-	-	-
4332	Q9BY11	54	DLMNCVQERAKIEKAYGQQLTDWAKRW	+	-	-	-
4333	Q9NVV4	152	ETAIPFRSRFFNLKLNQTSERSRVRS	-	-	-	-
4334	Q9NVV4	90	TVLIHCPEKISENKFLKYLSQFGPINN	+	-	-	-
4335	P05165	568	DIANWELSVKLHDKVHTVVASNNGSVF	-	-	-	-
4336	P05165	65	GSVGYDPNEKTFDKILVANRGEIACRV	+	-	-	+
4337	P05165	119	ADEAVCVGPAPTSKSYLNMDAIMEAIK	-	-	-	+
4338	P05165	150	QAVHPGYGFLSENKEFARCLAAEDVVF	+	-	-	+
4339	P05165	200	AEVNTIPGFDGVVKDAEEAVRIAREIG	+	-	-	+
4340	P05165	262	AASSFGDDRLLIEKFIDNPRHIEIQVL	-	-	-	+
4341	P05165	328	AMGEQAVALARAVKYSSAGTVEFLVDS	+	-	-	+
4342	P05165	385	EMIRVAKGYPLRHQADIRINGWAVEC	-	-	-	+
4343	P05165	407	WAVECRVYAEDPYKSFGLPSIGRLSQY	-	-	-	+
4344	P05165	496	ALLREVIINSRFVKGDISTKFLSDVYP	+	-	-	-
4345	P05165	502	IINSRFVKGDISTKFLSDVYPDGFKGH	-	-	-	+
4346	P05165	513	STKFLSDVYPDGFKGHMLTKSEKNQLL	-	-	-	+
4347	P05165	648	KVNILTRLAAELNKFMLEKVTEDTSSV	-	-	-	+
4348	Q9Y5E7	639	VRTARLLRERDAAKQRLVVLVKDNGEP	-	-	-	-
4349	Q9Y5E7	299	ASEDIRKTFRLSAKSGELLLRQKLDFE	+	-	-	-
4350	P12004	138	QLGIPEQEYSCVVKMPSGEFARICRDL	-	-	-	-
4351	P12004	14	MFEARLVQGSILKRVLEALKDLINEAC	+	-	-	-
4352	P12004	77	RNLAMGVNLTSMISKILKCAGNEDIITL	+	-	-	-
4353	P12004	80	AMGVNLTSMISKILKCAGNEDIITLRAE	+	-	-	-
4354	P12004	248	LVVEYKIADMGHLYYLAPKIEDEEGS	+	-	-	-
4355	O14737	33	KHGDPGDAAQQEAKHREAEMRNSILAQ	-	-	-	-
4356	O14737	63	QSARARLSNLALVKEPKTKAVENYLIQ	+	-	-	-
4357	Q9UNF0	213	DVLKTKEKYEKSLKELDQGTPQYMENM	-	-	-	-
4358	Q9UNF0	53	DLMNCLHERARIEKAYAQQLTEWARRW	+	-	-	-
4359	O14832	128	EKMITKVQDFQEDKELFRYCTLPEILK	-	-	-	-
4360	O14832	59	YTLDNNVLTLEQRKFYEENGFLVIKNL	-	-	-	+
4361	O14832	108	PLGLTVMRDVTISKSEYAPSEKMITKV	-	-	-	+
4362	O14832	231	KPHDYPKWEGGVNMFMHGIQDYEENKA	-	-	-	+
4363	O14832	252	YEENKARVHLMVEKGDTVFFHPLLIHG	-	-	-	+
4364	Q8TEW0	846	TKQFSDASQLDFVKTRKSKSMDLGIAD	-	-	-	-
4365	Q8TEW0	834	EGFGRQSMSEKRTKQFSDASQLDFVKT	+	-	-	-
4366	Q8TEW0	851	DASQLDFVKTRKSKSMDLGIADETKLN	+	-	-	-
4367	Q8TEW0	885	GSPSRDVGPSLGLKSSSLESLSQTAVA	+	-	-	-
4368	Q8TEW0	1350	SQVARLNLRLQTPEKGRPFYSSSSSSSS	+	-	-	-
4369	O95453	179	TSKCPVTIPEDQKKFIDQVVEKIEDLL	-	-	-	-
4370	O95453	220	GFQRKLIYQTLWSKYPKGIHVETLETE	+	-	-	-
4371	O95453	499	SQPEQVKIAVNTSKYAESYRIQTYAEY	+	-	-	-
4372	P05166	101	HRCADFGMAADKNKFPGDSVVTGRGRI	-	-	-	-
4373	P05166	99	VEHRCADFGMAADKNKFPGDSVVTGRG	+	-	-	+
4374	P05166	248	TNEDVTQEELGGAKTHTTMSGVAHRAF	-	-	-	+
4375	P05166	474	AVMGAKGAVEIIFKHGENVEAAQAEYI	+	-	-	+
4376	P05166	489	HENVEAAQAEYIEKFANPFPAAVRGFV	+	-	-	+
4377	Q8WW12	129	DEDSEPEEMPPEAKMRMKNIGRDTPTS	-	-	-	-
4378	Q8WW12	64	KRSAEEEEADLPTKPTKISKFGFAIGS	+	-	-	-
4379	Q8WW12	150	RDTPTSAGPNSFNKGKHGFSNQLWE	+	-	-	-
4380	Q8WW12	152	TPTSAGPNSFNKGKHGFSNQLWERN	+	-	-	-
4381	Q15118	73	KQFLDFGSVNACEKTSFMFLRQELPVR	-	-	-	-
4382	Q15118	405	LSTDSIERLPVYNKAAWKHYNTNHEAD	-	-	-	+
4383	Q8NC51	327	GADGQWKKGFLVHKSKSEEAHAEDSVM	-	-	-	-
4384	Q8NC51	52	KEAGGGVGPGAKSAAQAAAQTNNA	+	-	-	-
4385	Q8NC51	68	AQAAAQTNNAAGKQLRKESQKDRKNP	+	-	-	-
4386	Q8NC51	122	VGRRPDQQLQEGEKIIDRRPERRPPRE	+	-	-	-
4387	Q8NC51	140	RPERRPPRRERRFEKPLEEKGEGGEFSV	+	-	-	-
4388	Q8NC51	211	GSDRSSFSHYSGLKHEDKRGGSGSHNW	+	-	-	-

4389	Q8NC51	329	DGQWKKGfVLHKS K SEEHAEDSVMDH	+	-	-	-
4390	Q13177	69	IFSGTEKGSKKKE K ERPEISPPSDFEH	-	-	-	-
4391	Q13177	62	PRHKIISIFSGTE K GSKKKEKERPEIS	+	-	-	-
4392	Q13177	128	EQKKNPQAVLDVL K FYDSNTVKQKYL	+	-	-	-
4393	P51003	288	VFSKWEWPNPVLL K QPEECNLNLPVWD	-	-	-	-
4394	P51003	641	SSGNAATSGNAAT K IPTPIVGVRTSS	+	-	-	-
4395	P51003	650	NAATKIPTPIVG V KRTSSPHKEESPKK	+	-	-	-
4396	P51003	736	DIPALPANPIPV I KNSIKLRLNRRRRR	+	-	-	-
4397	P51003	740	LPANPIPV I KNSIKLRLNRRRRRRRRR	+	-	-	-
4398	Q9UGN5	77	DKQDGMPSGRSWAS K RVSESVKALLLK	-	-	-	-
4399	Q9UGN5	37	NNGNTAPEDSSPA K KTRRCQRQESKKM	+	-	-	-
4400	Q9UGN5	38	NGNTAPEDSSPA K KTRRCQRQESKKMP	+	-	-	-
4401	Q9Y365	69	VQAVEMDRTLHK I KCRMECCDVPAETL	-	-	-	-
4402	Q9Y365	94	TLYDVLHDI E YRK K WDSNVIEF D IAR	-	-	-	+
4403	Q9Y365	197	TYLAQVDPKGSLP K WVVKSSQFLAPK	-	-	-	+
4404	Q9Y365	202	VDPKGSLPKWV V NKSSQFLAPKAMKKM	-	-	-	+
4405	P49585	266	VKDVEEKSKEF V Q K VEEKSIDLIQWE	-	-	-	-
4406	P49585	8	MMMMMMDAQCSA K VNARKRRKEAPGP	+	-	-	-
4407	Q9BUL8	183	YSKSFSDTLKTY F KDGKAINVFSANR	-	-	-	-
4408	Q9BUL8	179	EFVKYSKSFSDTL K TYFKDGKAINV F V	+	-	-	-
4409	O95340	557	SVEIIPFRVAAY N KAKKAMDFYD P ARH	-	-	-	-
4410	O95340	5	MMMMMMMMMSG I K K QKTENQ Q KSTNV	+	-	-	-
4411	Q86W56	425	DHFMRLPKAEDRR K EQWETKHQ R TERK	-	-	-	-
4412	Q86W56	340	DEQEDGSSSQ T AN K PSRFQARDADIE F	+	-	-	-
4413	P09874	30	GRASCKKCSE S IP K DSLRLMAIMVQSPM	-	-	-	-
4414	P09874	97	KVKKTAEAGGV T G K QDGIGSKAE K TL	+	-	-	-
4415	P09874	105	GGVTGKGQDGIG S KAE K TLGDFAAEYA	+	-	-	-
4416	P09874	131	AKSNRSTCKGC M E K IEKGQVRLSK K MV	+	-	-	-
4417	P09874	600	RSWGRVGT V IGSN K LEQMP S KEDAIE H	+	-	-	-
4418	P09874	621	EDAIEHFMKLY E E K TGN A WHSKN F TKY	+	-	-	-
4419	Q15154	738	GVNEKAREKFYE A K L Q Q QREL K Q L Q E	-	-	-	-
4420	Q15154	399	SERLPDEKVEL F S K MRVLQ E KKQ K MD K	+	-	-	-
4421	P18669	138	PMEPDHPFYSN I S K DRRYADLT E DQ L P	-	-	-	-
4422	P18669	106	GGLTGLNKAET A A K HGEAQV K IWR R SY	+	-	-	-
4423	P18669	251	TVRKAMEAVAAQ G KAKKKKKKKKKKKK	+	-	-	+
4424	P18669	253	RKAMEAVAAQ G KAKKKKKKKKKKKKKK	+	-	-	-
4425	P18669	254	KAMEAVAAQ G KAKKKKKKKKKKKKKK	+	-	-	-
4426	Q96HS1	93	SGEEELASKLDHY K AKATRHIFLIR S	-	-	-	-
4427	Q96HS1	116	IRHSQYHVDGS L E K DRTLTPLGRE Q AE	+	-	-	-
4428	Q96HS1	144	TGLRLASLGLK F N K IVHSSMTRAI E TT	+	-	-	-
4429	Q96HS1	191	GAPIEPDPPVSHW K PEAVQYYEDGAR I	+	-	-	-
4430	Q8WUM4	525	CYQSHRDTIVLL C K P EPELNAAIP S AN	-	-	-	-
4431	Q8WUM4	215	KATRDKMKD A IIA K LANQAADYFGDA F	+	-	-	-
4432	P30101	104	TCNKYGVSGYPT L K I FRDGEEAGAYD G	-	-	-	-
4433	P30101	129	DGPRTADGIVSH L K K QAGPASVPLR T E	-	-	-	+
4434	P30101	152	LRTEEFKK F ISD K DASIVGFFD S S F S	+	-	-	-
4435	P30101	218	LFRPSHLTNKFED K TVAYTEQ K MTSG K	-	-	-	+
4436	P30101	252	NIFGICPHMTED N K D LIQ G KD L L I AY Y	+	-	-	-
4437	P30101	362	LERFLQDYFDG N L K RYLKSEPI P ES N D	+	-	-	-
4438	P30101	494	QREATNPPV I Q E E K PKKKKKQA E D L L L	+	-	-	-
4439	O00541	81	KDIRFL L HEPIV N K F REYKV F VR K LR K	-	-	-	-
4440	O00541	98	YKV F VR K LR K AY G K S E W NT V ER L KD N K	+	-	-	-
4441	Q01813	255	SPPEEGWEEQ M CV K LS E NRARK K RL N I	-	-	-	-
4442	Q01813	395	LRGRSFAGNLNTY K RLA I KLPDDQ I PK	+	-	-	-
4443	Q01813	486	GG S ILGT K RVLP G K Y LEE I ATQ M R T HS	+	-	-	-
4444	Q01813	688	GGAPSPFDRN F GT K ISARAMEW I TAK L	+	-	-	-
4445	P35558	191	TPVLEAVGDGE F V K CLHSVGCPL P LQ K	-	-	-	-
4446	P35558	70	LGQMEEGILRR L K K YDNCWLAL T D P R	+	-	-	-

4447	P35558	71	GQMEEEGILRRLK K YDNCWLALTDPRD	+	-	-	-
4448	P35558	594	SKEFWEKEVEDIE K YLEDQVNADLPCE	+	-	-	-
4449	Q16822	414	VTSWLGKPKPGD K EPCAHPNSRFCAP	-	-	-	-
4450	Q16822	88	TLLEQQGLIRKLP K YNNCWLARTDPKD	+	-	-	-
4451	Q16822	457	VPIDAIIFGGRRP K GVPLVYEAFNWRH	-	-	-	+
4452	Q15120	230	ELEVEEFNAKAPD K PIQVVYVPSHLFH	-	-	-	-
4453	Q15120	278	EGYPAVKTLVTLG K EDLSIKISDLGGG	-	-	-	+
4454	O15530	76	GSLQHAQPPPQPR K KRPEDFKFGKILG	-	-	-	-
4455	O15530	304	FQKIIKLEYDFPE K FFPKARDLVEKLL	+	-	-	-
4456	P61758	52	KQPGNETADTVLK K LDEQYQKYKFMEL	-	-	-	-
4457	P61758	59	ADTVLKKLDEQYQ K YKFMELNLAQKKR	+	-	-	-
4458	P00558	230	VADKIQLINNMLD K VNEMIIGGGMAFT	-	-	-	-
4459	P00558	6	MMMMMMMMMSLSN K LTLDKLDVKGKRV	-	-	-	+
4460	P00558	11	MMMSLSNKLTL D KLDVKGKRVVMRVD	+	-	-	-
4461	P00558	48	TNNQRIKAAVPSI K FCLDNGAKSVVLM	+	-	-	+
4462	P00558	75	SHLGRPDGVMPMD K YSLEPVAVELKSL	+	-	-	-
4463	P00558	86	PDKYSLEPVAVEL K SLLGKDVFLFKDC	+	-	-	-
4464	P00558	91	LEPVAVELKSLLG K DVFLFKDCVGPEV	+	-	-	-
4465	P00558	97	ELKSLLGKDVFL K DCVGPEVEKACAN	+	-	-	-
4466	P00558	131	LLENLRFHVEEEG K GKDASGNKVKAEP	+	-	-	-
4467	P00558	146	KDASGNKVKAEP K IEAFRASLSKLGD	+	-	-	-
4468	P00558	191	GVNLPQKAGGFLM K KELNYFAKALESP	-	-	-	+
4469	P00558	199	GGFLMKKELNYFA K ALESPERPFLAIL	+	-	-	-
4470	P00558	267	GTSLFDEEGAKIV K DLMSKAENGVKI	+	-	-	-
4471	P00558	291	VKITLPVDFVTAD K FDENAKTGQATVA	+	-	-	-
4472	P00558	361	FARGTKALMDEVV K ATSRGCITIIGGG	+	-	-	-
4473	P07237	81	GKLKAEGSEIRLA K VDATEESDLAQQY	-	-	-	-
4474	P07237	200	TSNSDVFSKYQLD K DGVVLFKKFDEGR	+	-	-	-
4475	P07237	222	FDEGRNNFEGEVT K ENLLDFIKHNQLP	-	-	-	+
4476	P07237	271	LLFLPKSVSDYDG K LSNFKTAAESFKG	-	-	-	+
4477	P13667	109	QFAPEYEKIANIL K DKDPPIPVAKIDA	-	-	-	-
4478	P13667	366	GQLVVMQPEKFQ S KYEPRSHMMDVQGS	+	-	-	-
4479	Q96HC4	462	CKNTMAYIGFVEE K GALYCELCYKFF	-	-	-	-
4480	Q96HC4	89	SLNMTLQRASAAP K PEPVPVQKGEPKE	+	-	-	+
4481	Q96HC4	350	RPGVTSLTAAAF K PVGSTGVIKSPSW	+	-	-	-
4482	Q9P0J1	331	NERELERLKHHP K SEAKSVVKQDRLL	-	-	-	-
4483	Q9P0J1	202	ILQWHKHPNDYF S KEASKLYFNSLRTY	+	-	-	-
4484	O75381	195	QKIQELAHELAA K ATTSTNWILESQN	-	-	-	-
4485	O75381	34	NVLPREPLIATAV K FLQNSRVRQSPLA	+	-	-	-
4486	Q9H0N5	115	ITLTSHDCGELTK K DKVLAKFIEKAAA	-	-	-	-
4487	Q9H0N5	114	QITLTSHDCGELT K DKVLAKFIEKAA	+	-	-	+
4488	Q9H0N5	118	TSHDCGELTKKDV K LAKFIEKAAASVV	+	-	-	+
4489	Q9H0N5	125	LTKKDVKLAKFIE K AAASVVVVVVVVV	+	-	-	+
4490	Q13526	97	EAEILINGYIQI K SGEEDFESLASQF	-	-	-	-
4491	Q13526	46	QWERPSGNSSSG K NGQGEPARVRCSH	+	-	-	-
4492	Q9H307	653	HNRDRKHRRSVDR K RRTSGLERSHKS	-	-	-	-
4493	Q9H307	238	HNAKIIKYIRTKT K PHLFYIPGRMCPA	+	-	-	+
4494	Q00169	167	YKAEEDPAKFKS I KTGRGPLGNWKQE	-	-	-	-
4495	Q00169	215	WWGLQNKVENFI H KQERRLFTNFHRQL	+	-	-	-
4496	Q9ULU4	609	DSSDSEYISDDEQ K SKNEPEDTEDKEG	-	-	-	-
4497	Q9ULU4	413	NFDMTASPKILMS K PVLSGGTGRRISL	+	-	-	-
4498	Q29RF7	637	DSEAISALVKLMN K SIEGTADDEEEGV	-	-	-	-
4499	Q29RF7	1146	GKPKPAGVLGAVN K PLSATGRKPYVRS	+	-	-	-
4500	Q29RF7	1211	EENPVRIISVTPV K NIDPVKNKEINSD	+	-	-	-
4501	Q29RF7	1290	ESQGNATKNDDL N KPINKGRKRAAVGQ	+	-	-	-
4502	Q9NTI5	1117	NFSNTKNYLPP E MSFFTPGKPKTTNV	-	-	-	-
4503	Q9NTI5	1136	GKPKTTNVLGAVN K PLSSAGKQSQTKS	+	-	-	-
4504	Q9BY49	231	QSFFEGSFQKIP K RIGVPEEVSSVVC	-	-	-	-

4505	Q9BY49	32	QVAIVTGGATGIGKAIVKELLELSNV	-	-	-	+
4506	P28328	72	CLWVFLWRFTHYSKNATVGQSVLNKY	-	-	-	-
4507	P28328	84	SKNATVGQSVLNKYKNDSPNLRYQP	+	-	-	-
4508	P35232	240	SLATAGDGLIELRKLEAAEDIAYQLSR	-	-	-	-
4509	P35232	128	DERVLPSTTEILKSVVARFDAGELIT	+	-	-	-
4510	P35232	186	LTFGKEFTEAVEAKQVAQQEAERARFV	+	-	-	-
4511	P35232	202	AQQEAERARFVVEKAEQQKAAIISAE	+	-	-	+
4512	O75151	621	SKPDSLLKMEEEQKLEKSPLAGNKDNK	-	-	-	-
4513	O75151	720	LLDKKAVLPTPVTKPKLDSAAYKSDDS	+	-	-	-
4514	Q7RTV0	29	GVAIGRLCEKCDGKCVICDSYVRPCTL	-	-	-	-
4515	Q7RTV0	3	MMMMMMMMMMMAKHHPDIFCRKQAG	+	-	-	-
4516	Q8WWQ0	1433	SVLSDYKSALRFHKRNTITKRRKKRNR	-	-	-	-
4517	Q8WWQ0	1497	SIPPRHNAAQINGKTESSSVVTRSNR	+	-	-	-
4518	Q8WWQ0	1533	QPSTSSAAKTFITKANASAIPGKTILE	+	-	-	-
4519	P78356	263	LHVGEESKKNFLEKLKRDVEFLAQLKI	-	-	-	-
4520	P78356	150	TRFLTYYDRRFVIKTVSSEDVAEMHNI	+	-	-	-
4521	Q14651	134	SEEEKVAFVNWINKALENDPCKHLIP	-	-	-	-
4522	Q14651	90	VSLMQELKSKDISKTFRKIINKREGIT	+	-	-	-
4523	Q14651	296	AGWHTISNFSQDIKDSRAYFHLLNQIA	+	-	-	-
4524	Q14651	362	QFVTPADVSGNPKNLAFVANLFNTY	+	-	-	-
4525	Q14651	473	NCNYAVELGKNKAKFSLVGIAGQDLNE	+	-	-	-
4526	Q14651	543	LKSANKKTSISSFKDKSISTSLPVLDL	+	-	-	-
4527	Q14651	580	QEMIRRENLSDEKLNNAKYAISVARK	+	-	-	-
4528	Q99471	104	YVEKTAEDAKDFFKRKIDFLTKQMEKI	-	-	-	-
4529	Q99471	42	LSTSIAQLKVVQTKYVEAKDCLNVLNK	+	-	-	-
4530	O15212	44	QKLEAQLTENNIVKEELALLDGSNVVF	-	-	-	-
4531	O15212	21	KLQGEVEKYQQLOKDLKSMGRQKLE	+	-	-	-
4532	O15212	66	SNVVFLLGPVLVKQELGEARATVGKR	+	-	-	-
4533	P48426	15	ATPGNLGSSVLASKTKTKKKHFVAQKV	-	-	-	-
4534	P48426	89	NHLFNKENMPSHFKFKEYCPMVFRNLR	+	-	-	-
4535	P48426	145	ARFHTSYDKRYIIKTITSEDVAEMHNI	+	-	-	-
4536	O60331	37	AAESGAAAGLAQKKAAPTEVLSMTAQP	-	-	-	-
4537	O60331	265	FDLKGSTYKRRASKKEKEKSFPTYKDL	+	-	-	-
4538	O60331	268	KGSTYKRRASKKEKESFPTYKDLDFM	+	-	-	-
4539	Q9Y263	173	LPEQGLMLTGSADKTVKLWKAGRCERT	-	-	-	-
4540	Q9Y263	529	PFTGNSAYRSAASKTMNIYFPKKEAVT	+	-	-	-
4541	Q9NP80	61	RGFHTNIIRCKWTKSEAHSCSKHCYSP	-	-	-	-
4542	Q9NP80	736	RNEKLDQLQLEGLKYIERNEQMKKVA	-	-	-	+
4543	P13796	220	HVVNIGAEDLKEGKPYLVLLWQVIK	-	-	-	-
4544	P13796	76	LDQDGRISFDEFIKIFHGLKSTDVAKT	+	-	-	-
4545	P13796	88	IKIFHGLKSTDVAKTFRKAINKKEGIC	+	-	-	-
4546	P13796	294	AGCNKIGNFSTDIKDSKAYYHLLQVA	+	-	-	-
4547	P13796	297	NKIGNFSTDIKDSKAYYHLLQVAPKG	+	-	-	-
4548	P13796	361	QFVTATDVVRGNPKNLAFIANLFNRY	+	-	-	-
4549	P13796	472	NCNYAVELGKNQAKFSLVGIGGQDLNE	+	-	-	-
4550	P13796	542	LREAKKSSSISFDPKISTSLPVLDL	+	-	-	-
4551	P13796	579	YDLLKTENLNDEKLNNAKYAISMARK	+	-	-	-
4552	Q8N0Y7	157	DLTEDQLPSYESPKDTIARALPFWNEE	-	-	-	-
4553	Q8N0Y7	251	TVCKAIEAVAAQGAKKKKKKKKKKKKK	+	-	-	+
4554	Q8N0Y7	253	CKAIEAVAAQGAKKKKKKKKKKKKKKK	+	-	-	-
4555	Q8N0Y7	254	KAIEAVAAQGAKKKKKKKKKKKKKKK	+	-	-	-
4556	Q99623	97	RARPRKISSPTGSKDLQMVNISLRVLS	-	-	-	-
4557	Q99623	147	PSIVNEVLKSVVAKFNASQLITQRAQV	+	-	-	-
4558	Q99623	200	LSFSREYTAAVEAKQVAQQEAQRAQFL	+	-	-	-
4559	Q99623	236	QKIVQAEGEAEAAKMLGEALSKNPGYI	+	-	-	-
4560	Q99623	250	MLGEALSKNPGYIKLRKIRAAQNISKI	+	-	-	-
4561	Q99623	262	IKLRKIRAAQNISKIATISQNRIYLTA	+	-	-	-
4562	P08567	198	LNELYLPAGDMSKSAVDGTAENPFLD	-	-	-	-

4563	P08567	64	KGSTLTSPCQDFG K RMFVFKITTTKQQ	+	-	-	-
4564	P13797	223	HVVNIGAEDLRAG K PHLVGLLWQIIK	-	-	-	-
4565	P13797	91	VYIFQEVKSSDIA K TFRKAINRKEGIC	+	-	-	-
4566	P13797	297	SGWQKINNFSADI K DSKAYFHLLNQIA	+	-	-	-
4567	P13797	300	QKINNFSADIKDS K AYFHLLNQIAPKG	+	-	-	-
4568	P13797	364	QFVTPADVVSNGN P KLNLAFVANLFNKY	+	-	-	-
4569	P13797	475	NCNYAVELGKHPA K FSLVGIGGQDLND	+	-	-	-
4570	P13797	545	LSEAGKSTSIQSF K DKTISSSLAVVDL	+	-	-	-
4571	P13797	582	YDLVKSGNLTEDD K HNNAKYAVSMARR	+	-	-	-
4572	P36871	219	SALKELLSGPNRL K IRIDAMHGVGPY	-	-	-	-
4573	P36871	16	KIVTVKTQAYQDQ K PGTSGLRKRKVVF	+	-	-	-
4574	P36871	349	PTSGALDRVASAT K IALLYETPTGWKFF	+	-	-	-
4575	P36871	419	KQSVEDILKDHQ K YGRNFFTRYDYEE	-	-	-	+
4576	Q9BVI0	205	KQPDKEGKLICSE K GKVSEKSLPKNEK	-	-	-	-
4577	Q9BVI0	843	VEESYITSEHCYQ K PRAYPAVEQKLV	+	-	-	-
4578	Q8N2W9	31	SDLQMLLGFVGRS K SGLKHELVTRALQ	-	-	-	-
4579	Q8N2W9	114	LAGPNIDYPVLYG K YLNGLGRLPAKTL	+	-	-	-
4580	Q16513	420	TSWKPISNQSWDQ K FTLELDRSRELEI	-	-	-	-
4581	Q16513	77	EGAENLRKVTTDK K SLAYVDNILKKS	+	-	-	-
4582	O00469	341	LKLFIHNEVYHE K DIKVFFDKAKHEI	-	-	-	-
4583	O00469	704	KFLRYNCSIESPR K GWSFMHPGRLTHL	-	-	-	+
4584	O15305	26	VDGTLTAPRQKIT K EMDDFLQKLRQKI	-	-	-	-
4585	O15305	149	CSQEERIEFYELD K KENIRQKFVADLR	+	-	-	-
4586	P48739	60	PYEKDGEGQYTH K IYHLKSKVPFVR	-	-	-	-
4587	P48739	215	WWGLQSKVENFIQ K QEKRIFTNFHRQL	+	-	-	-
4588	Q8TCS8	582	KIVMEAIQQASVA K KEILQIMNKTISK	-	-	-	-
4589	Q8TCS8	250	LQQDFCHAIKVG V KYTQQIIQGIQQLV	+	-	-	-
4590	Q8TCS8	264	YTQQIIQGIQQLV K ETGVTKRTPQKLF	+	-	-	-
4591	Q8TCS8	285	TPQKLFTPSPEIV K YTHKLAMERLYAV	+	-	-	-
4592	Q8TCS8	289	LFTPSPEIVKYTH K LAMERLYAVFTDY	+	-	-	-
4593	Q8TCS8	552	YNGDMDFKIAGTN K GITALQADIKLPG	-	-	-	+
4594	Q9H8W4	128	TATEKSEWMNHIN K CVTDLLSKSGKTP	-	-	-	-
4595	Q9H8W4	44	IPGRVLIGEGVLT K LCRKKPKARQFFL	+	-	-	-
4596	Q8NA72	334	AKVAMLSGALENA K AEIORMQHEKEHF	-	-	-	-
4597	Q8NA72	538	PVTVQTIPOATAA K YPRTIHPESSSTA	+	-	-	-
4598	Q08752	353	DKAIQAELLKVQ K IKAQKDKEKAVYA	-	-	-	-
4599	Q08752	171	VARILENVEVKGE K PAKLCVIAECGEL	+	-	-	-
4600	Q16512	496	RIPRLRRQKKIFS K QQGKAFQRRQMN	-	-	-	-
4601	Q16512	448	WRDQRGLCALKF L KLEDFLDNERHEVQ	+	-	-	-
4602	Q15149	1441	AQLEPVASPAKK P KVQSGSESVIQEYV	-	-	-	-
4603	Q15149	1725	EAELQSKRASFAE K TAQLERSLQEEHV	+	-	-	-
4604	Q15149	2636	QETQALQQSFLSE K DSLLQRERFIEQE	+	-	-	-
4605	Q15149	3053	DVFEEKATVSAPFG K FQGKTVTIWEIIN	+	-	-	-
4606	Q15149	3091	LLRQFRTGRITVE K IIKIIITVVEEQE	+	-	-	-
4607	Q15149	3420	LLRQFRTGKVTV E KVIKILITIVVEEVE	+	-	-	-
4608	Q9HCM2	79	GAVNRIYKLSSD L KVLVTHETGPDEN	-	-	-	-
4609	Q9HCM2	1350	DLEVPGYRQERVE K GKLKLAQLINNKV	+	-	-	-
4610	Q8NEY8	391	QPPQAPQPLQPR K KRVRRTTQLRRTTG	-	-	-	-
4611	Q8NEY8	235	SRLTEKELAAEAS K WAAEKLEKSDSN	+	-	-	-
4612	Q8NEY8	240	KELAAEASKWAA E KLEKSDSNLPEIS	+	-	-	-
4613	P30405	133	IYGSRFPDENFT L KHVGPVLSMANAG	-	-	-	-
4614	P30405	67	ANGKPLGRVVLE L KADVVPKTAENFRA	+	-	-	+
4615	P30405	86	KTAENFRALCTGE K GFGYKGSTFHRVI	-	-	-	+
4616	P30405	167	FFICTIKTDWLDG K HVVFGHVKEGMDV	+	-	-	-
4617	P30405	175	DWLDGKHVVFGHV K EGMDVVKKIESFG	-	-	-	+
4618	P30405	190	GMDVVKKIESFGS K SGRTSKKIVITDC	-	-	-	+
4619	Q13356	348	PTGTGTGGESYW G KPFKDEFRPNLSHT	-	-	-	-
4620	Q13356	482	GSQGPQTFRQGV G KYINPAATKRAAEE	+	-	-	-

4621	O75400	535	QAKQLRKRNWEALKNILDNMANV TYST	-	-	-	-
4622	O75400	196	SKCPWKEYKSDSGKPYYYNSQT KESRW	+	-	-	-
4623	Q9Y520	1049	GEKAEKVTEKV VVKPEKTEKKDLPPPP	-	-	-	-
4624	Q9Y520	27	GKKYATLSLFNTYK GKSLETQKT TARH	+	-	-	-
4625	Q9Y520	392	IPAQPSVAKVPYKG GPSFNQERG TSSH	+	-	-	-
4626	O60664	296	KQGVDQKLVEGQEK LHMWLSWNQKQL	-	-	-	-
4627	O60664	65	SYPHIKTVCDAAEKGVRTLTAAAVSGA	+	-	-	-
4628	P62136	26	IGRLLEVQGSRP GKNVQLTENEIRGLC	-	-	-	-
4629	P62136	305	SFQILKPADKNKGK YGQFSGLNP GGRP	+	-	-	-
4630	P62937	118	PNTNGSQFFICTAKTEWLDGKHVVF GK	-	-	-	-
4631	P62937	28	EPLGRVSFELFADKVPKTAENFRALST	+	-	-	-
4632	P62937	44	KTAENFRALSTGEKGFYKGS CFHRII	+	-	-	-
4633	P62937	76	QGGDFTRHNGTGGKSIYGEKFEDENFI	+	-	-	-
4634	P62937	82	RHNGTGGKSIYGEKFEDENFILKHTGP	+	-	-	-
4635	P62937	125	FFICTAKTEWLDGKHVVF GKVKEGMNI	+	-	-	-
4636	P62937	131	KTEWLDGKHVVF GKVKEGMNIVEAMER	+	-	-	-
4637	P62937	133	EWLDGKHVVF GKVKEGMNIVEAMERFG	+	-	-	-
4638	P23284	195	VESTKTDSRDKPLKDVI IADCGKIEVE	-	-	-	-
4639	P23284	209	DVI IADCGKIEVEKPF AIAKEEEEEEE	+	-	-	+
4640	O15355	112	LAIDAKLTTEEVIKELAQIAGRPT EDE	-	-	-	-
4641	O15355	383	DEVELARIKNAGGKVTMDGRVNGGLNL	+	-	-	-
4642	P30048	52	SLTNLLCSGSSQAKLFSTSSSCHAPAV	-	-	-	-
4643	P30048	83	PYFKGTAVNGEFKDL SLDDFKGKYL V	-	-	-	+
4644	P30048	91	VNGEFKDL SLDDFKGKYLVLFFYPLDF	+	-	-	+
4645	P30044	102	LFGVPGAFTPGCSKTHLPGFVEQAEAL	-	-	-	-
4646	P30044	75	IPAVEVFEGEPGNKVNLAELFKGKKG V	+	-	-	-
4647	P30044	83	GEPGNKVNLAELFKGKKGVLFGVPGAF	+	-	-	+
4648	P30044	116	THLPGFVEQAEALKAGVQV VACL SVN	-	-	-	+
4649	P30041	199	SVMVLPTIPEEEAKKLFPKG VFTKELP	-	-	-	-
4650	P30041	63	ELGRAAKLAPEFAKRNVKLI ALSIDSV	+	-	-	-
4651	P30041	209	EEAKKLFPKG VFTKELPSGKKYLRYTP	+	-	-	+
4652	Q6NYC8	113	QQQQRSEELLAERKPGPLEARERRPSP	-	-	-	-
4653	Q6NYC8	457	PGDPLMSRLFYGVKAGPGVGAPRRSGH	+	-	-	-
4654	Q5JRX3	490	CLQENPKFLQEKVKQYFKNNQHKL TLS	-	-	-	-
4655	Q5JRX3	759	VRMLKRIAEMTDIKPILRKLPR IKKHL	+	-	-	-
4656	Q5JRX3	770	DIKPILRKLPR IKHLLNGDNMRCSVN	+	-	-	+
4657	Q5JRX3	849	SQVIRKLVMEPTFKPWQMKTHFLMPFP	-	-	-	+
4658	Q5JRX3	884	RTVPYTDPDHASILKILARLMTAKFLHT	+	-	-	-
4659	Q5JRX3	946	QSFGKAVDWAKSGKFTQQDIDEAKLSV	-	-	-	+
4660	P29590	725	PLIRERVPGASSFKLKNLAQTYLARNM	-	-	-	-
4661	P29590	487	AQKRKCSQTQCPRKVIKMESEEGKEAR	+	-	-	-
4662	P29590	515	ARSSPEQPRPSTS KAVSPPHLDGPPSP	+	-	-	-
4663	Q5VTL8	496	EKSKKREHSPSKEKSRKRSRSKERSHK	-	-	-	-
4664	Q5VTL8	227	FSTLFPRI PVPVQKNIDQQIKTRPRKI	+	-	-	-
4665	Q6P2Q9	449	PAGQPVKVRVSYQKLLKYYVLNALKHR	-	-	-	-
4666	Q6P2Q9	1463	QNPFWWTHQRHDGKLWNLNNYRTDMIQ	+	-	-	-
4667	P43686	238	AAFIRVVGSEFVQKYLGEGRPMVRDVF	-	-	-	-
4668	P43686	397	MLAVRENRYIVLAKDFEKAYKTVIKKD	+	-	-	-
4669	P43686	401	RENRYIVLAKDFEKAYKTVIKKDEQEH	+	-	-	-
4670	P62191	350	LDPALIRPGRIDRKIEFPLPDEKTKKR	-	-	-	-
4671	P62191	258	ATFLRVVGSELIQKYLGDGPKLVREL F	+	-	-	-
4672	P49720	118	TEPVIAGLDPKTFKPFICSLDLIGCPM	-	-	-	-
4673	P49720	77	AQRLKFRNLNLYELKEGRQIKPYTLMSM	+	-	-	-
4674	P28065	163	GSTFIYGYVDAAYKPGMSPEECRRFTT	-	-	-	-
4675	P28065	53	VSAGEAVVNRVFDKLSPLHERIYCALS	+	-	-	-
4676	P28065	109	VLAAANVVRNISYKYREDLSAHLMVAG	+	-	-	-
4677	P48147	684	LIHVDTKAGHGAGKPTAKVIEEVSDMF	-	-	-	-
4678	P48147	157	SASGSDWVTIKFMKVDGAKELPDVLER	+	-	-	-

4679	Q9UF12	198	LAVPTEEEPDSAAKSGEAWYEGNLGAM	-	-	-	-
4680	Q9UF12	386	AFGVKLVRGAYLDKERAVAQLHGMDP	+	-	-	-
4681	Q92620	40	CKSKSAASEQHVFKAAPAPRPSLLGLDL	-	-	-	-
4682	Q92620	260	RLSTRDRDRSVRGKYSDDTPLPTPSYK	+	-	-	-
4683	Q8WWY3	373	RKMKERLGLTEIRKANRMSFGEIEED	-	-	-	-
4684	Q8WWY3	438	QRTLQKQSVVYGGKSTIRDRSSGTASS	+	-	-	-
4685	P25787	53	AANGVVLATEKKQKSILYDERSVHKVE	-	-	-	-
4686	P25787	70	YDERSVHKVEPITHIGLVYSGMGPDY	+	-	-	-
4687	P25787	171	WKATAMGKNYVNGKTFLEKRYNEDLEL	+	-	-	-
4688	P25788	168	SGVSYGYWGCAIGKARQAAKTEIEKLQ	-	-	-	-
4689	P25788	57	DGVVFGVEKLVLSSKLYEEGSNKRLFNV	+	-	-	-
4690	P25788	206	EVAKIIYIVHDEVKDKAFELELSWVGE	+	-	-	-
4691	P25788	230	VGELTNGRHEIVPKDIREEAKEYAKES	+	-	-	-
4692	Q6NWX9	563	ELKARFHDEKKIKDILKDRGFCVEVN	-	-	-	-
4693	Q6NWX9	148	SQCPWKEYKSDTGKPYYYNNQSKESRW	+	-	-	-
4694	Q06830	37	GQFKDISLSDYKGKYVFFFFYPDLDF	-	-	-	-
4695	Q06830	7	MMMMMMSSGNAKIGHAPAPNFKATAV	+	-	-	-
4696	Q06830	16	SGNAKIGHAPAPNFKATAVMPDGQFKDI	+	-	-	-
4697	Q06830	27	NFKATAVMPDGQFKDISLSDYKGKYV	+	-	-	-
4698	Q06830	35	PDGQFKDISLSDYKGKYVFFFFYPDLDF	+	-	-	+
4699	Q06830	136	EGISFRGLFIIDDKGILRQITVNDLPV	+	-	-	-
4700	Q9UBK2	224	LKYLTTNDPPHTKPTENRNSSRDKCT	-	-	-	-
4701	Q9UBK2	79	SNQYNNEPSNIFEKIDEENEANLLAVL	+	-	-	-
4702	Q9UBK2	146	PPPQEAEEPSLLKLLLAPANTQLSYN	+	-	-	-
4703	Q9UBK2	184	NHNHRIRTNPAIVKTENSWSNKAKSIC	+	-	-	-
4704	Q9UBK2	254	KSHTQSQSQHLQAKPTTTLPLTPESP	+	-	-	-
4705	Q9UBK2	271	LSLPLTPESPNDPKGSPFENKTIERTL	+	-	-	-
4706	Q9UBK2	278	ESPNDPKGSPFENKTIERTLSVELSGT	+	-	-	-
4707	Q9UBK2	321	NPFRASPKLKSSCKTVVPPPSKKPRYS	+	-	-	-
4708	Q9UBK2	347	SESSGTQGNNSTKKGPEQSELYAQLSK	+	-	-	-
4709	Q9UBK2	413	ISQELQDSRQLENKDVSSDWQGQICSS	+	-	-	-
4710	Q9UBK2	442	SDQCYLRETLEASKQVSPCSTRKQLQD	+	-	-	-
4711	Q9UBK2	451	LEASKQVSPCSTRKQLQDQEIARLNLK	+	-	-	-
4712	Q9UBK2	758	DFELYFCGRKQFFKSNYADLDSNSDDF	+	-	-	-
4713	Q9UBK2	779	SNSDDFDPASTKSXYDSLDFDSLLKEA	+	-	-	-
4714	P78527	790	SIYIDRHVMQPYKIDILPCLDGYLKTS	-	-	-	-
4715	P78527	117	SVEIKNTCTSVYTKDRAACKIPALDL	+	-	-	-
4716	P78527	828	VSALSRAAQGFNKVVLKHLKKTKNLS	+	-	-	-
4717	P78527	1209	PLLPGNRSPNLWLKDLKEEGVSFLIN	+	-	-	-
4718	P78527	1970	NELKFYQGFLEFSEKPEKNLLIFENLID	+	-	-	-
4719	P78527	2259	KDCLSIPLYRLIFEKFSGKDPNSKDNSV	+	-	-	-
4720	P78527	3241	SSLIRSCKFSMKMKMIDSARKQNNFSL	+	-	-	-
4721	P78527	3260	RKQNNFSLAMKLLKELHKESKTRDDWL	+	-	-	-
4722	P78527	3621	KMYERMYAALGDPKAPGLGAFRRKFIQ	+	-	-	-
4723	P78527	3638	LGAFRRKFIQTFGKEFDKHFHGKGGSKL	+	-	-	-
4724	P78527	3642	RRKFIQTFGKEFDKHFHGKGGSKLLRMK	+	-	-	-
4725	O43490	553	YYLSGKLFNKSCKMLTFEQVYSDCKKN	-	-	-	-
4726	O43490	225	IKYILAQYNTTKDKAFTDLNSINSLVG	+	-	-	-
4727	O43490	257	RLRPNIIPVLDEIKSMATAIKETKEAL	+	-	-	-
4728	O43490	264	PVLDEIKSMATAIKETKEALENMNSTL	+	-	-	-
4729	P35998	156	DRNKYQIHIPLPPKIDPTVTMMQVEEK	-	-	-	-
4730	P35998	116	NADSEDPKYIINVQFAKFVVDLSQDV	+	-	-	-
4731	P35998	422	FLEAVNKVIKSYAKFSATPRYMTYNNN	+	-	-	-
4732	O95456	241	IPAILYLCYTDVMDLDLITVEAFKPIL	-	-	-	-
4733	O95456	264	KPILSTRSLKGLVKNIPQSTEILKKLM	+	-	-	-
4734	P48634	2123	QQASPPDALRWIPKPWERTGPPPREGP	-	-	-	-
4735	P48634	27	GKKYSSLNLFDTYKGSLEIQKPAVAP	+	-	-	-
4736	P48634	35	LFDITYKGSLEIQKPAVAPRHGLQSLG	+	-	-	-

4737	P48634	1196	PGWSPPAKSLAPK K PPTGPLPPSKEPL	+	-	-	-
4738	P07737	70	SSFYVNGLTLLGGQ K CSVIRDSLLQDGE	-	-	-	-
4739	P07737	105	STGGAPTFFNVTVT K TDKTLVLLMGKEG	+	-	-	-
4740	P07737	108	GAPTFFNVTVTKTD K TLVLLMGKEGVHG	+	-	-	-
4741	Q9UMS4	266	SEQILATLKGHTK K VTSVVFHPSQDLV	-	-	-	-
4742	Q9UMS4	122	QHDAACRVIAARLT K EVTAAREALATLK	+	-	-	-
4743	Q9UMS4	179	VGMTPEIIQKLQD K ATVLTTERKKRGK	+	-	-	-
4744	Q9UMS4	244	PSDTNKILTGGAD K NVVVFDKSSEQIL	+	-	-	-
4745	Q9UMS4	261	VFDKSSEQILATL K GHTKKVTSVVFHP	+	-	-	-
4746	Q13523	264	KIGKARSPTDDKV K IEDKSKSKDRKKS	-	-	-	-
4747	Q13523	99	ASDKEGMSPAKRT K LDDLALLEDELEKQ	+	-	-	-
4748	Q13523	717	ARDNARANQEVAV K IIRNNELMQKTGL	+	-	-	-
4749	O43172	200	PRAMKRLEEARLH K EIPETTRTSQMQE	-	-	-	-
4750	O43172	27	TKAPDDLVA PVV K PHIYYGSLEEKER	+	-	-	-
4751	Q9ULL5	976	ARPTKVKAEP P PK K RKKWLKEAGGNAT	-	-	-	-
4752	Q9ULL5	402	KAEEAGGTRLEPL K PLKIKLSVPKAGE	+	-	-	-
4753	P62195	335	EEARLDILKIH S R K MNLTRGINLRKIA	-	-	-	-
4754	P62195	222	CTFIRVSGSELVQ K FIGEGARMVRELF	+	-	-	-
4755	O14818	52	DIVVLGVEKK S VA K LQDERTVRKICAL	-	-	-	-
4756	O14818	227	DQSLKIILNPEEIE K YVAEIEKEKEENE	+	-	-	-
4757	Q9UNM6	186	YKDALRFLGCVDI K DLPVSEQQERAFT	-	-	-	-
4758	Q9UNM6	298	PANHRQLTFEEIA K SAKITVNEVELLV	+	-	-	-
4759	Q14914	299	DLLKWVLEGKI Q Y K EYIIIEGFENMPAA	-	-	-	-
4760	Q14914	178	KGCKVVGAVGSDE K VAYLQKLGFDDVF	+	-	-	-
4761	Q92932	580	TEDVEKATVDN K D K LEETSGLKILQTG	-	-	-	-
4762	Q92932	970	LIDMVLN K MAKGA K EIDIAATLEHLRD	+	-	-	-
4763	O43272	405	RLTLEMQRKF N VE K PLIFNTYQCYLKD	-	-	-	-
4764	O43272	368	QMTRMLQRM D VLA K KATEMGVRLMVDA	+	-	-	-
4765	O43272	486	MYHRCLDYVLEEL K HNAKAKVMVASHN	+	-	-	-
4766	O94903	211	FQLLLSLREEL C K L NI PADQVELSMG	-	-	-	-
4767	O94903	125	FMLETVD S VKLAD K VNSSWQRKGSPER	-	-	-	+
4768	P54821	31	RLDSPGNLDTLQ A K N FSVSHLLDLEE	-	-	-	-
4769	P54821	160	AKFRRNERAMLAN K NASLLKSYSGDVT	+	-	-	-
4770	P62333	93	VVGCRRLDKSK L K P GTRVALDMTTLT	-	-	-	-
4771	P62333	72	EVLKQLTEEK F IV K ATNGPRYVVGCR	+	-	-	-
4772	P62333	206	CNFLKVSSS I VD K YIGESARLIREMF	+	-	-	-
4773	P25789	118	IPCEQLVTALCDI K QAYTQFGGKRPFG	-	-	-	-
4774	P25789	127	LCDIKQAYTQFGG K RPFGVSLLYIGWD	+	-	-	-
4775	P25789	176	CIGNNSAAAV S ML K QDYKEGEMTLKSA	+	-	-	-
4776	P20618	104	TLTKIIEARL K MY K HSNNKAMTTGAIA	-	-	-	-
4777	P20618	204	HVPLSLDRAMRLV K DVFI SAAERDVYT	+	-	-	-
4778	Q99460	803	GLNKDLKMPKV Q Y K SNCKPSTFAYPAP	-	-	-	-
4779	Q99460	310	METEEKTSSAFVG K TPEASPEPKDQTL	+	-	-	-
4780	Q99460	720	NQFRQLYSKVIND K HDDVMAKFGAILA	+	-	-	-
4781	P06454	21	TSSEITTKDLKE K EVVEEAENGRDAP	-	-	-	-
4782	P06454	15	SDAAVDTSS E IT T KDLKEKKEVVEEAE	+	-	-	+
4783	P06454	103	RAAEDDEDDDDVD T K K QKTDEDDDDDDDD	+	-	-	-
4784	Q15397	63	SRNFEKSITKL G K K GVKQFKNKQQGDK	-	-	-	-
4785	Q15397	33	KNRFHKNSDSGSS K TFPTRKVAKEGGP	+	-	-	-
4786	P22102	598	LAGFAVGAMERDQ K LPHLERITEGDVV	-	-	-	-
4787	P22102	350	VVMASKGYPGDY T K G VEITGFPEAQAL	+	-	-	-
4788	P60900	185	QTESTSFLEKKV K KFDWTFEQTVETA	-	-	-	-
4789	P60900	102	SQVQRARYEAA N W K YKYGYEIPVDMLC	+	-	-	-
4790	P60900	104	VQRARYEAA N W K YKYGYEIPVDMLCKR	+	-	-	-
4791	O00232	180	QELQVETYGSME K KERVEFILEQMRLC	-	-	-	-
4792	O00232	221	KINTKFFQEENTE K LKLKYNNLMIQLD	+	-	-	-
4793	O00232	368	KNRVVEHNIRIM A K Y YTRITMKRMAQL	+	-	-	-
4794	P61289	212	VEDYRRTVTEIDE K EYISLRLLIISELR	-	-	-	-

4795	P61289	195	YYITRAKLVSKIAKYPHVEDYRRTVTE	+	-	-	-
4796	P31939	66	ELTGFPEMLGGRVKTLPVAVHAGILAR	-	-	-	-
4797	P31939	199	DEAISDYFRKQYSKGVSQMPLRYGMNP	+	-	-	-
4798	Q96EY7	158	FEPQIKDISEAALKERIELRKVKASVD	-	-	-	-
4799	Q96EY7	126	GENVAKFIINSYPKYFQKDIAEPHIPC	+	-	-	-
4800	P11498	600	LKKIAPYVAHNFSKLFSMENWGGATFD	-	-	-	-
4801	P11498	79	IYSEQDTGQMHRQKADEAYLIGRGLAP	+	-	-	+
4802	P11498	297	DPQLRTRLTSDSVKLAKQVGYENAGTV	+	-	-	-
4803	P11498	319	NAGTVEFLVDRHGKHYFIEVNSRLQVE	+	-	-	-
4804	P11498	434	HYDSSLVKVIAHGKDHPATAATKMSRAL	+	-	-	-
4805	P11498	442	VIAHGKDHPTAATKMSRALAEFRVRGV	-	-	-	+
4806	P11498	661	AVGYTNYPDNVVFKFCEVAKENGMDVF	+	-	-	-
4807	P11498	748	THILCIKDMAGLLKPTACTMLVSSLRD	+	-	-	-
4808	P11498	992	GASLPPLDLQALEKELVDRHGEEVTPE	+	-	-	-
4809	P11498	1061	FEVELERGKTLHIKALAVSDLNRAGQR	+	-	-	-
4810	P11498	1090	FFELNGQLRSILVKDTQAMKEMHFHPK	+	-	-	-
4811	P11498	1124	QIGAPMPGKVIDIKVVAGAKVAKGQPL	+	-	-	-
4812	Q13200	632	HFDSKEKEEDKDKKEKKDKDKKEAPAD	-	-	-	-
4813	Q13200	551	ILQTIMEKSETELKDTYARWLPLGLGL	+	-	-	-
4814	P51665	100	ARERIVGWYHTGPKLHKNDIAINELMK	-	-	-	-
4815	P51665	204	ITNQVHGLKGLNSKLLDIRSYLEKVAT	+	-	-	-
4816	P51665	214	LNSKLLDIRSYLEKVATGKLPINHQII	+	-	-	-
4817	P51665	316	DKEKDKDKEKSDVKKEEKKEKKKKKKK	+	-	-	-
4818	P51665	317	KEKDKDKEKSDVKKEEKKEKKKKKKK	+	-	-	-
4819	O95758	465	SNSPLHRFKKPGSKNFQNIFFPSATLH	-	-	-	-
4820	O95758	423	LAMNHLSGQRLYGKVLRLATLSKHQAVQ	+	-	-	-
4821	P22234	283	VLMGSTSDLGHCEKIKKACGNFGIPCE	-	-	-	-
4822	P22234	36	ELLDSPGKVLQSKDQITAGNAARKNH	+	-	-	-
4823	P22234	247	LKEVTPEGLQMVKNFEWVAERVELLL	+	-	-	-
4824	P11217	333	RDPVRTNFDAPDKVAIQLNDRTHPSLA	-	-	-	-
4825	P11217	364	MRILVDLERMDWDKAWDVTVRTCAYTN	-	-	-	+
4826	Q96QR8	289	ADEMKEIQERQRDKLYERRGGGSGGGE	-	-	-	-
4827	Q96QR8	267	YRNAITVPFKAWGKFGGAFCRYADEMK	+	-	-	-
4828	P06737	811	WNTMVLKNIAASGKFSSDRTIKEYAQN	-	-	-	-
4829	P06737	364	MRIFVDIEKLPSWKAWELTQKTFAYTN	-	-	-	+
4830	Q08257	232	DIIIEMLANVNLSKDLSSLHGGRVIV	-	-	-	-
4831	Q08257	23	AVRVFEFGGPEVLKLRSDIAVPIPKDH	+	-	-	-
4832	Q08257	296	AAALQAGMEIGWLKPVIGSQYPLEKVA	-	-	-	+
4833	Q32P51	52	TLTDCVVMRDPNTKRSRGFGFVTYATV	-	-	-	-
4834	Q32P51	298	SSGPYGGGGQYFAKPQNQGGYGVSSSS	+	-	-	-
4835	P20962	35	EKVEEKASRKERKEVEVEEEENGAE	-	-	-	-
4836	P20962	4	MMMMMMMMMMSEKSVEAAAELSAKDL	+	-	-	-
4837	P20962	15	SEKSVEAAAELSAKDLKEKKEKVEEKA	+	-	-	-
4838	P20962	92	LKRAAEEDDEADPKRQKTENGASAAAA	+	-	-	-
4839	Q9UHX1	276	TGKHKGYGFIIEYKAQSSQDAVSSMNL	-	-	-	-
4840	Q9UHX1	251	SDDDIKSVFEAFGKIKSCTLARDPTTG	+	-	-	-
4841	Q9UHX1	454	SISGSSARHVMQKLLRKQESTVMVLR	+	-	-	-
4842	P30566	75	IQEMKSNLENIDFKMAAEEKRLRHDV	-	-	-	-
4843	P30566	147	KLARVISRLADFAKERASLPTLGFTHF	+	-	-	-
4844	P30566	295	FEKQQIGSSAMPYKRNPMSERCCSLA	+	-	-	-
4845	P31930	134	NAYSTREHTAYYIKALSKDLPAVELL	-	-	-	-
4846	P31930	111	FKGTKNRPGSALEKEVESMG AHLNAYS	+	-	-	-
4847	P31930	138	TREHTAYYIKALS KDLPAVELLGDIV	+	-	-	-
4848	P31930	163	IVQNCSLEDSQIEKERDVILREMQEND	+	-	-	+
4849	P31930	248	GGVEHQQLDLAQKHLGGIPWTYAEDA	+	-	-	-
4850	P22695	359	AAGDVIKAAYNQVKTIAQGNLSNTDVQ	-	-	-	-
4851	P22695	66	ENYSPVSRIGLFIKAGSRYEDFSNLGT	+	-	-	-
4852	P22695	199	LANPLYCPDYRIGKVTSEELHYFVQNH	+	-	-	-

4853	P22695	250	FLNMRGGLGLSGA K ANYRGGEIREQNG	+	-	-	-
4854	O96011	189	PGTPGGGLPQLAL K LRLQVLLLARVLR	-	-	-	-
4855	O96011	43	HALQRHGASPELQ K QIRQLESHLSLGR	+	-	-	-
4856	P27708	1183	PPQDITAKTLER I KAIHVAVGQELQVT	-	-	-	-
4857	P27708	747	DYCVVKIPRWDL S KFLRVSTKIGSCMK	+	-	-	-
4858	P27708	1411	RGAGGRRLSSFVT K GYRTRRLAADFSV	+	-	-	-
4859	O14949	33	SPFEQRAYPHVFT K GIPNVLRRIRESF	+	-	-	+
4860	P35241	253	FPWSEIRNISFND K KFVIKPIDKKAPD	-	-	-	-
4861	P35241	60	LQYVDSKGYSTWL K LNKKVTQQDVKKE	+	-	-	-
4862	P35241	79	TQQDVKKENPLQ F KFRAKFFPEDVSEE	+	-	-	-
4863	P35241	83	VKKENPLQ F KFRAKFFPEDVSEELIQE	-	-	-	+
4864	P35241	139	ASYAVQAKYGDYN K EIHKPGYLANDRL	+	-	-	-
4865	P35241	165	LLPQRVLEQHKL T KEQWEERIQNWHEE	+	-	-	-
4866	P46060	352	EQLQEVLLEGFNMA K VLASLSDDDEDEEE	-	-	-	-
4867	P46060	524	TFLTRLVHMG L LK S EDKVKAIANLYG	+	-	-	-
4868	Q9UKM9	216	ALLSRLEQIAAEQ K ANPDGKKKGDDGGG	-	-	-	-
4869	Q9UKM9	44	ALVKKSDVET I FS K YGRVAGCSVHKGY	+	-	-	-
4870	Q9UKM9	165	VPLVRRVKTNVPV K LFARSTAVTTSSA	+	-	-	-
4871	Q9H6Z4	32	FQKDKGQKSPAEQ K NLSDSGEPRGEA	-	-	-	-
4872	Q9H6Z4	9	MMMMMADLANEE K PAIAPPVFVFQKD	+	-	-	-
4873	Q9H6Z4	21	EKPAIAPPVFVFQ K DKGQKSPAEQKNL	+	-	-	-
4874	Q96S59	224	ACGIYYFEVK I VS K GRDGYMGIGLSAQ	-	-	-	-
4875	Q96S59	405	STDQTVLEELAS I KNRQRIQKLVLAGR	+	-	-	-
4876	P49792	1684	CSVCLVRNEASAT K CIACQNPQKQNT	-	-	-	-
4877	P49792	1977	KDPNFKGFSGAGE K LFSSQYGMANKA	+	-	-	-
4878	P07919	45	TVREQCEQLEKCV K ARERLELCDERVS	-	-	-	-
4879	P07919	42	PLTTVREQCEQLE K CVKARERLELCDE	+	-	-	-
4880	P07919	85	FDFLHARDHCVAH K LFNNLKKKKKKKK	+	-	-	-
4881	Q16576	155	KTPSSDVLVFDYT K HPAKPDPSGECNP	-	-	-	-
4882	Q16576	4	MMMMMMMMMMAS K EMFEDTVEERVIN	+	-	-	-
4883	Q16576	119	GFGSVTGK I EC E I K INHEGEVNRARYM	+	-	-	-
4884	Q16576	159	SDVLVFDYT K HPAKPDPSGECNPDLRL	+	-	-	-
4885	P98175	834	RREKYGIPEPPEP K RRKYGGISTASVD	-	-	-	-
4886	P98175	383	LTIDGKTINVEFA K GSKRDMASNEGSR	+	-	-	-
4887	P49756	177	KTKAQLDEWKAK K KASNGNARPETVTN	-	-	-	-
4888	P49756	135	ASGKLQAFGFCEY K EPESTLRALRLLH	+	-	-	-
4889	Q92804	192	GSQGGGRGGYD K DGRGPMTGSSGGD	-	-	-	-
4890	Q92804	268	KQIG I IKTNKKTG K PMINLYTDKDTGK	+	-	-	-
4891	P17812	280	LRRDLPIERQPR K MLMKWKEMADRYD	-	-	-	-
4892	P17812	100	NLTTGKIYQYVIN K ERKGDYLGKTVQV	+	-	-	-
4893	P14927	64	LPENLYNDRMF R I K RALDLNLKHQILP	-	-	-	-
4894	P14927	12	MMAGKQAVSASG K WLDGIRKWYYNAA	+	-	-	+
4895	P14927	19	AVSASGWLDGIR K WYYNAAAGFNKLGL	+	-	-	-
4896	P14927	78	RALDLNLKHQILP K EQWTKYEEENFYL	+	-	-	+
4897	P14927	83	NLKHQILPKEQWT K YEEENFYLEPYLK	+	-	-	-
4898	P14927	96	KYEEENFYLEPYL K EVIRERKEREWA	+	-	-	-
4899	P42696	107	IERPLSQEP A KKV K AKKKHTNAEKKLA	-	-	-	-
4900	P42696	151	KQGQKRKNSQPGV K VADRKILDDTETD	+	-	-	-
4901	P38159	47	IVEVLLMKDRETN K SRGFAFVTFESPA	-	-	-	-
4902	P38159	30	TETNEKALEAVFG K YGRIVEVLLMKDR	+	-	-	-
4903	Q9UJ41	457	ETTDDEKKDLAIQ K RIRALRWVTPQML	-	-	-	-
4904	Q9UJ41	329	VSKEFIEFLKTFH K TGQEIYKQTKLFL	+	-	-	-
4905	Q9UJ41	348	YKQTKLFL E GMHY K RDLSIEEQSECAQ	+	-	-	-
4906	P63244	172	NSSNP I IVSCGWD K LVKVWNLANCKLK	-	-	-	-
4907	P63244	130	NRQIVSGSRDK T I K LWNTLGVCXYTVQ	+	-	-	-
4908	P63244	183	WDKLKVWNLAN C K L KTNHIGHTGYLN	+	-	-	-
4909	Q8IUD2	310	TQKQTLNARDES I K L LLEMLQSKGLSA	-	-	-	-
4910	Q8IUD2	10	MMMMMYGSARS V G K VEPSSQSPGRSPR	+	-	-	-

4911	Q96PK6	594	LSPPRASYDDPYK K AVAMSKRYGSDRR	-	-	-	-
4912	Q96PK6	164	QKKGPGLAVQSGD K TKKPGAGDTAFPG	+	-	-	-
4913	Q9P258	272	MACGAEFMIMDC K GNLYSFGCPEYGQ	-	-	-	-
4914	Q9P258	92	GGAAVVITEPEHT K ERVKLEGSCKKGQ	+	-	-	-
4915	Q9P258	124	ATNWDLIGRKEVP K QQAAYRNLGQNLW	+	-	-	-
4916	Q9P258	293	CPEYGQLGHNSDG K FIARAQRIEYDCE	+	-	-	-
4917	Q9P258	377	HAEQKDEMVPRLV K LDFDPGRGASQIY	+	-	-	-
4918	Q9BWE0	295	HRRIHTGEKPYPC K ECGRRFRHKPNLL	-	-	-	-
4919	Q9BWE0	33	LSGPSQESPQTLG K ESRGLRQQGTSVA	+	-	-	-
4920	Q9BWE0	276	PHQCPECGKRFTN K PYLTSRRRIHTGE	+	-	-	-
4921	P01116	101	KSFEDIHHYREQ I KRVKDSEDVPMVLV	-	-	-	-
4922	P01116	104	EDIHHYREQ I KRVKDSEDVPMVLVGNK	+	-	-	-
4923	Q8IXT5	928	PKINCGSGRVTP I KIMNLPFKANVNEI	-	-	-	-
4924	Q8IXT5	319	GTDLTDEQIRFLY K DENRTRYAFVMFK	+	-	-	-
4925	Q09028	25	VEERVINEEYK I WKNTPFPLYDLVMTH	-	-	-	-
4926	Q09028	4	MMMMMMMMMMAD K EAAFDDAVEERVI	+	-	-	-
4927	Q09028	160	SDVLVFDYTKHPS K PDPSGECNPDLRL	+	-	-	-
4928	Q7Z6E9	1731	ASSAESQDSKKKK K KKKKKKKKKKKH	-	-	-	-
4929	Q7Z6E9	130	TANLAEANASEED K IKAMMSQSGHEYD	+	-	-	-
4930	Q96T37	73	GGEDSTSRGERS K LGGSGGSNGSSSG	-	-	-	-
4931	Q96T37	450	KIIIRNPIKIGYG K ATPTTRLWVGGLG	+	-	-	-
4932	P06400	294	HECNIDEVKNVYF K NFIPFMNSLGLVT	-	-	-	-
4933	P06400	810	LRIPGGNIYISPL K SPYKISEGLPTPT	-	-	+	-
4934	P06400	860	KINQMVCNSDRVL K RSAEGSNPPKPLK	-	-	+	-
4935	P06400	873	KRSAEGSNPPKPL K KLRFDIEGSDEAD	+	-	-	-
4936	P06400	874	RSAEGSNPPKPL K KLRFDIEGSDEADG	+	-	-	-
4937	P40938	154	TKDAQHALRRTME K YMSTCRLILCCNS	-	-	-	-
4938	P40938	20	KYRPCSLGRLDYH K EQAQLRNLVQCG	+	-	-	-
4939	P35249	84	LPNLLFYGPPTG K TSTILAAARELFG	-	-	-	-
4940	P35249	6	MMMMMMMMMQAFL K GTSISTKPPLTKD	+	-	-	-
4941	P35249	13	MMQAFLKGTSIST K PPLTKDRGVAASA	+	-	-	-
4942	Q15276	558	GIQIQEAETRDQV K KLQMLRQANDQL	-	-	-	-
4943	Q15276	282	ERQQHNQLKHTWQ K ANDQFLESQRLLM	+	-	-	-
4944	Q92878	501	LSKAEKNSNVETL K MEVISLQNEKADL	-	-	-	-
4945	Q92878	959	DIKEKVKNIHGYM K DIENYIQDGKDDY	+	-	-	-
4946	P43487	97	GAIRLLMRRDKTL K ICANHYPMMEL	-	-	-	-
4947	P43487	150	LLAIRFLNAENAQ K FKTKFEECRKEIE	+	-	-	+
4948	P43487	183	GSGKNDHAEKVAE K LEALSVKEETKD	+	-	-	-
4949	P62826	23	QFKLVLVGDGGTG K TTFVKRHLTGEFE	-	-	-	-
4950	P62826	60	VHPLVFHTNRGP I KFNVDWTAGQEKFG	+	-	-	-
4951	P62826	71	PIKFNVDWTAGQ E KFGGLRDGYIIQAQ	+	-	-	-
4952	P62826	99	AIIMFDVTSRVTY K NVPNWHRDLVRVC	+	-	-	-
4953	P62826	159	YYDISAKSNYNF E KPFLWLARKLIGDP	+	-	-	+
4954	P61026	177	LTLAEDILRKTPV K EPNSENVDISSGG	-	-	-	-
4955	P61026	102	YDITNGKSFENIS K WLRNIDEHANEDV	+	-	-	-
4956	P15153	130	LDLRDDKDTIEKL K EKKLAPITYPQGL	-	-	-	-
4957	P15153	147	LAPITYPQGLAL A KEIDSVKYLECSAL	+	-	-	-
4958	Q9NW64	66	TVFRWCPGVRMR F KKTEVCQTCSKLKN	-	-	-	-
4959	Q9NW64	212	KDRYYGINDPVAD K LLKRASTMPRLDP	+	-	-	-
4960	Q5T8P6	770	SKLEKNKTMKSED K AEIMKTLEVLTKN	-	-	-	-
4961	Q5T8P6	510	GEPGVPTKKTWFD K PNFNRTNSPGFQK	+	-	-	-
4962	Q8TC12	165	GHFLLTHLLEKL K ESAPSRIVNVSSL	-	-	-	-
4963	Q8TC12	112	LDLSDTKSIRAF A KGFLAEKHLHVLI	+	-	-	-
4964	Q15493	38	VSNSLLFVDIPAK K VCRWDSFTKQVQR	-	-	-	-
4965	Q15493	144	QGALYSLFPDHHV K KYFDQVDISNGLD	-	-	-	+
4966	Q15493	244	TGKRLQTVKLPVD K TTSCCFGGKNYSE	-	-	-	+
4967	Q15493	253	LPVDKTTSCCFGG K NYSEMYVTCARDG	-	-	-	+
4968	Q7Z5B4	185	GESRAQTVTSDQ E KRLLHQLEITRVM	-	-	-	-

4969	Q7Z5B4	202	HQLREITRVMKEGKFIDRFSPEKEAEE	+	-	-	-
4970	P27694	343	TKITVRSNNREVAKRNIYLMDTSGKV	-	-	-	-
4971	P27694	163	GMGSTVSKAYGASKTFGKAAGPSLSHT	+	-	-	-
4972	P27694	167	TVSKAYGASKTFGKAAGPSLSHTSGGT	+	-	-	-
4973	P27694	259	FPLIEVNVVYFYSKGTCLKIANKQFTAV	+	-	-	-
4974	P46063	452	KLYEMVSYCQNISKCRRLVMAQHFDEV	-	-	-	-
4975	P46063	514	KQAEELNEKLTPCLKLIDSWMGKGAACL	+	-	-	-
4976	P46063	522	KLTPLKLIDSWMGKGAACL RVAGV VAP	+	-	-	-
4977	Q13123	151	SAAEKRRQLIQESKFLGGDMEHTHLVK	-	-	-	-
4978	Q13123	98	RQQEIERERELAEKYRDRAKERRDGVN	+	-	-	-
4979	Q13123	137	ANYRAVGPTAEADKSAAEKRRQLIQES	+	-	-	-
4980	P23921	563	QGPYETYEGSPVSKGILQYDMWNVPT	-	-	-	-
4981	P23921	17	IKRDGRQERVFMFDKITSRIQKLCYGLN	+	-	-	-
4982	P23921	376	WGEEFEKLYASYEKQGRVRKVVKAAQQL	+	-	-	-
4983	Q9P2R6	439	KETGELITFYFYWKKTPEAASSRAHRR	-	-	-	-
4984	Q9P2R6	1158	ARTDLYFMPLAGSKLAKKREEAIEKAK	+	-	-	-
4985	Q2KHR2	506	IKATKVCDQRTKCKSRCNEMLPGTSTG	-	-	-	-
4986	Q2KHR2	607	GSVKKDQKVPHSGKTEGSTAGAQIPSK	+	-	-	-
4987	P26373	42	PARKIRRRKARQAKARRIAPRPASGPI	-	-	-	-
4988	P26373	16	PSRNGMVLKPHFHKDWQRRVATWFNQP	+	-	-	-
4989	P26373	177	EKARVITEEEKNFKAFASLRMARANAR	+	-	-	-
4990	P50914	147	ALLKASPKKAPGTGTAAAAAAAAAAK	-	-	-	-
4991	P50914	79	HSAHQKYVRQAWQKADINTKWAATRWA	+	-	-	-
4992	P50914	85	YVRQAWQKADINTKWAATRWAKKIEAR	+	-	-	+
4993	P50914	204	APKAQKGQKAPAQKAPAPKASGKAAA	-	-	-	+
4994	P35250	192	EPIQSRCAVLRYTKLTDAQILTRLMNV	-	-	-	-
4995	P35250	163	AQQALRRTMEIYSKTTRFALACNASDK	+	-	-	-
4996	P35250	304	SPEDIIGNIFRVCKTFQMAEYLKLEFI	+	-	-	-
4997	Q07960	59	DSKSSPELVTHLKWDDPYYDIARHQI	-	-	-	-
4998	Q07960	80	IARHQIVEVAGDDKYGRKIIIVFSACRM	+	-	-	-
4999	P62913	159	RRTGCIGAKHRISKEEAMRWFQQKYDG	-	-	-	-
5000	P62913	52	VLEQLTGQTPVFSKARYTVRSFGIRRN	+	-	-	-
5001	P62913	85	CTVRGAKAEIILEKGLKVREYELRKNN	+	-	-	-
5002	P30050	130	RHRSLARELSGTIKEILGTAQSVGCNV	-	-	-	-
5003	P30050	54	KVGDDIAKATGDWKLRLITVKLTIQNR	+	-	-	-
5004	Q02543	128	ARHRARAHSIQIMKVEEIAASKCRRPA	-	-	-	-
5005	Q02543	76	YCGQVFEKSPLRVKNFGIWLRYDSRSG	-	-	-	+
5006	P83731	119	EQAIRAAKEAKKAKQASKKTAMAAKA	-	-	-	-
5007	P83731	27	YPGHGRRYARTDGVFQFLNAKCESAF	+	-	-	-
5008	P83731	77	SEEIQKKRTRRAVFKFQRAITGASLADI	+	-	-	-
5009	P83731	93	RAITGASLADIMAKRNQKPEVRKAQRE	+	-	-	-
5010	P83731	131	AKQASKKTAMAAAAPTKAAPKQKIVK	-	-	-	+
5011	P62906	102	ALKKLNKNKKLVKKLAKKYDAFLASES	-	-	-	-
5012	P62906	91	KAVDIPHMDIEALKLNKNKKLVKKLA	+	-	-	-
5013	P62906	106	LNKNKKLVKKLAKKYDAFLASESLIKQ	+	-	-	-
5014	P62906	118	KKYDAFLASESLIKQIPRILGPGLNKA	+	-	-	-
5015	P46776	94	LVSEQTRVNAAKNKTGAAPIIDVVRSG	-	-	-	-
5016	P46776	47	NAGGLHHHRINFDKYHPGYFGKVGMDKH	+	-	-	-
5017	P46776	55	RINFDKYHPGYFGKVGMDKHHLKRNQS	+	-	-	-
5018	P46776	110	AAPIIDVVRSGYYKVLGKGKLPKQPVI	+	-	-	-
5019	P40429	115	LKVFDGIPPPYDKKCRMVVPALKVVR	-	-	-	-
5020	P40429	191	RKQAEKNVEKKIDKYTEVLKTHGLLVV	+	-	-	-
5021	P62888	44	YKQTLKMIRQGKAKLVILANNC PALRK	-	-	-	-
5022	P62888	26	SINSRLQLVMKSGKYVLGYKQTLKMIR	+	-	-	-
5023	O76021	240	IENIVAVTKGLSEKLPEKWESVKLLFV	-	-	-	-
5024	O76021	468	PKKPEAKFFTTPSKSVRKASHTPKKWP	+	-	-	-
5025	P61353	109	VNKDVFDRDPALKRKARREAKVKFEERY	-	-	-	-
5026	P61353	27	LAGRYSGRKAVIVKNIDDGTSRDPYSH	+	-	-	-

5027	P61353	93	LMPTRYSDIPLD K TVVNKDVFRDPAL	+	-	-	-
5028	P62899	51	FKKRAPRALKEIR K FAMKEMGTPDVRI	-	-	-	-
5029	P62899	55	APRALKEIRKFAM K EMGTPDVRIIDTRL	-	-	-	+
5030	P62899	70	MGTPDVRIIDTRLN K AVWAKGIRNVPYR	-	-	-	+
5031	P62899	75	VRIDTRLNKA V WAKGIRNVPYRIRVRL	+	-	-	+
5032	P62910	32	KFIRHQSDRYVKI K RNWRKPRGIDNRV	-	-	-	-
5033	P62910	50	KPRGIDNRVRRRF K GQILMPNIGYGSN	-	-	-	+
5034	P46777	41	TDYYARKRLVIQD K NKYNTPKYRMIVR	-	-	-	-
5035	P46777	5	MMMMMMMMMGFV K VVNKAYFKRYQV	+	-	-	-
5036	P46777	48	RLVIQDKNKYNT P KYRMIVRVTNRDII	+	-	-	-
5037	P46777	220	YMRYLMEEDDAY K KQFSQYIKNSVTP	+	-	-	-
5038	P63173	50	RCSRYLYTLVITD K EKAELKQSLPPG	-	-	-	-
5039	P63173	9	MMMMMPRKIEEI K DFLLTARRKDAKS	+	-	-	-
5040	P63173	67	EKLKQSLPPGLAV K ELKKKKKKKKKKK	+	-	-	-
5041	P35268	93	KRYLKYLTKKYL K NNLRDWLRVVANS	-	-	-	-
5042	P35268	69	LGGGVVTIERSKS K ITVTSEVPFSKRY	-	-	-	+
5043	P62750	37	AKKAVLKGVHSH K KKIRTSPTFRRPK	-	-	-	-
5044	P62750	70	QPKYPRKSAPRRN K LDHYAIIKFPLTT	+	-	-	-
5045	P47914	114	HPKLGKRARARIA K GLRLCRPKAKAKA	-	-	-	-
5046	P47914	5	MMMMMMMMMAKS N NHTTHNQSRKWHR	-	-	+	-
5047	P47914	33	GIKKPRSQRYES L KGVDPKFLRNMRF	+	-	-	-
5048	P61927	68	RRNTTGTGRMRH L KIVYRRFRHGFREG	-	-	-	-
5049	P61927	10	MMMMMTKGTSSFG K RRNKTHTLCRRCG	+	-	-	-
5050	Q9NYK5	72	TPRTEKIEVKHVG K TDPGTVFVMNKNI	-	-	-	-
5051	Q9NYK5	126	WDMYKPLTKSCEI K FLTFKDCDPGEVN	+	-	-	-
5052	Q9HD33	107	SNEDLHKLWYV L KERNMLLTLEQEAK	-	-	-	-
5053	Q9HD33	144	RLDKVVDSDALD K VVQEREDALRLLQ	+	-	-	-
5054	P18077	45	GVYARDETEFYLG K RCAYVYKAKNNTV	-	-	-	-
5055	P18077	8	MMMMMMMSGRLWS K AIFAGYKRGLRNQ	+	-	-	-
5056	P18077	63	VYKAKNNTVTPGG K PNKTRVIWGVTR	+	-	-	+
5057	P42766	106	RRLNKHEENLKT K QQRKERLYPLRKY	-	-	-	-
5058	P42766	19	ARDLRGKKKEEL L KQLDDLKVELSQLR	+	-	-	-
5059	P42766	43	QLRVAKVTGGAAS K LSKIRVVRKSIAR	+	-	-	-
5060	P39023	224	FGQDEMIDVIGVT K GKGYGVTSRWHT	-	-	-	-
5061	P39023	136	HKSKKKAFTKYCK K WQDEDGKKQLEKD	+	-	-	-
5062	P39023	286	GYHHRTEINKKI Y KIGQGYLIKDGKLI	+	-	-	-
5063	P39023	294	NKKIYKIGQGYLI K DGKLIKNNASTDY	+	-	-	-
5064	P39023	366	VQTKRRALEKID L KFIDTTSKFGHGRF	+	-	-	-
5065	P39023	373	LEKIDLK F IDTTSKFGHGRFQTMEEEK	+	-	-	-
5066	P62987	112	CYARLHPRAVNCR K KKCGHTNNLRPKK	-	-	-	-
5067	P62987	98	LAQKYNCCKMICR K CYARLHPRAVNCR	-	-	+	-
5068	Q02878	207	VIATSTKIDISNV K IPKHLTDAYFKKK	-	-	-	-
5069	Q02878	239	RHQEGEIFDTEKE K YEITEQRKIDQKA	+	-	-	-
5070	P62424	37	AKKVVNPLFEKRP K NFGIGQDIQPKRD	-	-	-	-
5071	P62424	34	KQEAKKVVNPLFE K RPKNFGIGQDIQP	+	-	-	-
5072	P62424	97	TQALDRQTATQL L KLAHKYRPETKQEK	+	-	-	-
5073	P62424	217	FTQVNSDKGALAK L VEAIRTNYNDRY	+	-	-	-
5074	Q9Y3U8	19	PMVGLNKGHKVT K NVSKPRHSRRRGR	-	-	-	-
5075	Q9Y3U8	62	GFAPYERRAME L KVSKDKRALKFIKK	+	-	-	-
5076	P49207	69	VRVVRPKVLMRL S KTKKHVSRAYGGSM	-	-	-	-
5077	P49207	36	SRTPGNRIVYLYT K KVGKAPKSACGVC	+	-	-	-
5078	P49207	43	IVYLYTKKVGKAP K SACGVCPGRLRGV	+	-	-	-
5079	Q969Q0	86	VEPNCRSKRMLAI K RCKHFELGGDKKR	-	-	-	-
5080	Q969Q0	53	RYDRKQSGYGGQT K PIFRKKAKTTKKI	-	-	+	-
5081	P18124	181	ALTDNALIARS L KYGIICMEDLIHEI	-	-	-	-
5082	P18124	124	LLRLRQIFNGTFV K LNKASINMLRIVE	+	-	-	-
5083	P18124	127	LRQIFNGTFVKLN K ASINMLRIVEPYI	-	-	-	+
5084	Q9BXT8	736	EILCPVQDQACVA K FEDGIWYRAKVG	-	-	-	-

5085	Q9BXT8	234	SNLIKAKSYIEEKNNLNAAAMNIARAL	+	-	-	-
5086	Q13151	137	VEKAEIIADKQSGKRGFGFVYFQNH	-	-	-	-
5087	Q13151	133	QFGTVEKAEIIADKQSGKKRGFGFVYF	+	-	-	-
5088	P09651	78	VEEVDAAMNARPHKVDGRVVEPKRAVS	-	-	-	-
5089	P09651	3	MMMMMMMMMMMSKSESPKEPEQLRKL	+	-	-	-
5090	P09651	350	SSGPYGGGGQYFAKPRNQGGYGGSSSS	+	-	-	-
5091	P22626	120	AHVTVKKLFVGGIKEDTEEHHLRDYFE	-	-	-	-
5092	P22626	104	VEPKRAVAREESGKPGAHVTVKKLFVG	-	-	+	-
5093	P22626	168	FGFVTFDDHDPVDKIVLQKYHTINGHN	+	-	-	-
5094	P22626	173	FDDHDPVDKIVLQKYHTINGHNAEVRK	+	-	-	-
5095	P36578	308	SPEIQRALRAPRKIHRRVLKKNPLKN	-	-	-	-
5096	P36578	14	MACARPLISVYSEKGESSGKNVTLPAV	+	-	-	-
5097	P36578	106	GNMCRGGRMFAPTKTWRWRHRRVNTTQ	+	-	-	-
5098	P36578	259	VGRFCIWTESAFRKLDELYGTWRKAAS	+	-	-	-
5099	P36578	333	KNLRIMLKLNPYAKTMRNTILRQARN	+	-	-	-
5100	P36578	353	ILRQARNHKLRLVDKAAAAAALQAKSD	+	-	-	-
5101	P36578	364	VDKAAAAAALQAKSDEKAAVAGKKPV	+	-	-	-
5102	Q96DB5	139	RDVAQLSRTSEEEKKLLVYEALYAKR	-	-	-	-
5103	Q96DB5	165	RALEKNESSFASHKWYAICLSDVGDYE	-	-	-	+
5104	Q05823	470	EDEFARNVLSSIFKAVQELHLSCGYTH	-	-	-	-
5105	Q05823	684	EHIDEKHKMKMLKIGDPSLYFQKTFP	+	-	-	-
5106	Q5TBB1	109	LLLHYLIKADKEGKFQPLDQVVVDNVF	-	-	-	-
5107	Q5TBB1	295	AQKALAKVDKSGMSIDTFFGVKNKKK	+	-	-	-
5108	P35398	62	SYSSTRGISVTKKTHTSQIEIIPCKI	-	-	-	-
5109	P35398	38	GSRETPLNQESARKSEPPAPVRRQSYS	-	-	+	-
5110	P32969	168	SNSAALIQQATTVKNKDIRKFLDGIYV	-	-	-	-
5111	P32969	121	NGSLVEIRNFLGEKYIRRVRMRPGVAC	+	-	-	-
5112	Q9H2W6	61	LGALCLQRPPVVSPLTPLQEEMASLL	-	-	-	-
5113	Q9H2W6	230	FPQAMRTESNLGAKVFFFKALLLTGDF	+	-	-	-
5114	P51991	204	INGHNCEVKKALSQEMQSAGSQRGRG	-	-	-	-
5115	P51991	134	AHLTVKKIFVGGIKEDTEEYNLRDYFE	+	-	-	-
5116	P05387	99	SAPAAAEKKDEKKEESEESDDDMGFG	-	-	-	-
5117	P05387	21	LLAALGGNSSPSAKDIKKILDSVGIEA	+	-	-	+
5118	Q96GC5	51	GGILLSISRPYKTKPTHGIGKYKHLIK	-	-	-	-
5119	Q96GC5	199	VKEHTEEDFKGRFKARPELEELLAKLK	-	-	-	+
5120	Q96E39	47	IVEVLLIKDRETNKSRGFAFVTFESPA	-	-	-	-
5121	Q96E39	30	TETNEKALETVFGKYGRIVEVLLIKDR	+	-	-	-
5122	Q13464	1020	AEIMNRKDFKIDRKANTQDLRKKEKE	-	-	-	-
5123	Q13464	647	LQEEVKHLKHNLEKVEGERKEAQDMLN	+	-	-	-
5124	P52815	91	EISDLNELLKKTLLKIQDVGLVPMGGVM	-	-	-	-
5125	P52815	138	KERTHFTVRLTEAKPVDKVKLIKEIKN	+	-	-	-
5126	P52815	150	AKPVDKVKLIKEIKNYIQGINLVQAKK	-	-	-	+
5127	P52815	162	IKNYIQGINLVQAKKLVESLPQEIKAN	-	-	-	+
5128	P52815	178	VESLPQEIKANVAKAEAEKIKAALEAV	-	-	-	+
5129	O14802	1224	VIHIDEQSGKEKYKLLVEGDNLRAVMA	-	-	-	-
5130	O14802	445	LKYGNREKMAQELKYGDIVERHLIDGD	+	-	-	-
5131	Q16518	216	AYNIVKIPPLQADKEDPISKSEIVVQF	-	-	-	-
5132	Q16518	113	ITEFGTCAFPDPCKNIFSRFFSYFRGV	+	-	-	-
5133	Q9Y508	60	VFCSACLQECLKPKKPVCGVCRSALAP	-	-	-	-
5134	Q9Y508	102	TSCHGCRKNFFLSKIRSHVATCSKYQN	+	-	-	-
5135	Q9Y508	112	FLSKIRSHVATCSKYQNYIMEGVKATI	+	-	-	-
5136	Q14684	369	QILSQGKHKKKGNKLEKTNLEKEKGS	-	-	-	-
5137	Q14684	652	ESDFVKFDTPFLPKPLFFRAKSSTAT	+	-	-	-
5138	Q9Y2L1	895	NPQLIYDDEIPSLKIEDTVFHVFDKVK	-	-	-	-
5139	Q9Y2L1	18	KTFLKKTRAGGVMKIVREHYLRDDIGC	+	-	-	-
5140	Q15287	152	SKSKPPKRDEKERKRRSPSPKPTKVHI	-	-	-	-
5141	Q15287	218	YAYVEFENPDEAEKALKHMDGGQIDGQ	+	-	-	-
5142	P10155	204	SSEGLAIVTKYITKGWKEVHELYKEKA	-	-	-	-

5143	P10155	224	ELYKEKALSVETE K LLKYLEAVEKVKR	+	-	-	-
5144	P10155	359	DEEILKALDAAFY K TFKTVEPTGKRFL	+	-	-	-
5145	Q99729	227	KKFHTVSGSKCEI K VAPKEVYQQQQY	-	-	-	-
5146	Q99729	215	FKEEEPVKKVLE K FHTVSGSKCEIKV	+	-	-	-
5147	Q99729	318	PGYDYSQGSTNYG K SQRRGGHQNNYKP	+	-	-	-
5148	P62277	93	LAPDLPEDLYHLI K KAVAVRKHLERNR	-	-	-	-
5149	P62277	27	SALPYRRSVPTWL K LTSDDVKEQIYKL	+	-	-	+
5150	P62277	34	SVPTWLKLTSDDV K EQIYKLAKKGLTP	-	-	-	+
5151	P04843	37	ASSEAPPLINEDV K RTVDLSSHLAKVT	-	-	-	-
5152	P04843	187	RVKLASRNVESYT K LGNPTRSEDLLDY	+	-	-	-
5153	P04843	538	ALTSEIALQLSRL K TEGSDLCDRVSEM	+	-	-	-
5154	P62280	79	VSIRGRILSGVVT K MMQRTIVIRRDY	-	-	-	-
5155	P62280	38	LGETGKEKLPRYY K NIGLGFKTPKEAI	+	-	-	-
5156	P62280	45	KLPRYYKNIGLGF K TPKEAIEGTYIDK	+	-	-	-
5157	P62280	58	KTPKEAIEGTYID K KCPFTGNVSIRGR	+	-	-	-
5158	P39019	29	RALAAFLKKSGKL K VPEWVDTVKLAKH	-	-	-	-
5159	P39019	23	NQQEFVRALAAFL K KSGKLVPEWVD	+	-	-	-
5160	P39019	111	SVARRVLQALEGL K MVEKDQDGGRKLT	+	-	-	-
5161	P39019	115	RVLQALEGLKMVE K DQDGGRKLT PQGQ	+	-	-	-
5162	P39019	143	DLDR IAGQVAAAN K KHHHHHHHHHHHH	-	-	-	+
5163	P62266	37	DKQYKKAHLGTAL K ANPFGGASHAKGI	-	-	-	-
5164	P62266	54	FGGASHAKGIVLE K VGVVEAKQPNSAIR	-	-	-	+
5165	P62266	135	VVKVANVSLALY K GKKERPRSSSSSS	+	-	-	-
5166	P15880	142	AIGDYNHVGVLGV K CSKEVATAIRGAI	-	-	-	-
5167	P15880	263	YLTPDLWKETVFT K SPYQEFTHDLVKT	+	-	-	-
5168	P15880	275	TKSPYQEFTHDLV K THTRVSVQRTQAP	+	-	-	-
5169	P23396	75	KGRRIRELTAVVQ K RFGFPEGSVELYA	-	-	-	-
5170	P23396	62	IILATRTQNVLGE K GRRIRELTAVVQK	+	-	-	-
5171	P23396	132	CYGVLR FIMESGA K GCEVVVSGKLRGQ	-	-	-	+
5172	Q9P2E9	1159	QKSVEEEEQVWR K VGAAEEELQKSRV	-	-	-	-
5173	Q9P2E9	932	HSKLQSSEAEVRS K CEELSGLHGQLQE	+	-	-	-
5174	P08708	107	EII EVDPTKEM L KLLDFGSLSNLQVT	-	-	-	-
5175	P08708	19	TKTVKKAARV I E K YYTRLGNDFHTNK	-	-	-	+
5176	P62273	33	SCRVCSNRHGLIR K YGLNMCRQCFRQY	-	-	-	-
5177	P62273	48	GLNMCRQCFRQY A KDIGFIKLDDDDDD	+	-	-	-
5178	P25398	93	DDNKKLGEWVGLC K IDREGKPRKVVC	-	-	-	-
5179	P25398	129	KESQAKDVIEEY F KCKKKKKKKKKKKK	-	-	-	+
5180	P61247	115	GMDLTRDKMCSMV K KWQTMIEAHVDVK	-	-	-	-
5181	P61247	34	VVDPFSKKDWYDV K APAMFNIRNIGKT	+	-	-	-
5182	P61247	56	NIGKTLVTRTQGT K IASDGLKGRVFEV	+	-	-	-
5183	P61247	249	SSSGKATGDETGA K VERADGYEPPVQE	+	-	-	-
5184	Q6PCB5	251	EKPKNIEDLQIK K VKKKKKKKKHKENE	-	-	-	-
5185	Q6PCB5	28	APTATVSEKEPFG L QLSSRDPPGSLS	+	-	-	-
5186	P62979	99	TTPKKNKHKRKKV K LAVLKYYYKVDENG	-	-	-	-
5187	P62979	104	NKHKRKKVKLAVL K YYYKVDENGKISRL	+	-	-	-
5188	P62979	113	LAVLKYYYKVDENG K ISRLRRECPSDEC	+	-	-	-
5189	P62979	152	HYCGKCCLTYCFN K PEDKKKKKKKKKKK	+	-	-	-
5190	P62701	134	YKLCKVRKIFVGT K GIPHLVTHDARTI	-	-	-	-
5191	P62701	233	TRLSNIFVIGKGN K PWISLPRGKGIRL	+	-	-	-
5192	P62241	26	KTGGKRKPYHKR K YELGRPAANTKIG	-	-	-	-
5193	P62241	37	KRKYELGRPAANT K IGPRRIHTVRVRG	+	-	-	-
5194	P62241	128	SHYALPLGRKKGA L TPEEEEILNKKR	+	-	-	-
5195	Q96T23	405	SDDFDSPVKGPLC K SVTPTKEFLKDEI	-	-	-	-
5196	Q96T23	1050	DIKEADGGGVGRG K DISTITGHRGKDI	+	-	-	-
5197	Q96T23	1339	QPRVLPSEQEST K KPYRIESDEEEDFE	+	-	-	-
5198	P08865	57	DGIYIINLKRTWE K LLLAARAIVAIEN	-	-	-	-
5199	P08865	52	YKRKSDGIYIIN L KRTWEKLLLAARAI	+	-	-	-
5200	P08865	89	VISSRNTGQRAVL K FAAATGATPIAGR	+	-	-	-

5201	P62244	43	CSKVIVRFLTVMMKHGYIGEFEIIDDH	-	-	-	-
5202	P62244	88	ISPRFDVQLKDLEKWQNNLLPSRQFGF	-	-	-	+
5203	P62269	115	GLDNKLREDLERLKKIRAHRLRHFVG	-	-	-	-
5204	P62269	94	DWFLNRQKDVKGKYSQVLANGLDNKL	+	-	-	-
5205	P62269	106	GKYSQVLANGLDNKLREDLERLKKIRA	+	-	-	-
5206	P60866	86	GSKTWDRFQMRIHKRLIDLHSPSEIVK	-	-	-	-
5207	P60866	8	MMMMMMMAFKDTGKTPVEPEVAIHRIR	-	-	-	+
5208	P60866	34	RITLTSRNVKSLEKVCADLIRGAKEKN	+	-	-	-
5209	P60866	75	RITTRKTPCGEGSKTWDRFQMRIHKRL	+	-	-	-
5210	P63220	51	EVDKVTGRFNGQFKTYAICGAIRMGGE	-	-	-	-
5211	P63220	81	SILRLAKADGIVSKNFFFFFFFFFFFFFF	+	-	-	-
5212	P62851	57	LNNLVLFDKATYDKLCKEVPNYKLITP	-	-	-	-
5213	P62851	43	AKKKKWSKGKVRDKLNNLVLFDKATYD	+	-	-	-
5214	P62851	52	KVRDKLNNLVLFDKATYDKLCKEVPNY	+	-	-	+
5215	P62851	60	LVLFDKATYDKLCKEVPNYKLITPAVV	+	-	-	-
5216	P62851	66	ATYDKLCKEVPNYKLITPAVVSERLKI	+	-	-	-
5217	P62851	94	GSLARAALQELLSKGLIKLVSKHRAQV	+	-	-	+
5218	P62861	21	RAGKVRGQTPKVAKEKKKKKKTGRAKR	-	-	-	-
5219	P62861	51	YNRRFVNVPVTFGKKKGPANSSSSSS	-	-	-	+
5220	P62081	15	FSSSAKIVKPNGEKPDEFESGISQALL	-	-	-	-
5221	P62081	74	IIFVPVPQLKSQKIQVRLVRELEKKF	+	-	-	-
5222	Q86VV8	1229	DTLLLNFMVETDRKCELLYVFQTQLA	-	-	-	-
5223	Q86VV8	811	ARVLSRVTDLFIGKKPIELRLDDRREL	+	-	-	-
5224	P46782	167	LCTGAREAAFRNIKTIACLADELINA	-	-	-	-
5225	P46782	47	SLQDYIAVKEKYAKYLPHSAGRYAAKR	+	-	-	-
5226	P62753	221	EYAKLLAKRMKEAKEKRQEIQIAKRRRL	-	-	-	-
5227	P62753	211	RTKKNKEEAAEYAKLLAKRMKEAKEKR	+	-	-	-
5228	P09234	31	PSVRKTHCSGRKHENVKDYYQKWMEE	-	-	-	-
5229	P09234	52	QKWMEEQASLIDKTTAAQQGKIPPT	+	-	-	-
5230	P09661	153	PQVRVLDQKVKLKERQEAEMFKGKR	-	-	-	-
5231	P09661	172	EKMFKGKRGALAKDIARRSKTFNPGA	+	-	-	-
5232	P08579	85	FPPYGGKPMRIQYAKTDSDIISKMRGTF	-	-	-	-
5233	P08579	111	FADKEKKKEKKKAKTVEQTATTTNKKP	+	-	-	-
5234	Q9Y3D9	169	VRPQTALEENETQKEVPQDQHLEAPAD	-	-	-	-
5235	Q9Y3D9	102	NPNFKSTCQRFVEKYTELQKLGETDEE	+	-	-	-
5236	P51398	370	IQYYLENNWLQHEKAPTEEGKKELLFL	-	-	-	-
5237	P51398	175	VKNCRDLLQSSYNKQRFQDQPLEASTWL	+	-	-	-
5238	P51398	207	TNERFLNQIKVQEKYVWNKRESTEKGS	+	-	-	-
5239	P08621	27	APRDPPIPYLPPLEKLPHEKHNNQPYCG	-	-	-	-
5240	P08621	118	LFVARVNYDTTESKLRRFEFVYGPPIKR	+	-	-	-
5241	P60903	18	MEHAMETMMFTFHKFAGDKGYLTKEDEL	-	-	-	-
5242	P60903	23	ETMMFTFHKFAGDKGYLTKEDELRLVME	+	-	-	-
5243	P60903	28	TFHKFAGDKGYLTKEDELRLVMEKEFPG	+	-	-	-
5244	P60903	37	GYLTKEDELRLVMEKEFPGFLENQKDPL	+	-	-	-
5245	P60903	54	GFLENQKDPLAVDKIMKDLDQCRDGKV	+	-	-	-
5246	P60903	57	ENQKDPLAVDKIMKDLDQCRDGKVGFG	+	-	-	-
5247	P31949	65	KNQKDPGVLDRRMKKLDTNSDGLDFS	-	-	-	-
5248	P31949	3	MMMMMMMMMMMAKISSPTETERCIES	+	-	-	-
5249	P31949	27	IESLIAVFQKYAGKDGNYTSLSKTEFL	+	-	-	-
5250	P46781	22	CRKTYVTTPRRPFKSRLDQELKLIGEY	-	-	-	-
5251	P46781	66	IRKAARELLTLDEKDPRLFEQNALLR	+	-	-	-
5252	P46781	116	EDFLERRLQTQVFKLGLAKSIHARVL	+	-	-	-
5253	P46781	155	VNIPSFIVRLDSQKHIDFSLRSPYGGG	+	-	-	-
5254	Q96HN2	405	GKQVVVCGYGEVKGCCCAALKAMGSIV	-	-	-	-
5255	Q96HN2	121	PDGTVTEAPRTVKQIQFADQKQEFNK	+	-	-	-
5256	Q9Y2R9	223	LEAFHNQGPVIKRKHDHLKMAEANRAL	-	-	-	-
5257	Q9Y2R9	208	KHQRITLMPEKLSHKLEAFHNQGPVIK	+	-	-	-
5258	Q9Y2R9	228	NQGPVIKRKHDLHKMAEANRALAHYRW	+	-	-	-

5259	P82933	294	AEAIVYKHGSGRIKVN	GIDYQLYFPIT	-	-	-	-
5260	P82933	287	GKRKTAKAEAI	VYKHGSGRIKVN	+	-	-	-
5261	P82650	244	CFAQFEPDSTEYIKV	HHTYEDIDKRG	-	-	-	-
5262	P82650	211	PKEGRKILTPII	FKEENLRTMYSQ	+	-	-	-
5263	P82909	57	GLPSHSSVISQHS	KGSKSPDLLMYQ	-	-	-	-
5264	P82909	5	MMMMMMMMMM	MGSKMASASRVV	-	-	-	+
5265	Q01196	125	NYSAELRNATAAM	KNQVARFNDLRF	-	-	-	-
5266	Q01196	24	RRFTPPSTALSP	GKMSEALPLGAP	+	-	-	-
5267	Q01196	43	PLGAPDAGAALAG	KLRSGDRSMVEV	+	-	-	-
5268	Q9Y265	400	SEEALNHLGEIGT	KTTLRYSVQLLTP	-	-	-	-
5269	Q9Y265	453	AKSSAKILADQQD	KYMKKKKKKKKK	+	-	-	-
5270	P82979	135	ARARFGISSVPT	KGLSSDNKPMVNL	-	-	-	-
5271	P82979	10	MMMMMATETVELH	KLKLAEKQECLAR	+	-	-	-
5272	P82979	142	ISSVPTKGLSSDN	KPMVNLDKLKERA	+	-	-	-
5273	Q9NQZ2	444	NPRVKHREKFRRA	KIRRRGQVREVRKE	-	-	-	-
5274	Q9NQZ2	144	QRKKLYYD	TDYGSKSRGRQSQ	+	-	-	-
5275	Q6NUK1	105	KLAFKSLDKNNDG	KIEASEIVQSLQTL	-	-	-	-
5276	Q6NUK1	320	YPMEVMKTRLAVG	KGTGQYSGIYDCAK	+	-	-	+
5277	Q6NUK1	336	QYSGIYDCAKKIL	KHEGLGAFYKGYVP	+	-	-	-
5278	Q6NUK1	437	QLNMVGLFRRIIS	KEGIPGLYRGITPN	+	-	-	+
5279	Q9NQC3	400	FKPFERVWEVKDS	KEDSDMLAAGGKIE	-	-	-	-
5280	Q9NQC3	1104	YSNSALGHVNCTI	KELRRLFLVDDLVD	+	-	-	-
5281	P21453	330	EMRRAFIRIMSCC	KCPSGDSAGKFKRP	-	-	-	-
5282	P21453	10	MMMMMGPTSVPLV	KAHRSSVSDYVNYD	+	-	-	-
5283	Q9Y2Q9	65	FASALERHSELLQ	KVEPLQKGSPKNVE	-	-	-	-
5284	Q9Y2Q9	133	FHCVCRRPEVDGE	KYQKGTRVRLRLD	+	-	-	-
5285	P26447	28	TFHKYSGKEGDKF	KLNKSELKELLTRE	-	-	-	-
5286	P26447	7	MMMMMMMACPLE	KALDVMVSTFHKYS	+	-	-	-
5287	P26447	35	KEGDKFKLNKSEL	KELLTRELP	+	-	-	-
5288	P06703	32	YSGREGDKHTLSK	KELKELIQKELTIG	-	-	-	-
5289	P06703	40	HTLSKKELKELIQ	KELTIGSKLQDAEI	+	-	-	-
5290	P06703	47	LKELIQKELTIGS	KLQDAEIARLMEDL	+	-	-	+
5291	O76054	141	CELLLQECAHQTT	KLGRKVETITIIYD	-	-	-	-
5292	O76054	51	LLRWLRARSFDLQ	KSEAMLRKHVEFRK	-	-	-	+
5293	O76054	253	EYGGTMTDPDGNP	KCKSKINYG	-	-	-	+
5294	O76054	257	TMTDPDGNPKCKS	KINYG	-	-	-	+
5295	O76054	393	TVEVLLPDKASEE	KMKQLGAGTPKKKK	-	-	-	+
5296	Q9NTJ5	271	GSIPVFW	SQRPNLKYP	-	-	-	-
5297	Q9NTJ5	456	NACAKQYAGTGAL	KTDFTRTGKRTHLG	+	-	-	-
5298	O43865	284	LCVPAMNVNDSVT	KQKFDNLYCCRESI	-	-	-	-
5299	O43865	40	KYSFMATVTKAPK	KQIQFADDMQEFTK	+	-	-	-
5300	Q01826	129	LSLGYSHSSAAQA	KGLIQVGKWN	-	-	-	-
5301	Q01826	136	SSAAQAKGLIQVG	KWN	+	-	-	-
5302	A3KN83	1240	KKKLFLVYRPNTG	KQLKLEIYADLKKK	-	-	-	-
5303	A3KN83	149	APTVRNAMTSAPS	KDQVQLKDLLKNS	+	-	-	-
5304	A3KN83	413	TYSSLIGESQSGG	KYKTRLKQLLHWC	+	-	-	-
5305	A3KN83	1222	LQIRNNKKTAILV	KEVNPKKKFLVYR	+	-	-	-
5306	Q15437	198	KSYVFRG	TKDLTAKQIQDMLGLTKPAM	-	-	-	-
5307	Q15437	564	QLIRLCQKFGQYN	KEDPTSFR	+	-	-	-
5308	P21912	159	FYAQYKSIEPYLK	KKDESQEGKQYQLQ	-	-	-	-
5309	P21912	51	RIKKFAIYRWDPD	KAGDKPHMQTYEVD	+	-	-	-
5310	P21912	55	FAIYRWDPDKAGD	KPHMQTYEVDLNKC	+	-	-	-
5311	O14975	541	SIKMKENHEFDGK	KLFQHIADYLPSYA	-	-	-	-
5312	O14975	291	GCIVAGATLALRT	KFSASQFWDDCRKY	+	-	-	-
5313	Q9NZJ4	2342	QNEITKMSIIDKL	KPFSFILVENAYVD	-	-	-	-
5314	Q9NZJ4	943	INHSSDQGISSYT	KLGCKVLHHTAKL	+	-	-	-
5315	Q15424	609	SREKRSVVSFDKV	KEPRKSRDSESHSR	-	-	-	-
5316	Q15424	607	SASREKRSVVSFD	KVKEPRKSRDSESH	+	-	-	-

5317	O95171	109	DRISDRNDAAKTYKANTLDNQLTNRSM	-	-	-	-
5318	O95171	83	DALDRKVNEDVPKATISRYSSDDTLTD	+	-	-	-
5319	Q9UBE0	109	LERAQNLNPMVDVKVDTEDEIEKKPESF	-	-	-	-
5320	Q9UBE0	198	SQGVEDGPDTKRAKLDSSSETTMVKKKV	+	-	-	-
5321	Q9UBT2	426	CRTIFLNKQPNPRKLLVPCALDPPNP	-	-	-	-
5322	Q9UBT2	271	LFKDDIRYLLTMDKLWRKRKPPVPLDW	+	-	-	-
5323	Q9UBT2	613	NADVSEEEERSRKRKLDEKENLSAKRSR	+	-	-	-
5324	Q9UL12	166	LFIASNRQRLDEYKRLMSLGKAYGVES	-	-	-	-
5325	Q9UL12	38	PCNLSSAAGPTAEKSVPYQRTLKEGQG	-	-	-	+
5326	Q9UL12	173	QRLDEYKRLMSLGKAYGVESHVLSPAE	+	-	-	+
5327	Q9UL12	377	AINRVPVLEKTGIKSTVCGPESFTPDH	-	-	-	+
5328	Q9UL12	391	STVCGPESFTPDHKPLMGEAPELRGFF	-	-	-	+
5329	Q9UL12	559	YTFAFPPHHDTIKKECLACRGAAAVFD	+	-	-	-
5330	Q9UL12	775	NAGYRAIDSLSIEKGYRHHHADLRPDD	+	-	-	-
5331	Q9UL12	802	SPLEAGLAFTCKLKSVPVFLGREALEQ	+	-	-	+
5332	Q9UL12	884	HDPSGGPVSLDFVKSQDYALERMGVTY	+	-	-	+
5333	Q9UL12	904	ERMGVTYGAQAHLSKSPFDPNNKRVKGI	+	-	-	+
5334	Q14151	87	IGIELEATSKKSAKRCVKGLKMEEEGT	-	-	-	-
5335	Q14151	616	SESKEKRDILSFDKIKEQRERERQRQR	+	-	-	-
5336	O75396	185	NLSSLKSKYRQDAKYLNMHSTYAKLAA	-	-	-	-
5337	O75396	38	QSGRDLQQYQSQAQQLFRKLNEQSPTR	+	-	-	-
5338	Q9NQR1	275	DLIDGKGRGVIATKQFSRGDFVVEYHG	-	-	-	-
5339	Q9NQR1	172	DARKGPLVPFPNQKSEAAEPPKTPPSS	+	-	-	-
5340	Q01105	90	RQPFQKRSELIAKIPNFWVTTFVNHP	-	-	-	-
5341	Q01105	68	IDRLNEQASEEILKVEQKYNKLRQPFF	+	-	-	-
5342	Q01105	150	IDFYFDENPYFENKVLKSEFHLNESGD	+	-	-	-
5343	Q01105	172	NESGDPSSKSTEIKWKSGKDLTKRSSQ	+	-	-	-
5344	Q15428	190	ETIAFKVPSREIDKAEGKFWTHWNRET	-	-	-	-
5345	Q15428	10	MMMMDFQHRPGGKTGSGGVASSSES	+	-	-	-
5346	Q13435	563	KSKMREKVRPKMGKIDIDYQKLHDAFF	-	-	-	-
5347	Q13435	275	DPSVGPKIPQALEKILQLKESRQEEMN	+	-	-	-
5348	Q96ES7	136	LQQSAMTLPLWIGKPGDKPPPLCGAIP	-	-	-	-
5349	Q96ES7	288	PPLNVAQRYVVACEPKKKKKKKKKKKK	+	-	-	-
5350	Q96F10	85	VGYGIYYFIYSTWKGRTIYLEDIYVMP	-	-	-	-
5351	Q96F10	29	DILRLIRELAEFEKLSQVKISEEARL	+	-	-	-
5352	Q8IZQ5	23	AEAAVVAVAEKREKLANGGEGMEEATV	-	-	-	-
5353	Q8IZQ5	20	KRKAEAAVVAVAEKREKLANGGEGMEE	+	-	-	-
5354	O95470	438	KTARFLKSELENIKGIFVFGNPQLSVI	-	-	-	-
5355	O95470	353	RVKGVTSISADTHKYGYPKGSLSVLY	+	-	-	-
5356	P55809	446	AKTKVVVTMEHSAKNAHKIMEKCTLP	-	-	-	-
5357	P55809	185	IKYNKDGSVAIASKPREVREFNGQHF	-	-	-	+
5358	P55809	418	SKYGDLANWMI PGKVMVKGMGAMDLVS	-	-	-	+
5359	P55809	421	GDLANWMI PGKVMVKGMGAMDLVSSAK	-	-	-	+
5360	P55809	455	EHSAGNAHKIMEKCTLPLTGKQCVNR	-	-	-	+
5361	Q15019	305	QDLHYENFRSERLKRGGKVENEDMNK	-	-	-	-
5362	Q15019	190	IVPVIKADTLTLKERERLKKRILDEI	+	-	-	-
5363	Q16181	181	SGHGLKPLDIEFMKRLHEKVNIIPLIA	-	-	-	-
5364	Q16181	373	VFEMKVKEKVQKIKDSEALQRRHEQM	+	-	-	-
5365	Q9BWJ5	28	QSKYIGTGHADTTKWEVLVNQHRDSYC	-	-	-	-
5366	Q9BWJ5	17	RYTIHSQLEHLQSKYIGTGHADTTKWE	+	-	-	-
5367	Q9Y3B4	106	NANRAFQKMDTKKKEEQKLKLLKEYGI	-	-	-	-
5368	Q9Y3B4	29	EVNRILYIRNLPYKITAEMYDIFGKY	+	-	-	-
5369	Q9Y3B4	41	YKITAEMYDIFGKYGPQRQIRVGNT	+	-	-	-
5370	Q96ST3	519	PFLGKFPELFNWFKNFLGYKESVHLET	-	-	-	-
5371	Q96ST3	469	SKHGGGTESLFFDKVRKALRSAEAYEN	+	-	-	-
5372	Q96ST3	865	KKHNGVGSGPPKSKLLFSNTAAQKLRG	+	-	-	-
5373	Q96ST3	875	PKSKLLFSNTAAQKLRGMDEVYNLFYV	+	-	-	-
5374	O43175	394	EASKQADVNLVNAKLLVKEAGLNVTT	-	-	-	-

5375	O43175	21	KVLISDSLDPCR K ILQDGGQLQVVEKQ	+	-	-	-
5376	O43175	58	LQDCEGLIVRSAT K VTADVINA A EKLQ	+	-	-	-
5377	Q9Y617	300	GFYVCPVEPQNR S KMNIPFRIGNAKGD	-	-	-	-
5378	Q9Y617	51	SVLEMSHRSSDFA K IINNTE ¹ NLVRELL	+	-	-	-
5379	Q9Y617	127	EAKKFGTINIVHP K LGSYTKIPDPSTW	+	-	-	-
5380	Q9Y617	269	EWIKNNGGAA A ME K LSSIKSQTIYEII	+	-	-	-
5381	Q9Y617	318	FRIGNAKGDDALE K RFLDKALELNMLS	+	-	-	-
5382	Q9Y617	323	AKGDDALEKRFLD K ALELNMLSLKGHR	+	-	-	-
5383	Q9Y617	333	FLDKALELNMLSL K GHRSVGGIRASLY	+	-	-	-
5384	P50454	151	SSVSFADDFVRSS K QHYNCEHSKINFR	-	-	-	-
5385	P50454	94	VSLGGKATTASQ A KAVLSAEQLRDEEV	-	-	-	+
5386	P50454	207	RTDGALLVNAMFF K PHWDEKFHHKMVD	+	-	-	-
5387	P50454	296	KLLTKEQLKIWMG K MQKKAVAI S LPKG	-	-	-	+
5388	P50454	319	LPKGVVEVTHDLQ K HLAGLGLTEAIDK	+	-	-	-
5389	O75533	493	VDVDESTLSPEEQ K ERKIMKLL L KIKN	-	-	-	-
5390	O75533	141	ISPERLDPFADGG K TPDPKM N ARTYMD	+	-	-	-
5391	O75533	214	DQTADQTPGATPK K LSSWDQAETPGHT	+	-	-	-
5392	O75533	554	SPTLEDQERHLLV K VIDRILYKLDDL V	+	-	-	-
5393	O75533	562	RHLLVKVIDRILY K LDDLVRPYVHKIL	+	-	-	-
5394	O43765	160	DCERAICIDPAYS K AYGRMGLALSSLN	-	-	-	-
5395	O43765	137	NAVYFCNRAAAYS K LGNYAGAVQDCER	+	-	-	-
5396	O00193	50	RKQKFLRLMGAG K EHTGRLVIGDHKS	-	-	-	-
5397	O00193	174	EDPKNKKDAKS N Y K MMFVKSSGSSSSSS	+	-	-	-
5398	O00193	179	KKDAKS N Y K MMFV K SSGSSSSSSSSSSS	+	-	-	-
5399	Q9NTJ3	375	MKAKNKDVKDTE K LNKITKFIEENKE	-	-	-	-
5400	Q9NTJ3	381	DVKDTEKKLNKIT K FIEENKEKFTQLD	+	-	-	-
5401	Q9NTJ3	679	ATFIGLDKMAVWA K KMTEIQTPENTPR	+	-	-	-
5402	P51532	1464	LSPNPPNLTKMK K IVDAVIKYKDSSS	-	-	-	-
5403	P51532	188	NQLHQQLRAQIMAY K MLARGQPLPDHLQ	+	-	-	-
5404	Q96Q15	1174	HSLNGESRKTVLS K PTDSSPEVINYL G	-	-	-	-
5405	Q96Q15	173	DDRDRRLATVKQL K EFIQQPENKLVLV	+	-	-	-
5406	Q9UHD8	519	YQVNGKRILGRKT K WGTIEVENTTHCE	-	-	-	-
5407	Q9UHD8	62	TPLLRATVASSTQ K FQDLGVKNSEPSA	+	-	-	-
5408	Q9Y6X0	104	FSIKEANFTEGSL K LKIQTTRAKKPP	-	-	-	-
5409	Q9Y6X0	817	TMPNLQPISALPT K TQKGIHSGTWKLS	+	-	-	-
5410	O95104	608	VELGVTYIPWDKV K PEELESFCEGGML	-	-	-	-
5411	O95104	49	AIKLYKHVVQIVE K FIKKCKPEYKVP G	+	-	-	-
5412	Q12872	787	YHSSSKSRSRSHS K AKHSLPSAYRTVR	-	-	-	-
5413	Q12872	315	FASKKCNRL E ELM K PLKVVDPDHPLAA	+	-	-	-
5414	O60880	104	DQGIVIPLOYPVE K KSSARSTQGT T GI	-	-	-	-
5415	O60880	89	YFRKIKNLISAFQ K PDQGIVIPLOYPV	+	-	-	-
5416	P29353	210	EAVPGAKGATRRR K PCSRPLSSILGRS	-	-	-	-
5417	P29353	154	VNKPTRGWLHPND K VMGPGVSYLVRYM	+	-	-	-
5418	Q8TAQ2	161	IEPKLLGKLKDII K RHQGTVTEDK N NA	-	-	-	-
5419	Q8TAQ2	326	KKNAKKGPSTPYT K SKRGHREEEQEDL	+	-	-	-
5420	Q14141	198	KADAISKSELTKF K IKITSELV S NGVQ	-	-	-	-
5421	Q14141	367	EAE L KEAEKE L HE K FDRLKKLHQDE K K	+	-	-	-
5422	Q53H47	275	YSGRYLNLT V SE D KERLDHGKLRKPCY	-	-	-	-
5423	Q53H47	498	NEPFLDRIVTCDE K WILYDNRRR S AQW	-	-	+	-
5424	Q15459	717	PVSIKVQVPNMQD K TEWKLNGQVLVFT	-	-	-	-
5425	Q15459	55	IIYPPPEVRNIVD K TASFVARNGPEFE	+	-	-	-
5426	P23246	211	PKQGP G PGGPKGG K MPGGPKPGGGPGL	-	-	-	-
5427	P23246	208	GPGPKQGP G PGGP K GGKMPGGPKPGGG	+	-	-	-
5428	P23246	314	VGNLPADITEDEF K RLFAKYGE P GEVF	-	-	+	-
5429	P23246	319	ADITEDEFKRLFA K YGE P GEVFINKGK	+	-	-	-
5430	P23246	338	EVFINKGKGFGF I KLESRALAEIA K AE	+	-	-	-
5431	P23246	421	GRSTGKGIVEFAS K PAARKAFERCSEG	+	-	-	-
5432	P23246	472	LPEKLAQKNPMYQ K ERETPPRFAQHGT	+	-	-	-

5433	Q6P4A7	279	VFTYFFKRTQYFR K NPGSLWILKLSCT	-	-	-	-
5434	Q6P4A7	197	FVQMKYGLTGPWI K RLLPVIFLVQASG	+	-	-	-
5435	Q9NR45	166	MVISSGMQSM D TM K QVYQIVKPLNPNF	-	-	-	-
5436	Q9NR45	79	ALERPYTSKHSWG K TYGEHKRHLEFSH	+	-	-	-
5437	Q9H0K1	686	QSLETQYLQHR L Q K PSLLSKAQNTCQL	-	-	-	-
5438	Q9H0K1	53	RITKTEVAIKI I D K SQLDVNLEKIYR	+	-	-	-
5439	P42285	198	VIFTSPIKALSN Q K YREMYEEFQDVGL	-	-	-	-
5440	P42285	51	PGSADKAGKRF D G K LQSESTNNGKNKR	+	-	-	-
5441	P42285	78	DVDFEGTDEPI F G K KPRIEESITEDLS	+	-	-	-
5442	Q7KZF4	157	PEQNRLSECEE Q A K AAKGMWSENGS	-	-	-	-
5443	Q7KZF4	193	IENPRHFVDSHH Q K PVNAII EHVRDGS	+	-	-	-
5444	Q7KZF4	641	SKVHFTAERSS Y K SLLSAEEAAKQKK	+	-	-	-
5445	O60749	427	WQKWEDAQITLL K REAEAKMMVANKP	-	-	-	-
5446	O60749	469	KVQQGERDFEQIS K TIRKEVGRFEKER	+	-	-	-
5447	O60292	1734	LEVMLKQLHTD L Q K EKQDKVVLQSEVA	-	-	-	-
5448	O60292	1448	FQLSASVPK S FF S K QPVNRKHPTGWKR	+	-	-	-
5449	Q15796	20	FTPPVVKRLLGW K SAGGSGGAGGGEQ	-	-	-	-
5450	Q15796	19	PFTPPVVKRLLGW K SAGGSGGAGGGE	+	-	-	-
5451	Q13485	340	AYFEMDVQVGET F K VPSSCPIVTVDGY	-	-	-	-
5452	Q13485	37	MCHRQGG E SET F A K RAIESLVKKLKEK	+	-	-	-
5453	Q13485	428	DREAGRAPGDAV H K IYPSAYIKVFDLR	+	-	-	-
5454	Q13485	507	DLRRLCILRMS F V K GWGPDYPRQSIKE	+	-	-	-
5455	Q14683	52	SNLMDAISFVL G E K TSNLRVKTLDLI	-	-	-	-
5456	Q14683	648	RHKTVALDGT L F Q K SGVISGGASDLKA	+	-	-	-
5457	Q14683	713	QVQSQA H GL Q M R L K YSQSDLEQTKTRH	+	-	-	-
5458	Q14683	1037	NMKAMEKLESVR D K FQETSDEFEAARK	+	-	-	-
5459	A6NHR9	900	GVTAKGPVNSC Q G K NYNLKVTLPLGLKE	-	-	-	-
5460	A6NHR9	1349	RGEHTLQVKA I YN K SIIEGPIIKLMIL	+	-	-	-
5461	A6NHR9	1802	RSLPHFRNGK L Y F K PIGDPVFARDLLT	-	-	-	+
5462	Q9BZQ2	271	VTCEPYQDSS S R F K VTVSVAEPFSSNI	-	-	-	-
5463	Q9BZQ2	642	SNSSKSTLGGVN M K VLPAPKLKMTNNH	+	-	-	-
5464	Q9BZQ2	717	NLEMNNNKIEAN V K GDIRIVTSSSSSS	+	-	-	-
5465	Q9NTG7	288	DRVPRCPVCTGV V K PDIVFFGEPLPQR	-	-	-	-
5466	Q9NTG7	122	SSVVGSGGSSDK G K LSLQDVAELIRAR	-	-	-	+
5467	O15105	359	TLDNPDSRTLL V H K VFPGF S IKAFDYE	-	-	-	-
5468	O15105	64	GGGGPGRAGC L G K AVRGAKGHHHPHP	+	-	-	-
5469	O15105	70	RAGCCLGKAVRG A K GHHHPHPAAGAG	+	-	-	-
5470	P51531	1354	VRLLKKRKRNR N D K DPAKEDVEKAKKR	-	-	-	-
5471	P51531	604	SDLPVKVTH T ET G K VLFGPEAPKASQL	+	-	-	-
5472	P51531	997	KGILLTDGSEK D K GKGGA K TLMNTIM	+	-	-	-
5473	P51531	999	ILLTDGSEK D K GKGGA K TLMNTIMQL	+	-	-	-
5474	Q13596	55	EGEDIFTGA A V S K HQSPKITT S LLPI	-	-	-	-
5475	Q13596	237	VGKEDSSSA E F L E K RRRAALERYLQRIV	+	-	-	-
5476	P18583	2206	GEWVPVEKNGEEN K DDDNV F SSNLPSE	-	-	-	-
5477	P18583	16	TNIEQIFRSF V S K FREIQ Q ELSSGRN	+	-	-	-
5478	P18583	288	VLKSVEST S PE P S K IMLVEPPVAKVLE	+	-	-	-
5479	P18583	2055	ERGRSPKRLTD L D K AQLLEIAKANAAA	+	-	-	-
5480	Q13309	405	HFTTIARPTIGN K K NQEIWGIK R LTL	-	-	-	-
5481	Q13309	68	LLSNLGH P ESPP R K RLKSGSDKDFVI	+	-	-	-
5482	Q13309	71	NLGH P ESPP R K R L K SGSDKDFVIVRR	+	-	-	-
5483	P09012	114	FVERDRKREKR P K SQETPATKKAVQG	-	-	-	-
5484	P09012	60	RSLKMRGQAF V IF K EVSSATNALRSMQ	+	-	-	-
5485	P04179	53	PHINAQIMQL H S K HHAAYVNNLN V TE	-	-	-	-
5486	P04179	68	HAAYVNNLN V TE E K YQEALAKGDVTAQ	+	-	-	+
5487	P04179	75	LN V TE E KYQEAL A K GDVTAQIALQPAL	+	-	-	+
5488	P04179	114	FWTNLSPNGG G EP K GELLEAIKRDFGS	+	-	-	-
5489	P04179	122	GGGEPKGELLEAI K RDFGSFDKFKEKL	+	-	-	+
5490	P04179	130	LLEAIKRDFGS F D K FKEKLTAASVGVQ	+	-	-	+

5491	P04179	202	YYLQYKNVRPDYLKAIWNVINWENVTE	+	-	-	-
5492	Q15005	66	GSAVKNSLDDSAKVLLEKYKYVENFG	-	-	-	-
5493	Q15005	169	IWQLSSSLKRFDDKYTLKLTTFISGRTK	+	-	-	-
5494	Q15005	191	SGRTKQQREAEFTKSIKFFDHSGLTV	+	-	-	-
5495	Q9Y657	222	VVDSL VGKQVEYAKEDGSKRTGMVIHQ	-	-	-	-
5496	Q9Y657	44	TSHKKHRSSVGPSPVSPRRNIVGCR	+	-	-	-
5497	O00267	175	SDDITQQQLLPGVKDPNLWTVKCKIGE	-	-	-	-
5498	O00267	718	LIGQTVRISQGPYKGYIGVVKDATEST	+	-	-	-
5499	Q9NWH9	746	DHRDDPYWSENKLSLDTDARFGHGS	-	-	-	-
5500	Q9NWH9	401	VSGLSSNTKAADLKNLFGKYGKVL SAK	+	-	-	-
5501	Q9NWH9	1024	SGNSMPRGSGSGFKPFKGGPPRRFFFF	+	-	-	-
5502	Q9UQE7	285	RQVRELKTKISAMKEEKEQLSAERQEQ	-	-	-	-
5503	Q9UQE7	105	DKEEVSLRRVIGAKKDQYFLDKKMVTK	+	-	-	-
5504	Q9UQE7	106	KEEVSLRRVIGAKKDQYFLDKKMVTKN	+	-	-	-
5505	Q9UQE7	140	SAGFSRNPYYIIVKQKINQMATA PDS	+	-	-	-
5506	Q9UQE7	1190	PELLESADKFGYVKFRNKVSHIDVITA	+	-	-	-
5507	O60264	83	QKEIQEPDPTYEEKMQTDRANRFEYLL	-	-	-	-
5508	O60264	440	IILMKDIDILNSAGKMDKMRLLNILMQL	+	-	-	-
5509	Q96GM5	273	RTATTQETDGFQVVRPGDVNVRCTVLL	-	-	-	-
5510	Q96GM5	223	RVEGRILLED SALS K YDATKQKRKFSSF	+	-	-	-
5511	Q9Y5X3	238	DSCVKADKMTRSHKNVADDYIHTAACL	-	-	-	-
5512	Q9Y5X3	275	IKKYLLKVAELFEKLRKVEGRVSSDED	+	-	-	-
5513	Q9Y5X1	213	SMKIPLNKFPGFAKPGTEQYLLAKQLA	-	-	-	-
5514	Q9Y5X1	288	TPTNTNRSVNHRYKHFDWLYERLLVKF	+	-	-	-
5515	Q9P0Z9	98	QLHRQTGLLLLGMKENQELKTIQANLS	-	-	-	-
5516	Q9P0Z9	126	QRVEHQCLSSEELKQRFNIRLPRGEV	+	-	-	-
5517	Q9Y5B9	141	SKNGKKIGVFSKDKFPGEFMKSWNDCL	-	-	-	-
5518	Q9Y5B9	139	KESKNGKKIGVFSKDKFPGEFMKSWND	+	-	-	-
5519	Q9Y5B9	196	MKKAASITSEVFNFKFKERVMEIVDAD	+	-	-	-
5520	Q9Y5B9	223	EKVRHSLAESVEKAIEKKYLAGADP	+	-	-	-
5521	Q9Y5B9	513	QQIQKARKSNVSYKNPSLMPKEPHIRE	+	-	-	-
5522	Q9Y5B9	732	VLHFHLKNAIMFGKKRHTDVQFYTEVG	+	-	-	-
5523	Q9Y5B9	786	RHKLKTAFAKNFIEKVEALTKEELEFEV	+	-	-	-
5524	Q9Y5B9	904	LKYTEGVQSLNWTKIMKTIVDDPEGFF	+	-	-	-
5525	P08047	665	GERPFMCTWSYCGKRFTRSDQLRHKR	-	-	-	-
5526	P08047	703	ECPKRFMRSDHLSKHIKTHQNKKGGPG	+	-	-	-
5527	Q9BSE5	198	DAHTDITDKALGEKLYHGAPFRRCVDE	-	-	-	-
5528	Q9BSE5	193	GLLHVDAHTDITDKALGEKLYHGAPFR	+	-	-	-
5529	Q9BSE5	217	PFRRCVDEGLLDCKRVVQIGIRGSSTT	+	-	-	+
5530	Q96I25	80	QIVDTPPHVAAGLKDVPVSGFSAGEVL	-	-	-	-
5531	Q96I25	21	GVETS DSKTEGWSKNFKLLQSQLQVKK	+	-	-	-
5532	Q96I25	41	SQLQVKKAAALTQAKSQR TKQSTVLAPV	+	-	-	-
5533	Q13813	1829	HEPAIQGVLDTGKLSDDNTIGKEEIQ	-	-	-	-
5534	Q13813	637	NQSRIDALEKAGQKLIDVNHYAKDEVA	+	-	-	-
5535	Q13813	803	FRDVEDEETWIREKEPIAASNRGKDL	+	-	-	-
5536	Q13813	1519	AFADQLIAAGHYAKGDISSRRNEVLDR	+	-	-	-
5537	Q13813	2052	LKDQLLAAKHVQSKAIEARHASLMKRW	+	-	-	-
5538	Q13813	2421	EIESAFRALSSSEKPYVTKEELYQNLT	+	-	-	-
5539	P84022	341	PATVCKIPPGCNLIKIFNNQEFAALLAQ	-	-	-	-
5540	P84022	378	QLTRMCTIRMSFVKGWGAEYRRQTVTS	+	-	-	-
5541	O95347	433	QMKLKHAQQELKNQAEVKKMDSGYRK	-	-	-	-
5542	O95347	114	ITVTRQVVIGGRNKYLINGVNANNTRV	+	-	-	-
5543	O95347	222	KLKEERS SYLEYQKVMREIEHLSRLYI	+	-	-	-
5544	O95347	677	SGGARSQAASILTQFQELKDVQDELRI	+	-	-	-
5545	O95347	1158	LKEGMFNANVLFKTKFVDGVSTVARF	+	-	-	-
5546	O95347	1160	EGMFNANVLFKTKFVDGVSTVARFTQ	+	-	-	-
5547	P35237	226	EIFTQILVLPYVGKELNMIIMLPDETT	-	-	-	-
5548	P35237	195	TEERL FKVSKNEEKPVQMMFKQSTFKK	+	-	-	-

5549	Q01082	853	LRKQALQDTLALYKMFSEADACELWID	-	-	-	-
5550	Q01082	90	DLYTDLRDGRMLIKLLEVLSSGERLPKP	+	-	-	-
5551	Q01082	1815	AASYELHKFYHDAKEIFGRIQDKHKKL	+	-	-	-
5552	Q01082	1913	CESRRVRLVDTGDKFRFFSMVRDLMLW	+	-	-	-
5553	Q01082	1989	SLARKHYASEEIKEKLLQLTEKRKEM	+	-	-	-
5554	Q14247	107	RMDKSAVGHEYQSKLSKHCSQVDSVRG	-	-	-	-
5555	Q14247	87	LETGPKASHGYGGKFGVEQDRMDKSAV	+	-	-	-
5556	Q14247	124	HCSQVDSVRGFGGKFGVQMDRVDQSAV	+	-	-	-
5557	Q14247	144	RVDQSAVGFEYQGKTEKHASQKDYSSG	+	-	-	-
5558	Q14247	161	HASQKDYSSGFGGKYGVQADRVDKSAV	+	-	-	-
5559	Q14247	181	RVDKSAVGFDYQGKTEKHESQRDYSKG	+	-	-	-
5560	Q14247	198	HESQRDYSKGFGGKYGIDKDKVDKSAV	+	-	-	-
5561	Q14247	235	HESQKDYVKFGGKFGVQTDQRQDKCAL	+	-	-	-
5562	Q14247	272	HESQKDYKTGFGGKFGVQSERQDSAAV	+	-	-	-
5563	Q14247	295	SAAVGFDYKEKLAKHESQQDYSKGFGG	+	-	-	-
5564	Q14247	304	EKLAKHESQQDYSKGFGGKYGVQKDRM	+	-	-	-
5565	Q14247	309	HESQQDYSKGFGGKYGVQKDRMDKNAS	+	-	-	-
5566	Q14247	346	AYQKTVPVEAVTSKTSNIRANFENLAK	+	-	-	-
5567	Q9UHB9	333	NEAAIVQAESEETKERLFESMLSECRD	-	-	-	-
5568	Q9UHB9	452	LQLPGLEEDKAFQKEIGLKTIVFKAYR	+	-	-	-
5569	Q05066	106	QLGYQWKMLTEAEKWPFFQEAQKLQAM	-	-	-	-
5570	Q05066	136	KYPNYKYRPRRKAKMPLKNCSSLPADP	+	-	-	-
5571	Q04837	81	GDSEVYQLGDVSQKTTWHRISVFRPGL	-	-	-	-
5572	Q04837	113	QYVKKGSRIYLEGKIDYGEYMDKNNVR	+	-	-	-
5573	Q04837	122	YLEGKIDYGEYMDKNNVRRQATTIIAD	-	-	-	+
5574	Q8N3U4	784	ICQHLYLTNVNTTVKEQAFTILCDILMI	-	-	-	-
5575	Q8N3U4	607	YFDLEIYTTGRLEKHLDALLRQIRNIV	+	-	-	-
5576	Q92922	64	QLDSVRVWLKGHYKKYVHADAPTNTL	-	-	-	-
5577	Q92922	345	PPPTPTESRKKSGKKGQASLYGKRRSQ	+	-	-	-
5578	Q92922	346	PPTPTESRKKSGKKGQASLYGKRRSQK	+	-	-	-
5579	Q92922	354	KKSGKKGQASLYGKRRSQKEEDEQEDL	+	-	-	-
5580	Q92922	359	KGQASLYGKRRSQKEEDEQEDLTKDME	+	-	-	-
5581	Q92922	948	LLTERQNFHMEQLKYAELRARQQMEQQ	+	-	-	-
5582	Q02447	698	ECSKRFRMRSDHLAKHIKTHQNKKGIHS	-	-	-	-
5583	Q02447	551	PGENADSPADIRIKEEPPDPEEWQLSG	+	-	-	-
5584	O75940	34	AALSGNGENEDLLKLLKDLQEVIELTK	-	-	-	-
5585	O75940	219	TGKVGVGTCGIADKPMQYQDTSKYNV	+	-	-	-
5586	Q8WW59	63	MGVKYGLVGLEPTKVALNVERFREWAV	-	-	-	-
5587	Q8WW59	53	HSSLALFRDDMGVYGLVGLEPTKVAL	+	-	-	-
5588	Q8WW59	130	VDDRSWVFTYAQRKWTMLANEKAPVE	+	-	-	-
5589	Q8WW59	139	YAQRKWTMLANEKAPVEGIGQPEKVG	-	-	-	+
5590	P21549	51	MAAGGLQMIGSMSKDMYQIMDEIKEGI	-	-	-	-
5591	P21549	225	NAPPGTSLISFSDKAKKKMYSRKTTPF	+	-	-	+
5592	P21549	234	SFSDKAKKKMYSRKTTPFSFYLDIKWL	+	-	-	-
5593	P21549	312	HGRLQALGLQLFVKDPALRLPTVTTVA	+	-	-	-
5594	Q9Y6N5	180	GSNYSVKTVKQTKALQDFKEGNAIFT	-	-	-	-
5595	Q9Y6N5	173	GFAHPKIGSNYSVKTVKQTKALQDFK	+	-	-	-
5596	P84103	146	RRRERSLSRERNHKPSRSFSRSRSRSR	-	-	-	-
5597	P84103	23	CKVYVGNLGNNGNKTTELAFGYGYP	+	-	-	-
5598	P81877	21	NSSAVPSDSQAREKLALYVVEYLLHVG	-	-	-	-
5599	P81877	6	MMMMMMMMMYGKGKSNSSAVPSDSQAR	+	-	-	-
5600	Q7KZ85	641	VDEAHYAYSFKYLKNKPVKELRDDQFL	-	-	-	-
5601	Q7KZ85	743	KNKLLAEKEYVIKACSRKLYNWLVA	+	-	-	-
5602	Q7KZ85	1676	QPKSNSHAAIDWGMKAEQWLQEKAEER	+	-	-	-
5603	O15042	336	VAFMNRRAERALKNLNGKMIMSFEMK	-	-	-	-
5604	O15042	760	SKKNEPIFKVAPSKWEAVDESELEAQA	+	-	-	-
5605	Q8IYB3	269	PKEPSPEKNSKKEKEKEKTRPRSRSR	-	-	-	-
5606	Q8IYB3	140	KKEEIKQRQIEQEKLASMKQDEKDK	+	-	-	-

5607	P51649	262	IPSGVYNVIPCSR K NAKEVGEAICTDP	-	-	-	-
5608	P51649	126	REVSAKERSSSLR K WYNLMIQNKDDLA	+	-	-	+
5609	P51649	135	SLLRKWYNLMIQ N KDDLARIITAESGK	-	-	-	+
5610	P51649	184	ARRVYGDIIHTPA K DRRALVLKQPIGV	-	-	-	+
5611	P51649	265	GVYNVIPCSR K NAKEVGEAICTDPLVS	+	-	-	+
5612	P51649	365	IHDAFVKAFAEAM K KNL RVNGFEEGT	+	-	-	-
5613	P51649	402	VEKVEKQVNDAS V KGATVVTGGKRHQL	-	-	-	+
5614	P51649	411	DAVSKGATVVTGG R HQLGKNFFEPTL	+	-	-	-
5615	Q9NQ55	420	KQKRLAKSPGRKR R WEMDRGRGRLCD	-	-	-	-
5616	Q9NQ55	438	DRGRGRLCDQKFP K TKDKSQGAQARRG	+	-	-	-
5617	Q9UEW8	341	AAELLKCKFFQKA N REYLIEKLLTRT	-	-	-	-
5618	Q9UEW8	349	FFQKAKNREYLIE K LLTRTPDIAQRAK	+	-	-	-
5619	P53597	158	EGIPQQDMVRVKH K LLRQEKTRLIGPN	-	-	-	-
5620	P53597	54	CSYTASRQHLYVD K NTKIIICQFTGKQ	+	-	-	-
5621	P53597	57	TASRQHLYVDKNT K IIICQFTGKQGT	+	-	-	+
5622	P53597	66	DKNTKIIICQFTG K QGT FHSQQALEYG	+	-	-	+
5623	P53597	81	GT FHSQQALEYGT K LVGGTTPGKGGQT	+	-	-	-
5624	P53597	105	GQTHLGLPVFNTV K EAKEQTGATASVI	+	-	-	-
5625	P53597	338	VSMSPAQLGTTIY K EFEKRKMLLLLLL	-	-	-	+
5626	Q06330	319	IQFQATPCPKEPN K EMINDGASWTIIS	-	-	-	-
5627	Q06330	175	KVISKPSKKKQSL K NADLCIASGTKVA	+	-	-	-
5628	Q9UQ35	210	GRRSESSSPRRER K KSSKKKKHRSESE	-	-	-	-
5629	Q9UQ35	101	QEKVATFRMLLE K DVNP GGKEETPGQ	+	-	-	-
5630	Q9UQ35	169	RAREAKQPAPEPP K PYSLVRESSSSRS	+	-	-	-
5631	Q07955	30	RIYVGNLPPDIRT K DIEDVFYKYGAIR	-	-	-	-
5632	Q07955	38	PDIRTKDIEDVFY K YGAIRDIDLKNRR	+	-	-	-
5633	Q07955	179	EDMTYAVRKL DNT K FRSHEGETAYIRV	+	-	-	-
5634	Q13243	125	VENLSSRVSWQDL K DFMRQAGEVTFAD	-	-	-	-
5635	Q13243	167	YGDLKNAIEKLSG K EINGRKIKLIEGS	+	-	-	-
5636	P31948	237	QALKEKELGNDAY K KKDFDTALKHYDK	-	-	-	-
5637	P31948	8	MMMMMMEQVNE L KEGKNKALSVGNID	+	-	-	-
5638	P31948	301	VGRENREDYRQIA K AYARIGNSYFKEE	+	-	-	-
5639	P31948	312	IAKAYARIGNSYF K EKEYKDAIHFYNK	+	-	-	-
5640	P31948	325	KEEKYKDAIHFY N KSLAEHRTPDVLKK	+	-	-	-
5641	P31948	344	RTPDVLKKCQQA E KILKEQERLAYINP	+	-	-	-
5642	P31948	446	RKAAALEAMKDY T KAMDVYQKALDLD	+	-	-	-
5643	Q15831	64	MGDLLGEGSYGKV E VLDSETLCRRAV	-	-	-	-
5644	Q15831	44	STEVIIYQPRRKRA K LIGKYLMDLLGE	+	-	-	-
5645	Q15831	48	IYQPRRKRAKLIG K YLMGDLLGEGSYG	+	-	-	-
5646	Q15831	96	KKLRRIPNGEANV K EIQLLRRLRHKN	+	-	-	-
5647	Q15831	97	KLRRIPNGEANV K EIQLLRRLRHKNV	+	-	-	-
5648	Q15831	296	SDLLKGMLEYEPA K RFSIRQIRQHSWF	+	-	-	-
5649	Q15831	311	FSIRQIRQHSWFR K KHPPAEAPVPIPP	+	-	-	-
5650	Q15831	416	KSRAEGRAPNPAP K ACSASSKIRRLSA	+	-	-	-
5651	Q15831	423	APNPARKACSASS K IRRLSACKQQQQQ	+	-	-	-
5652	Q15831	431	CSASSKIRRLSAC K QQQQQQQQQQQQQ	+	-	-	-
5653	P16949	85	LAEKREHEKEVLQ K AIENN NF SKMAE	-	-	-	-
5654	P16949	9	MMMMMASSDIQV K ELEKRASGQAFEL	+	-	-	-
5655	P16949	100	IEENN NF SKMAE K LTHKMEANKENRE	+	-	-	-
5656	P16949	119	EANKENREAQMA K LERLREKDKHIEE	+	-	-	-
5657	Q8IYB8	57	VLATASSASGGS K IPNTSLFVPLTVK	-	-	-	-
5658	Q8IYB8	99	RPLDKNEVKKVLD K FYKRKEIQKLGAD	+	-	-	-
5659	Q8IYB8	220	GPTNSGKTYHAIQ K YFSAKSGVYCGPL	+	-	-	-
5660	O43463	27	SSWNQLQDLCLRA K LSCPALGISKRN	-	-	-	-
5661	O43463	266	GRGWGVRTLEKIR K NSFVMEYVGEIIT	+	-	-	-
5662	Q68D10	190	EKKQFEPVEIKV V KSEERPMTAEELR	-	-	-	-
5663	Q68D10	582	AQGPQRLPFPTGY K RQREYEEEDDDDD	+	-	-	-
5664	P49458	16	QYQTWEEFSRAE K LYLADPMKARVVL	-	-	-	-

5665	P49458	52	CVKVTDDLVLCLVYKTDQAQDVKKIEKF	+	-	-	-
5666	P61956	35	VAGQDGSVVQFKIKRHTPLSKLMKAYC	-	-	-	-
5667	P61956	11	MMMADEKPKEGVKTENNDHINLKVAG	+	-	-	-
5668	P49589	714	FDENGLPTHMEGKELSKGQAKKLKKL	-	-	-	-
5669	P49589	503	LNKNFYDKKTAIHKALCDNVDTRTVME	+	-	-	-
5670	P14868	411	VRPFYTMPDPNPQKSNSYDMFMRGEE	-	-	-	-
5671	P14868	74	WVRARVHTSRAKGQCFLVLRQQQFNV	+	-	-	-
5672	P14868	374	EMGDEDDLSTPNEKLLGHLVKEYYDTD	+	-	-	-
5673	Q01130	170	SRSTSKSRSARRSKSKSSSVSRSRRS	-	-	-	-
5674	Q01130	52	RVGDVYIPRDYTKESRGFAFVRFHDK	+	-	-	-
5675	Q08945	580	SDHPGISITDLSKAGEIWKGMSKEKK	-	-	-	-
5676	Q08945	233	PTFLHLHGKTFDYKIPYTTVLRLFLLP	+	-	-	-
5677	Q08945	413	QYTFSSIEREEYKLFDFVNAKKNLIK	+	-	-	-
5678	Q08945	542	RKSRKKPVEVKKGKDPNAPKRPMAYM	+	-	-	-
5679	Q9HAC7	263	CLSHIAANYLIGQKEAKRWGTAHGSIV	-	-	-	-
5680	Q9HAC7	401	ISVPGPAVRYSKFKMSEARPPPLLGQH	+	-	-	-
5681	Q5JPH6	65	GGLRTALYNYIFAKKYQGSFILRLDT	-	-	-	-
5682	Q5JPH6	256	HVLRGSEWLVSATAHLLLYQALGWQPP	-	-	-	+
5683	Q5JPH6	486	SEGLEGTKYSNVMKLLRMALSGQQQGP	+	-	-	-
5684	P07814	1215	AIPVVKGRKTEKEKFAGGDYTTTIEAF	-	-	-	-
5685	P07814	300	GKAYVDDTPAEQMKAREQRIDSKHRK	+	-	-	-
5686	P07814	417	EQFYWIIIEALGIRKPYIWEYSRLNLNN	+	-	-	-
5687	P07814	498	VNMEWDKIWAFNKVIDPVAPRYVALL	+	-	-	-
5688	P07814	535	EAQEEMKEVAKHPKNPEVGLKPVWYSP	+	-	-	-
5689	P07814	542	EVAKHPKNPEVGLKPVWYSPKVFIEGA	+	-	-	-
5690	P07814	637	VTYEHLLITKPVLGKDEDFKQYVNKNSK	+	-	-	-
5691	P07814	788	EDVDAAVKQLLSLKAQYKEKTGQYKYP	+	-	-	-
5692	P07814	861	AKINEAVECLLSLKAQYKEKTGKEYIP	+	-	-	-
5693	P07814	1503	QPGAKCVCCKNPAKYITLFGRSYYYYY	+	-	-	-
5694	Q13247	252	KGRKSRKSKSKPKSDRGSHSHSRRS	-	-	-	-
5695	Q13247	165	EFRYSYDMKRALDKLDGTEINGRNIRL	+	-	-	-
5696	Q16629	70	PRDAEDAVRGLDGKVICGSRVRVELST	-	-	-	-
5697	Q16629	24	TKVYVGNLGTGAGKGELERAFSYYGPL	+	-	-	-
5698	Q13285	106	NKFGPMYKRDRAKQKKAQIRANGFK	-	-	-	-
5699	Q13285	34	SGYHYGLLTCECKGFFKRTVQNNKHY	+	-	-	-
5700	Q13285	38	YGLLTCECKGFFKRTVQNNKHYTECTE	+	-	-	-
5701	Q13285	72	KTQRKRCPPFCRFQKCLTVGMRLEAVRA	+	-	-	-
5702	P56962	223	AAVNVEEGTKNLGKAAYKLAALPVAG	-	-	-	-
5703	P56962	41	DLERLRKHQINIEKYQRCRIWDKLHEE	+	-	-	-
5704	Q9UMX1	398	LRGRLLHGRHFTYKSITGDMAITFVST	-	-	-	-
5705	Q9UMX1	303	SICIGTQPRRLSGKDTEQIRETLRRL	+	-	-	-
5706	Q6PI48	160	ELLNACKKLPEIKNFVKKTEALRLQY	-	-	-	-
5707	Q6PI48	382	AICIPEGAKYLKRKDIESIRNFAADHF	+	-	-	-
5708	Q9Y285	163	KLGEKERSELRRKLLAEVTLKTYWVS	-	-	-	-
5709	Q9Y285	311	RTHSQGGYGSQGYKYNWKLDEARKNLL	+	-	-	-
5710	Q9UJZ1	200	KESMQMQVEAERRKRATVLESEGTRES	-	-	-	-
5711	Q9UJZ1	145	TTMRSELGKLSLDKVFRRERESLNASIV	+	-	-	+
5712	Q9UJZ1	233	GKKQAQILASEAEKAEQINQAAGEASA	+	-	-	-
5713	Q9P2R7	161	KGRICNQVLVCERKYPREYYFAITME	-	-	-	-
5714	Q9P2R7	78	QEAGVSVPKGYVAKSPDEAYAIKAKLG	+	-	-	-
5715	Q9P2R7	88	YVAKSPDEAYAIKAKLGSKDVVIKAQV	+	-	-	+
5716	Q9P2R7	129	KGGVKIVFSPEEAKAVSSQMIGKKLFT	+	-	-	-
5717	Q9P2R7	139	EEAKAVSSQMIGKKLFTKQTGEKGRIC	+	-	-	-
5718	Q9P2R7	143	AVSSQMIGKKLFTKQTGEKGRICNQVL	+	-	-	-
5719	Q9P2R7	216	IIKEPIDIEEGIKKEQALQLAQKMGFP	+	-	-	-
5720	Q9P2R7	368	HQVTEAFKLITSDKKVLAILVNIFGGI	+	-	-	-
5721	Q96I99	46	TSRRWLNQYEQSKKLMSDNGVRVQRF	-	-	-	-
5722	Q96I99	73	FVADTANEALEAAKRLNAKEIVLKAQI	+	-	-	-

5723	Q96I99	78	ANEALEAAKRLNAKEIVLKAQILAGGR	-	-	-	+
5724	Q96I99	132	QMIGYNLATKQTPKEGVKNKVMVAEA	+	-	-	-
5725	Q96I99	139	ATKQTPKEGVKNKVMVAEALDISRET	+	-	-	-
5726	Q96I99	200	LIFKEQIDIFEGIKDSQAQRMAENLGF	+	-	-	-
5727	Q96I99	218	QRMAENLGFVGPLKSQAADQITKLYNL	+	-	-	-
5728	Q96I99	227	VGPLKSQAADQITKLYNLFLKIDATQV	+	-	-	-
5729	Q96I99	271	AKINFDDNAEFRQKDIFAMDDKSENEP	+	-	-	-
5730	Q96I99	291	DKSENEPIEENAAKYDLKYIGLDGNIA	+	-	-	-
5731	Q96I99	338	GKPANFLDLGGGVKEAQVYQAFKLLTA	-	-	-	+
5732	Q96I99	347	GGGVKEAQVYQAFKLLTADPKVEAILV	+	-	-	-
5733	Q96I99	386	ANGITKACRELELKVPLVVRLEGTNVQ	+	-	-	-
5734	Q96I99	423	LPITSAIDLEDAAKKAVASVAKKKKKK	+	-	-	-
5735	O95363	237	SAHKQETHTMEAVKLVEFDLKQTLTRL	-	-	-	-
5736	O95363	202	PIFHQLEAVRLFSEKHELFAGIKDGESL	+	-	-	-
5737	P49590	377	YDGLVGMFDPKGHKVPCVGLSIGVERI	-	-	-	-
5738	P49590	444	ELWDSGIKAEMLYKNNPKLLTQLHYCE	+	-	-	-
5739	Q9P2J5	143	KTEDIIKDKAKGKSKAAAKAGSSKY	-	-	-	-
5740	Q9P2J5	970	KHFEANNGKLPDNKVIASELGSMPELK	+	-	-	-
5741	Q9P2J5	1047	EHIEVKFASEAEDKIREDCCPGKPLNV	+	-	-	-
5742	Q96I59	357	GADLRTEHEKYLVKHCGNIPVFVINYP	-	-	-	-
5743	Q96I59	353	TPEWGADLRTEHEKYLVKHCGNIPVFV	+	-	-	-
5744	O43776	113	KITIKNDPSLPEPKCVKIGALEGYRGQ	-	-	-	-
5745	O43776	244	NNRHMMIRGENMSKILKARSMVTRCFR	+	-	-	-
5746	O43776	490	MRIFDSEEILAGYKREGIDPTPYWYT	+	-	-	-
5747	Q8WXH0	4145	KAEPSPQSWSSLWKHDKDMEEDRASSS	-	-	-	-
5748	Q8WXH0	955	IDIEKGKLSDNILKLEKQINKEKKLIR	+	-	-	-
5749	P47897	166	ARAVLKWADGKMIKNEVDMQVLHLLGP	-	-	-	-
5750	P47897	309	GICFLRFDDTNPEKEEAKFFTAICDMV	+	-	-	-
5751	P49588	943	KGGGKDVSAQATGKNVGCLQEALQLAT	-	-	-	-
5752	P49588	19	TASEIRQRFIDFFKRNEHTYVHSSATI	+	-	-	-
5753	P49588	876	ESGASAKALNEALKLFKMHSPTQSAML	+	-	-	-
5754	Q9HCS7	747	YNTQVNFMASQMLKVSGSATGTVSDLA	-	-	-	-
5755	Q9HCS7	420	DNGQLDDARVILEKATKVNFKQVDDLA	+	-	-	-
5756	Q9NSE4	277	HVSRSIYVKFPLLKPSPKLASLIDGSS	-	-	-	-
5757	Q9NSE4	74	RDTVLLPQTSFPMKLLGRQQPDTELEI	+	-	-	+
5758	Q9NSE4	189	SAMEIRKKARSFAKAAIEKQKSAFIRW	+	-	-	-
5759	Q9NSE4	194	RKKARSFAKAAIEKQKSAFIRWGIMAD	-	-	-	+
5760	Q9NSE4	233	EAKQLRTFYQMYDKGLVYRSYKPVFWS	+	-	-	-
5761	Q9NSE4	241	YQMYDKGLVYRSYKPVFWSPTSRTALA	+	-	-	+
5762	Q9NSE4	479	DWRTKKPVVIRASKQWFINITDIKTAA	-	-	-	+
5763	Q9NSE4	500	DIKTAAKELLKKVKFIPGSALNGMVEM	-	-	-	+
5764	Q9NSE4	725	GPSVLNAARDDISKLRNTLRFLGNVA	+	-	-	-
5765	Q9NSE4	775	LLQDLANKITELYKQYDFGKVVRLRLT	+	-	-	+
5766	Q9NSE4	781	NKITELYKQYDFGKVVRLRLRTFYTREL	+	-	-	+
5767	P23381	27	NSIATQGELVRSIKAGNASKDEIDSAV	-	-	-	-
5768	P23381	154	RDMNQVLDAYENKPFYLYTGRGPSSE	-	-	-	+
5769	P13984	193	KQHVLDMFLSAFEKHQYYNLKDLVDIT	-	-	-	-
5770	P13984	22	LTGAKQNTGVWLKVPKYLSQQWAKAS	+	-	-	-
5771	P13984	33	LVKVPKYLSQQWAKASGRGEVGKLRIA	+	-	-	-
5772	P13984	137	YMRLKRLQIEESSKPVRLSQQLDKVVT	+	-	-	-
5773	P49591	414	YQARRLRIRYGQTKKMDKVEFVHMLN	-	-	-	-
5774	P49591	323	RDTRGIFRVHQFEKIEQFVYSSPHDNK	+	-	-	-
5775	Q9NP81	249	ALLQHGLVNF'TFNKLLRRGFTPMTVPD	-	-	-	-
5776	Q9NP81	110	RQLQEQIRSLIEEEKAAVTEAVRALLAN	+	-	-	-
5777	Q9NP81	195	DESQARVLHMGVDKPVFSFQPRGHLEI	-	-	-	+
5778	Q5VWG9	721	KKKKKEKEKEKEKEKEREKEKREREKRE	-	-	-	-
5779	Q5VWG9	266	AKSQMPTAKPLETKSFTPKTKTKTSSP	+	-	-	-
5780	Q5VWG9	776	LRVGAGQDKIVISKVVPAPAEKAPAPSQ	+	-	-	-

5781	Q16594	63	ILDDAKIYSSHAKKATVDADDVRLAIQ	-	-	-	-
5782	Q16594	5	MMMMMMMMMESGKTASPKSMPKDAQM	+	-	-	-
5783	P41250	563	QLTKDMINVKRFQKTLYVEEVVNPVIE	-	-	-	-
5784	P41250	204	TSGHVDKFADFMVKDVNGECFRADHL	+	-	-	-
5785	P41250	501	EPKTVNVVQFEPKGAIGKAYKKDAKL	+	-	-	-
5786	Q9UMZ2	1189	EVYRVTKRVELGIKATAVCSEKLQQLL	-	-	-	-
5787	Q9UMZ2	513	MPLPGTKALPSMDKYAVFKGIAADKSS	+	-	-	-
5788	Q9UMZ2	744	TVKGGQNSTAASKYDVFRQLSLEGSG	+	-	-	-
5789	Q9H2K8	80	QDILKEVKFLRQLKHPNTIEYKGCYLK	-	-	-	-
5790	Q9H2K8	830	KMQTEAQHERELQKLEQRVSLRRAHLE	+	-	-	-
5791	P68371	297	LTVPELTQQMFDAKNMMAACDPRHGRY	-	-	-	-
5792	P68371	58	ERINVYYNEATGGKYVPRAVLVDLEPG	+	-	-	-
5793	Q15046	421	LPETNLFETEETRILDDICVAKAVEC	-	-	-	-
5794	Q15046	88	QYYKIRSQAIHQKLVNGEDPYPHKFHV	+	-	-	-
5795	Q15046	141	VAGRIHAKRASGGKLIFYDLRGEGVKL	+	-	-	-
5796	Q15031	727	PQLLSNKEKAEARKLWEYKNSVISQVT	-	-	-	-
5797	Q15031	68	TRKDVEKWWHQRIKEQASKISEADKSK	+	-	-	-
5798	Q15031	236	HGCSWRSGAKVEQKYLQWFIKTTAYA	+	-	-	-
5799	P54577	102	LLELRVSYYENVIKAMLESIGVPLEKL	-	-	-	-
5800	P54577	197	GGIDQRKIFTFAEKYLPALGYSKRVHL	+	-	-	-
5801	P54577	206	TFAEKYLPALGYSKRVHLMNPMVPGLT	+	-	-	-
5802	P54577	474	SAPGEHVFKGYEKGQPDEELKPKKKV	+	-	-	-
5803	P54577	482	VKGYEKGQPDEELKPKKKVFEKLQADF	+	-	-	-
5804	P54577	490	PDEELKPKKKVFEKLQADFKISEECIA	+	-	-	-
5805	O75528	312	PRNQNKPFVSPHTKSLESRIKEELIAQ	-	-	-	-
5806	O75528	418	KRTPTKKEKDQAWKTLKERESILKLLD	+	-	-	-
5807	Q01995	17	KGPSYGMSREVQSKIEKKYDEELEERL	-	-	-	-
5808	Q01995	172	HKREFTESQLQEGKHVIGLQMGSNRGA	+	-	-	-
5809	Q13509	392	KRISEQFTAMFRRKAFLHWYTGEGMDE	-	-	-	-
5810	Q13509	58	ERISVYYNEASSHKYVPRAILVDLEPG	+	-	-	-
5811	P17987	63	GDVTITNDGATIILKLEVEHPAAKVL	-	-	-	-
5812	P17987	199	GQPRYPVNSVNILKAHGRSQMESMLIS	+	-	-	-
5813	P17987	400	EMERSLHDALCVVKRVLESKSVVPGGG	+	-	-	-
5814	P17987	494	KNLKWIGLDLSNGKPRDNKQAGVFEP	+	-	-	-
5815	Q5T160	446	IIQDFKGLLLSDYKFSWDRVFQSRGDT	-	-	-	-
5816	Q5T160	568	LFKAVRSVLANGMKLLGITPVCRRMMM	+	-	-	-
5817	P35269	201	DEDEEEKEKRRRKASELRIHDLEDDL	-	-	-	-
5818	P35269	407	GGSTSSTLRAAASKLEQKRVSEMPAA	+	-	-	-
5819	P37802	88	APVKKIQASTMAFKQMEQISQFLQAAE	-	-	-	-
5820	P37802	17	RGPAYGLSREVQQKIEKQYDADLEQIL	+	-	-	-
5821	P37802	20	AYGLSREVQQKIEKQYDADLEQILIQW	+	-	-	-
5822	Q6P1N9	216	EANLEVLKSIPSEKLMIETDAPWCGVK	-	-	-	-
5823	Q6P1N9	27	TDPMFRGIYRGVQKHQDDLQDVIGRAV	-	-	-	+
5824	Q6P1N9	46	QDVIGRAVEIGVKFMITGGNLQDSKD	-	-	-	+
5825	Q9BVA1	297	LTVPELTQQMFDSKNMMAACDPRHGRY	-	-	-	-
5826	Q9BVA1	58	ERINVYYNEATGNKYVPRAILVDLEPG	+	-	-	+
5827	Q15813	207	PSGSVLTGTLSVLKVLVLNQTGITWAE	-	-	-	-
5828	Q15813	463	IKYPHQLDQKVLEKQLPGSMTIQVKVG	+	-	-	-
5829	Q9UGU0	946	FEQSKSQASFNNKKS GDHCHPPSIKHE	-	-	-	-
5830	Q9UGU0	602	MPLSSDGNPKVNEKTVGVIVSREAMTG	+	-	-	-
5831	P26639	236	KETLLAMFKYNKFKCRILNEKVNTPTT	-	-	-	-
5832	P26639	243	FKYNKFKCRILNEKVNTPTTTTVYRCGP	+	-	-	-
5833	Q9Y2Z4	43	KAHSGAQGLLAAQKARGLFKDFFPETG	-	-	-	-
5834	Q9Y2Z4	355	RRGPQKRLAAEVTKL VHGREGLDSAKR	+	-	-	-
5835	Q9Y2Z4	367	TKLVHGREGLDSAKRCTQALYHSSIDA	+	-	-	-
5836	P07437	154	GGTGSGMGMTLLISKIREEYPDRIMNTF	-	-	-	-
5837	P07437	58	DRISVYYNEATGGKYVPRAILVDLEPG	+	-	-	+
5838	Q99426	106	ARLGEYEDVSRVEKYTISQEAYDQRQD	-	-	-	-

5839	Q99426	219	GSVNGKRYFECQA KY GAFVKPAVVTVG	+	-	-	-
5840	Q9BZK7	266	TKDGNLASTLGQH KG PIFALKWNKKGN	-	-	-	-
5841	Q9BZK7	102	PDVVQTRQQAYRD KL AQQQAAAAA	+	-	-	-
5842	Q13428	1124	SPQSTSVQAKGTN KL RKPKLPEVQQAT	-	-	-	-
5843	Q13428	134	MKEKAKAETEKAG KT GNMSPHPATGKT	+	-	-	-
5844	Q13428	155	PATGKTVANLLSG K SPRKSAPESANTT	+	-	-	-
5845	Q13428	296	APAGTRSQVKASE KI LQVRAASAPAKG	+	-	-	-
5846	Q13428	313	VRAASAPAKGTPG K GATPAPPKGAGAV	+	-	-	-
5847	Q13428	322	GTPGKGATPAPP K AGAVASQTKAGKP	+	-	-	-
5848	Q13428	600	GPPQKAGPVAVQV K AEKPMDNSESSEE	+	-	-	-
5849	Q13428	716	EEKTGLAVTVGQA K SVGKGLQVKAASV	+	-	-	-
5850	Q13428	720	GLAVTVGQAKSV K GLQVKAASVPVKG	+	-	-	-
5851	Q13428	755	VLPGKTGPTVTQV K AEKQEDSESSEEE	+	-	-	-
5852	Q13428	1414	EKKGKGSLSG SQ GA K DEPEEELQKGMGT	+	-	-	-
5853	P40227	58	KMLVSGAGDIKLT K DGNVLLHEMQIQH	-	-	-	-
5854	P40227	5	MMMMMMMMMAAV K TLNPKAEVERAQA	+	-	-	-
5855	P40227	199	IDLFMIEIMEMKH K SETDTSIRGLVL	+	-	-	-
5856	P40227	287	IIELKRKVCSD S D K GFVVINQKGIDPF	+	-	-	-
5857	P40227	365	EYTLGEEKFTFIE K CNNPRSVTLLIKG	+	-	-	-
5858	P40227	377	EKCNNPRSVTLLI K GPKNHTLTQIKDA	+	-	-	-
5859	P40227	388	LIKGPKNHTLTQI K DAVRDGLRAVKNA	+	-	-	-
5860	P26640	269	QQPPPGEKKPK PE KREKRDPGVITYDL	-	-	-	-
5861	P26640	645	PRFEARKAVLV AL KE R GLFRGIEDNPM	+	-	-	-
5862	P78371	230	GFLDKKIGVNQ P KRIENAKILANTG	-	-	-	-
5863	P78371	13	MMASLSLAPVNI F KAGADEERAETARL	+	-	-	-
5864	P78371	154	LLSSAVDHGSDE V KFRQDLMNIAGTTL	+	-	-	-
5865	P78371	181	SSKLLTHHKDHFT K LAVEAVLRLKGS	+	-	-	-
5866	P50991	29	AGGRGKGAYQDRD K PAQIRFSNISAAK	-	-	-	-
5867	P50991	21	RSGATAGAAGGRG K GAYQDRDKPAQIR	+	-	-	-
5868	P50991	288	VLREERAYIILNV K QIKKTGCNVLLIQ	+	-	-	-
5869	P50991	302	QIKKTGCNVLLIQ K SILRDALSDLAH	+	-	-	-
5870	P50991	319	RDALSDLAHFLN K MKIMVIKDIERED	+	-	-	-
5871	P50991	326	ALHFLNKMIMVI K DIEREDIEFICKT	+	-	-	-
5872	P21980	672	MGLHKLNVNFESD K LKAVKGFRNVIIG	-	-	-	-
5873	P21980	468	AFTRANHLNKLAE K EETGMAMRIRVGQ	+	-	-	-
5874	Q12962	161	DPRIIRLISLAAQ K FISDIANDALQHC	-	-	-	-
5875	Q12962	189	MKG TASGSSRSKS K DRKYTLTMEDLTP	-	-	+	-
5876	Q53T94	353	LTFDPIAKMAKT V KYDVQAVAIIVVL	-	-	-	-
5877	Q53T94	440	WKSEKPLYYSFVD K PVAYKKREMVNL	+	-	-	-
5878	P37837	204	GRILDWHVANTDK K SYELEDPGVKS	-	-	-	-
5879	P37837	115	RVSTEVDARLS F D K DAMVARARRLIEL	+	-	-	-
5880	P37837	219	YEPLEDPGVKS V T K IYNYKKFSYKTI	+	-	-	-
5881	P37837	269	SPKLLGELLQDN A KLVVLSAKAAQAS	+	-	-	-
5882	P37837	286	VLSAKAAQASD L E K IHLDEKSFRWLHN	+	-	-	-
5883	P37837	321	LSDGIRKFAADAV K LERMLTERMFAE	+	-	-	-
5884	Q13885	174	DRIMNTFSVMP S P K VSDTVVEPYNATL	-	-	-	-
5885	Q13885	58	ERINVYYNEAAGN K YVPRAILVDLEPG	+	-	-	+
5886	P49368	370	DEYFTFITDCKD P KACTILLRGASKEI	-	-	-	-
5887	P49368	222	IEDSCVLRGVMIN K DVTHPRMRRYIKN	+	-	-	-
5888	Q14186	49	PSTVNPLGKQL L P K TFGQSNVNIAQQV	-	-	-	-
5889	Q14186	3	MMMMMMMMMMMA K DAGLIEANGELKV	+	-	-	-
5890	Q99757	140	EYEVSAVPTVLAM K NGDVVDKFGVIKD	-	-	-	-
5891	Q99757	152	MKNGDVVDKFGV I K D EDQLEAFLKKLI	+	-	-	+
5892	P29083	106	FINYRTLNVNVKY K LDMRRRIETDER	-	-	-	-
5893	P29083	67	FDRKQLRSVLNN L KGDKFIKCRMRVET	+	-	-	-
5894	P29084	260	ESGPKKVAPIQRR K KPASQKKRRFKTH	-	-	-	-
5895	P29084	74	SFNLKALSGSSGY K FGVLAKIVNYMKT	+	-	-	-
5896	P21675	1046	STEQARSSEGPM S K F ARGSRFSVAEHQ	-	-	-	-

5897	P21675	544	KESSLKSRILLGKTGVIKEEPQQNMS	+	-	-	-
5898	P53999	97	DIREYWMDEPEGMKPGRKGISLNPEQW	-	-	-	-
5899	P53999	35	DKKLKRKKQVAPEKPVKKQKTGETSRA	+	-	-	-
5900	P53999	53	QKTGETSRALSSSSKQSSSSRDDNMFI	+	-	-	-
5901	P53999	68	SSSSRDDNMFIQIGKMRYSVRDFKGV	+	-	-	-
5902	Q15185	95	SGQSWPRLTKERAKLNWLSVDFNNWKD	-	-	-	-
5903	Q15185	33	CVEDSKDVNVNFEKSKLTFSCLGSDN	+	-	-	-
5904	Q99832	109	SVTLAAEFLLKQVQPYVEEGLHPQIII	-	-	-	-
5905	Q99832	67	GKATISNDGATIILKLLDVVHPAAKTLV	+	-	-	-
5906	Q99832	250	IALLNVELELKAEDNAEIRVHTVEDY	+	-	-	-
5907	Q99832	320	DMFCAGRVPEEDLKRTMMACGSGSIQTS	+	-	-	-
5908	P50990	171	DEVSSLLRTSISMSKQYGNVFLAKLIA	-	-	-	-
5909	P50990	318	ANKYNIMLVRLNSKWDLRRLCKTVGAT	+	-	-	-
5910	P50990	400	DIERAVDDGVNTFKVLTRDKRLVPGGG	+	-	-	-
5911	P50990	466	AENSGVKANEVISKLYAVHQEGNKNVG	+	-	-	-
5912	Q9NZ01	285	LVGFTQMTIWAQKGRHSYLKEFRDYPP	-	-	-	-
5913	Q9NZ01	22	LDAKTREKLCFLDKVEPHATIAEIKNL	+	-	-	-
5914	Q9NZ01	60	RQSLRLDPKGKSLKDEDVLQKLPVGT	+	-	-	-
5915	P32780	102	RDAVKDLLQQLLPKFRKANKELEKN	-	-	-	-
5916	P32780	240	SHYFHRDRLNTGSKDLFAECAKIDEKG	+	-	-	-
5917	Q04206	427	APGPPQAVAPPAPKPTQAGEGTLSEAL	-	-	-	-
5918	Q04206	122	CIHSFQNLGIQCVKKRDLEQAISQRIQ	+	-	-	-
5919	Q04206	123	IHSFQNLGIQCVKKRDLEQAISQRIQT	+	-	-	-
5920	Q04206	218	SCLGGDEIFLLCDKVQKEDIEVYFTGP	+	-	-	-
5921	Q04206	221	GGDEIFLLCDKVQKEDIEVYFTGPGWE	+	-	-	-
5922	Q04206	310	RIEEKRKRTYETFKSIMKKSPFSGPTD	+	-	+	-
5923	Q9BWD1	266	GINDGAAAVVLMKSEADKRGLTPLAR	-	-	-	-
5924	Q9BWD1	200	NRTENAQKAGHFDKEIVPVLVSTRKGL	+	-	-	-
5925	Q9BWD1	233	EFPRHGSNIEAMSKLKPFLTDGTGT	+	-	-	-
5926	Q9BWD1	235	PRHGSNIEAMSKLKPFLTDGTGTVP	+	-	-	-
5927	P10599	82	CEVKCMPTFQFFKKGQKVGEFSGANKE	-	-	-	-
5928	P10599	3	MMMMMMMMMMVMVKQIESKTAFQEALD	+	-	-	-
5929	P10599	8	MMMMMMVMVKQIESKTAFQEALDAAGDK	-	-	-	+
5930	P10599	39	DFSATWCGPCKMIKPFHSLSEKYSNV	+	-	-	-
5931	P10599	94	KKGQKVGEFSGANKEKLEATINELVVV	+	-	-	+
5932	O60343	916	KIRCDMEDIHTLLKEGVPSRRGEIWQ	-	-	-	-
5933	O60343	477	LCERIEGLYPPRAKLVIQRHLSSLTDN	+	-	-	-
5934	Q6I9Y2	104	SIAGAHEKIAECKKQILQAKRIRKNRQ	-	-	-	-
5935	Q6I9Y2	36	DDRRINLLVKSFIKWCNSGSQEEGYSQ	+	-	-	-
5936	Q16762	24	VSTKWLAESIRTGKLGPLRVLDASWY	-	-	-	-
5937	Q16762	14	MVHQVLYRALVSTKWLAESIRTGKLG	+	-	-	+
5938	Q16762	136	TVSVLNGGFRNWLKEGHPVTSEPSRPE	+	-	-	+
5939	Q16762	163	PAVFKATLDRSLKTYEQVLENLESKR	+	-	-	+
5940	Q16762	175	LKTYEQVLENLESKRFQLVDSRSQGRF	+	-	-	+
5941	Q16762	224	MPFMDFLTEDGFEKGPEELRALFQTKK	+	-	-	+
5942	Q16762	236	EKGPEELRALFQTKKVDLSQPLIATCR	+	-	-	-
5943	Q16762	237	KGPEELRALFQTKKVDLSQPLIATCRK	+	-	-	+
5944	Q13263	319	LNKRGRVLVNDQKVTGEGQERLERQH	-	-	-	-
5945	Q13263	266	RKLLASLVKRLGDKHATLQKSTKEVRS	+	-	-	-
5946	Q13263	304	VQVDVKMAILQIMKELNKRGRVLVND	+	-	-	-
5947	Q13263	340	RLERQHWMTKIQKHQEHILRFASWAL	+	-	-	-
5948	Q13263	377	SKKLIYFQLHRAKMIIVDPVEPHGEMK	+	-	-	-
5949	Q13263	770	SPQEFQDVGRMFQFNKLTEDKADVQ	+	-	-	-
5950	Q13263	774	FAQDVGRMFQFNKLTEDKADVQSIIG	+	-	-	-
5951	Q13263	779	GRMFKQFNKLTEDKADVQSIIGLQRF	+	-	-	-
5952	O43615	359	ATYSQLAHPQQAKALGLQFHSRILDI	-	-	-	-
5953	O43615	217	PQRLRKRTFAGDKFKEEKVFEPNEEA	-	-	-	+
5954	Q9NVH6	204	FVENVPPTQEHTKLAERISLIRETIY	-	-	-	-

5955	Q9NVH6	179	DCQSFLNETNEGLK K FLQNFLLYGIAFV	+	-	-	-
5956	Q9NVH6	236	FTSDFSRGDTAYT K LALDRHTDTTYFQ	+	-	-	-
5957	Q86V81	107	SGFGGGAGVETGG K LLVSNLDFGVSDA	-	-	-	-
5958	Q86V81	86	RPAPYSRPKQLPD K WQHDLFDSGFGGG	+	-	-	-
5959	Q04727	60	HSLKLECEKLASE K TEMQRHYVMYYEM	-	-	-	-
5960	Q04727	237	DYSSESKKQKTEE K EIAARYDSdgeks	+	-	-	-
5961	Q04727	281	GSPAHSprengld K TRLLKKDAPISPA	+	-	-	-
5962	P31314	239	LASAERAALAKAL K MtDAQVKTWfQNR	-	-	-	-
5963	P31314	236	QKYLASAERAALAK K ALKMTDAQVKTWF	+	-	-	-
5964	Q8N2U0	46	PDAYGKELFDKAN K HHFLHSLALLGVP	-	-	-	-
5965	Q8N2U0	43	AQFPDAYGKELFD K ANKHHFLHSLALL	+	-	-	-
5966	Q96MV1	171	RWFFEALKYPKFS K AIVINGILMTVVF	-	-	-	-
5967	Q96MV1	165	SPFVNQRWFFEAL K YPKFSKAIVINGI	+	-	-	-
5968	Q5T1C6	44	PELRSFSSEEVI L KDCSVNPNSWNKDL	-	-	-	-
5969	Q5T1C6	55	ILKDCSVNPNSWN K DLRLLFDQFMKKC	-	-	-	+
5970	Q5T1C6	66	WNKDLRLLFDQFM K KCEDGSKRLPSY	-	-	-	+
5971	Q5T1C6	74	FDQFMKKCEDGSK R LPSYKRTPTEWI	+	-	-	-
5972	Q5T1C6	98	EWIQDFKTHFLDP K LMKEEQMSQAQLF	-	-	-	+
5973	Q5T1C6	207	VMINSQLDKVEGR K FFVSCNVQSVDEK	-	-	-	+
5974	P52888	168	HLPRETQENIKR I KKLSLLCIDFNKN	-	-	-	-
5975	P52888	257	FNCRCKEENCAI L KELVTLRAQSRLL	+	-	-	-
5976	P52888	538	YRTGSAPRELLE K LIESRQANTGLFN	+	-	-	-
5977	Q9Y5L4	45	VANAQELLQRMTD K CFRKCIGKPGGSL	-	-	-	-
5978	Q9Y5L4	53	QRMTDKCFRKCIG K PGGSLDNSEQKCI	-	-	-	+
5979	O75663	29	GPWKLTASKTHIM K SADVEKLADELHM	-	-	-	-
5980	O75663	106	ESRTEGEHSKEVI K PYDWTYTTDYKGT	+	-	-	-
5981	Q9Y490	84	YMLRNGDTMEYRK K QRPLKIRMLDGTV	-	-	-	-
5982	Q9Y490	1544	EVANSTANLVKTI K ALDGAFTEENRAQ	+	-	-	-
5983	Q9Y490	2031	GILKTAKVLVEDT K VLVQNAAGSQEKL	+	-	-	-
5984	Q9Y490	2115	AGKVGDDPAVWQ L KNSAKVMVTNVTSL	+	-	-	-
5985	P60174	225	KTATPQQAQEVHE K LRGWLKSNVSDAV	-	-	-	-
5986	P60174	51	MAPSRKFFVGGNW K MNGRKQSLGELIG	+	-	-	-
5987	P60174	186	EAGITEKVVFEQT K VIADNVKDWSKV	-	-	-	+
5988	P60174	193	VVFEQTKVIADNV K DWSKVVLAYEPVW	+	-	-	+
5989	P60174	231	QAQEVHEKLRGWL K SNVSDAVAQSTRI	+	-	-	+
5990	P60174	275	PDVDGFLVGAS L KPEFVDIINAKQQQ	+	-	-	-
5991	P25325	170	QLDPAFIKTYEDI K ENLESRRFQVDS	-	-	-	-
5992	P25325	40	QPLQLLDASWYLP K LGRDARREFEERH	+	-	-	+
5993	P25325	146	RHWLRQNLPLSSG K SQPAPAEFRAQLD	-	-	-	+
5994	P25325	164	PAEFRAQLDPAFI K TYEDIKENLESRR	-	-	-	+
5995	Q04726	181	ALGALGSQAHLTV K DEKNHHELDHRER	-	-	-	-
5996	Q04726	232	DYSMEAKKRKAEE K DSLSRYDSGDKS	+	-	-	-
5997	Q04726	275	VSPAHSPPENGLD K ARSLKKDAPTSPA	+	-	-	-
5998	O94826	188	DCTKAVELNPKYV K ALFRRAKAHEKLD	-	-	-	-
5999	O94826	185	VAQDCTKAVELNP K YVKALFRRAKAHE	+	-	-	-
6000	P11388	1237	TIEMKAEAEKKNK K KIKNENTEGSPQE	-	-	-	-
6001	P11388	1422	VPKKNVTVKKTA A KSQSSTSTTGAKKR	+	-	-	-
6002	P11388	1442	TTGAKKRAAPKGT K RDPALNSGVSQKP	+	-	-	-
6003	P24752	131	PCTTINKVCASGM K AIMMASQSLMCGH	-	-	-	-
6004	P24752	66	GSFLGSLSLPAT K LGSIAIQGAIEKA	+	-	-	+
6005	P24752	78	TKLGSIAIQGAIE K AGIPKEEVKEAYM	-	-	-	+
6006	P24752	174	YVMNRGSTPYGGV K LEDLIVKDGLTDV	+	-	-	+
6007	P24752	181	TPYGGVKLEDLIV K DGLTDVYNKIHMG	+	-	-	+
6008	P24752	190	DLIVKDGLTDVYN K IHMGSCAENTAKK	+	-	-	+
6009	P24752	202	NKIHMGSCAENTAK K LNIARNEQDAYA	+	-	-	+
6010	P24752	223	EQDAYAINSYTRS K AAWEAGKFGNEVI	+	-	-	+
6011	P24752	230	NSYTRSKAAWEAG K FGNEVIPVTVTVK	+	-	-	+
6012	P24752	243	KFGNEVIPVTVTV K GQPDVVVKEDEEY	-	-	-	+

6013	P24752	251	VTVTVKGQPDVVVKEDEEYKRVDFSKV	+	-	-	-
6014	P24752	257	GQPDVVVKEDEEYKRVDFSKVPKLKTV	+	-	-	-
6015	P24752	263	VKEDEEYKRVDFSKVPKLKTVFQKENG	+	-	-	+
6016	P24752	266	DEEYKRVDFSKVPKLKTVFQKENGTVT	-	-	-	+
6017	P24752	268	EYKRVDFSKVPKLKTVFQKENGTVTAA	-	-	-	+
6018	P24752	273	DFSKVPKLKTVFQKENGTVTAAANASTL	+	-	-	-
6019	P24752	338	FPIAPVYAASMLKDVGLKKEDIAMWE	+	-	-	-
6020	P42765	306	GIGPVP AISGALKKAGLSLKDMDLVEV	-	-	-	-
6021	P42765	25	AKRTPFGAYGGLLKDFLTATDLSEFAAK	+	-	-	+
6022	P42765	45	LSEFAAKAALSAGKVS PETVDSVIMGN	-	-	-	+
6023	P42765	137	QAPYCVRNVRFGTKLGS DIKLEDSLWV	+	-	-	+
6024	P42765	143	RNVRFGTKLGS DIKLEDSLWVSLTDQH	+	-	-	+
6025	P42765	171	QLPMAMTAENLAVKHKISREECDKYAL	+	-	-	+
6026	P42765	191	ECDKYALQSQQRWKAANDAGYFNDEMA	+	-	-	+
6027	P42765	209	AGYFNDEMAPIEVKTKKGKQTMQVDEH	+	-	-	+
6028	P42765	211	YFNDEMAPIEVKTKKGKQTMQVDEHAR	-	-	-	+
6029	P42765	212	FNDEMAPIEVKTKKGKQTMQVDEHARP	-	-	-	+
6030	P42765	214	DEMAPIEVKTKKGKQTMQVDEHARPQT	-	-	-	+
6031	P42765	234	EHARPQTTLQLQLPPVFKKDGTVTA	+	-	-	+
6032	P42765	240	TTLEQLQLQLPPVFKKDGTVTAGNASGV	-	-	-	+
6033	P42765	241	TLEQLQLQLPPVFKKDGTVTAGNASGVA	+	-	-	-
6034	P42765	269	GAGAVIIASEDAVKKHNF TPLARIVGY	+	-	-	-
6035	P42765	270	AGAVIIASEDAVKKHNF TPLARIVGYF	+	-	-	-
6036	P42765	305	MGIGPVP AISGALKKAGLSLKDMDLVE	+	-	-	+
6037	P42765	312	AISGALKKAGLSLKDMDLVEVNEAFAP	+	-	-	+
6038	P42765	340	YLAVERSLDLDISKTNVNGGAIALGHP	+	-	-	-
6039	P42765	375	TAHLVHELRRRGKYAVGSACIGGGQG	+	-	-	-
6040	Q8IYQ7	249	HVWPEDCEQKVS AKFFSEAVIEGLASD	-	-	-	-
6041	Q8IYQ7	281	PAKEFPKLSCGEWKSLVGATYVERAQI	+	-	-	-
6042	Q96FV9	337	QYLILFQYLKGQVFKSSNYVLTDEQS	-	-	-	-
6043	Q96FV9	133	VATWKSNTFY SAGKNYLLRMCNDLLRR	+	-	-	-
6044	Q96FV9	300	EELKTGGEHVYFAKFLTSEKLMDLQLS	+	-	-	-
6045	Q01085	91	VKVNWATTPSSQKDT SNHFHVFGDL	-	-	-	-
6046	Q01085	122	TTEDIKSAFAPFGKISDARVVKDMATG	+	-	-	-
6047	Q9NQ88	214	YMRSLFDYFLTDLKC SLPATLSRSELM	-	-	-	-
6048	Q9NQ88	50	KQAAAAGIFLNNVKFTHAFSSDLMRTK	+	-	-	-
6049	P51580	191	FQYLLCVLSYDPTKHPGPPFYVPHAEI	-	-	-	-
6050	P51580	58	GHQLLKKHLDTF LKGSGLRVFFPLCG	+	-	-	-
6051	P29144	803	LKNWVQTLRPVSAKTKPLGSRDVL PNN	-	-	-	-
6052	P29144	401	SPDMMVAEYSLREKLPANQYT WSSRGP	+	-	-	-
6053	Q9BVK6	47	RGSALYFHIGETEKKCFIEEIPDETMV	-	-	-	-
6054	Q9BVK6	160	EHANDYAEIAAKDKLSELQLRVRQLVE	+	-	-	-
6055	O14787	374	DDDDDALSDWNLRKCSAAALDVLANVF	-	-	-	-
6056	O14787	862	WVSPKDDL RDMFYKILHGFKDQVGEDN	+	-	-	-
6057	P12270	204	HSQNTWLNTELKTKTDELLALGREKGN	-	-	-	-
6058	P12270	252	QMNGLKTSNEHLQKHVEDLLTKLKEAK	+	-	-	-
6059	P12270	312	KSNELTRAVEELHKLLKEAGEANKAIQ	+	-	-	-
6060	P12270	345	EQSKDQMEKEMLEKIGRLEKELENAND	+	-	-	-
6061	P12270	428	ENKRINKYLDEIVKEVEAKAPILKRQR	+	-	-	-
6062	P12270	457	YERAQKAVASLSVKLEQAMKEIQRLQE	+	-	-	-
6063	P12270	477	EIQRLQEDTDKANQSSVLERDNRME	+	-	-	-
6064	P12270	713	LQEQTDLRSQNTKISTQLDFASKRYE	+	-	-	-
6065	P12270	723	QNTKISTQLDFASKRYEMLQDNVEGYR	+	-	-	-
6066	P12270	748	YRREITSLHERNQKLTATTQKQEQIIN	+	-	-	-
6067	P12270	755	LHERNQKLTATTQKQEQIINTMTQDLR	+	-	-	-
6068	P12270	1690	TPSKVTAAAMAGNKTSTPRASIRPMVTP	+	-	-	-
6069	P29401	244	AKHQPTAIIAKTFKGRGITGVEDKESW	-	-	-	-
6070	P29401	6	MMMMMMMMMESYHKPDQQKLQALKDTA	+	-	-	-

6071	P29401	11	MMMESYHKPDQQKLQALKDTANRLRI	+	-	-	-
6072	P29401	144	AACGMAYTGKYFDKASYRVYCLLDGE	+	-	-	-
6073	P29401	204	DPAPLQHQMIDIYQKRCEAFGWHAIIVD	+	-	-	-
6074	P29401	232	HSVEELCKAFGQAKHQPTAIIAKTFKG	+	-	-	-
6075	P29401	241	FGQAKHQPTAIIAKTFKGRGITGVEDK	+	-	-	-
6076	P29401	260	GITGVEDKESWHGKPLPKNMAEQIIQE	+	-	-	-
6077	P29401	538	EKINIRVLDPFTIKPLDRKLILDSARA	+	-	-	-
6078	P29401	603	NRVPRSGKPAELLKMFGLDRDAIAQAV	+	-	-	-
6079	Q96Q11	280	IGLPANASLEEFDKVSKNVDGFSPKPV	-	-	-	-
6080	Q96Q11	402	SGHDIRKVGISSGKEIGALLQQLREQW	+	-	-	-
6081	Q6PL24	167	PPLMAPPCIWTFAKVKEFKSKLGKEKN	-	-	-	-
6082	Q6PL24	169	LMAPPCIWTFAKVKEFKSKLGKEKNSR	+	-	-	-
6083	Q9Y2W1	670	YLKRGTEQEAANKKSPEIHRRIDISP	-	-	-	-
6084	Q9Y2W1	221	GGTSQDTKASESSKPWPDATYGTGSAS	+	-	-	-
6085	Q9Y2W1	346	KEESAASGGAAYTKRYLEEQTENGKD	+	-	-	-
6086	Q9Y2W1	455	KESEFDDEPKFMSKVIGANKNQEEKS	+	-	-	-
6087	Q9Y2W1	470	IGANKNQEEKSGKWEGLVYAPPGKEK	+	-	-	-
6088	Q9Y2W1	481	SGKWEGLVYAPPGKEKQRKTEELEES	+	-	-	-
6089	Q9Y2W1	519	KRSEGGHRGFVPEKNFRVTAYKAVQEK	+	-	-	-
6090	Q9Y2W1	527	GFVPEKNFRVTAYKAVQEKSSSPPRK	+	-	-	-
6091	Q9Y2W1	558	RDKLGAKGDFPTGKSSFSITREAQVNV	+	-	-	-
6092	Q9Y2W1	811	ETEEREESTTGFDKSRGLGTKDFVGPSE	+	-	-	-
6093	Q12931	276	EFSSSEARVRDVVTKYSNFVSFPLYLNG	-	-	-	-
6094	Q12931	262	TGTKII IHLKSDCKEFSSEARVRDVVT	+	-	-	-
6095	Q12931	324	HEEFYRYVAQAHDKPRYTLHYKTDAPL	+	-	-	-
6096	Q12931	332	AQAHDKPRYTLHYKTDAPLNIRSIFYV	+	-	-	-
6097	Q12931	424	IRKLRLDVLQQRLIKFFIDQSKKDAEKY	+	-	-	-
6098	Q12931	431	LQQRLIKFFIDQSKKDAEKYAKFFEDY	+	-	-	-
6099	Q12931	466	VTATEQEVKEDIAKLLRYESSALPSGQ	+	-	-	-
6100	Q9UPN9	861	SCKQSGLSSLVNGKSPIRSLMHRSAI	-	-	-	-
6101	Q9UPN9	763	SRGSCGSSGRTAETKTSLSFKSDQVKVK	+	-	-	-
6102	Q9UPN9	769	SSGRTAETKTSLSFKSDQVKVKQEPGTE	+	-	-	-
6103	Q9UPN9	793	GTEDEICSFSGGVKQEKTEDGRRSACM	+	-	-	-
6104	Q9UPN9	951	EVEYDCDNLQHSKKGKTAQGLSPVDQR	+	-	-	-
6105	Q9UPN9	953	EYDCDNLQHSKKGKTAQGLSPVDQRKC	+	-	-	-
6106	Q14669	284	SLPKTKLSLPGSSKSETSKPGPSGLQA	-	-	-	-
6107	Q14669	181	AEERSAKPTKLASKSATSAGCSTIT	+	-	-	-
6108	Q14669	1425	VGGKRGRAQTAPTKTSPRNAKKHDELW	+	-	-	-
6109	P11387	666	AKKEQLADARRDLKSAKADAKVMKDAK	-	-	-	-
6110	P11387	172	KEKKRKLEEEEDGKLKKPKNKDKDKKV	+	-	-	-
6111	P11387	280	EYTTKEIFRKNFFKDWRKEMTNEEKNI	+	-	-	-
6112	Q02880	540	EINNI IKIVGLQYKKSYYDDAESLKT LR	-	-	-	-
6113	Q02880	3	MMMMMMMMMMMAKSGGCGAGAGVGGG	+	-	-	-
6114	Q7Z392	666	TQGKMCLVPGKTRKLLFKFVAKTEDVG	-	-	-	-
6115	Q7Z392	245	FFSELKQDTQNALKNYRTAYNLVHEL R	+	-	-	-
6116	P67936	125	LKEAKHIAEEADRKYEEVARKLVILEG	-	-	-	-
6117	P67936	177	VTNNLKSLEAASEKYSEKEDKYEEEEIK	+	-	-	-
6118	P67936	215	RAEFAERTVAKLEKTIDDL EEKLAQAK	+	-	-	-
6119	Q9ULW0	449	EIEKRIQERESKKKTEDEHFEFHSRPC	-	-	-	-
6120	Q9ULW0	128	AQPQRRSLRLSAQKDLEQKEKHHVKMK	+	-	-	-
6121	Q9ULW0	305	SSPARVTKGCTIVKPFNLSQGKKRTFD	+	-	-	-
6122	Q9ULW0	375	KICRDPQTPVLQTKHRRARVTCKSTAE	+	-	-	-
6123	Q16881	291	ENAYGQFIGPHRIKATNNKGKEKIYSA	-	-	-	-
6124	Q16881	218	LGGTCVNVGCIPKLMHQAALLGQALQ	-	-	-	+
6125	Q15631	69	KRCLKAREHFGTVKTHLTSLKTKFP AE	-	-	-	-
6126	Q15631	187	INELDSGFRLNLKNDSLRKRYDGLKY	+	-	-	-
6127	Q15631	199	LKNDSLRKRYDGLKYDVKKVEEVYDL	+	-	-	-
6128	Q9Y4A5	472	IARYQLSAIFKKCKPQSELGAVEAALP	-	-	-	-

6129	Q9Y4A5	3078	HTIPTVPIVDCFQKIRQQVKCYLQLAG	+	-	-	-
6130	Q9Y5U2	164	PVPDYVAHPERWTKYSLEDVTEVSEQS	-	-	-	-
6131	Q9Y5U2	217	DPSSCGEGRVIFTKPVRGVEARHERKR	+	-	-	-
6132	Q6IBS0	110	LKMLYAATRATVKKEFGGGHIKDELFG	-	-	-	-
6133	Q6IBS0	14	MAHQGTGIHATEELKEFFAKARAGSVRL	+	-	-	-
6134	Q96PN7	907	ERKLFNKALATYSKDFIFVQKMKVSKT	-	-	-	-
6135	Q96PN7	633	MSDDEMPVLEIPRKHQPSVPKAEPLK	+	-	-	-
6136	Q96PN7	640	VLEIPRKHQPSVPKAEPLKTVQEKKK	+	-	-	-
6137	Q14258	573	AWHNNVEKTLPLSTKATRVGVLLNCDHG	-	-	-	-
6138	Q14258	273	TRKIKEEEKRVNSKFDTIYQILLKKKS	+	-	-	-
6139	Q14258	567	FNTKISAWHNNVEKTLPLSTKATRVGVL	+	-	-	-
6140	H0UI37	33	HNFYTAISKDVITYKELKNLLNSKNIML	-	-	-	-
6141	H0UI37	84	EVGEALQMNPRDFKEYNEVKPSKSDS	-	-	-	+
6142	P22314	911	TAAVGLVLCLELYKVVGQHRQLDSYKN	-	-	-	-
6143	P22314	528	RQFLFRPWDVTKLKSDTAAAVRQMNP	-	-	-	+
6144	P22314	671	QPAENVNQYLTDPKFVERTLRLAGTQP	+	-	-	-
6145	P22314	980	GEEMTLKQFLDYFKTEHKLEITMLSQG	+	-	-	-
6146	P63279	76	LFKDDYPSSPPKCKFEPPLFHPNVYPS	-	-	-	-
6147	P63279	65	PWEGGLFKLRMLFKDDYPSSPPKCKFE	+	-	-	-
6148	Q9NNW7	220	TSDDIFWLKESPGKTLVVGASYVALEC	-	-	-	-
6149	Q9NNW7	175	VDEHTVCGVAKGGKEILLSADHIIAT	-	-	-	+
6150	Q9NNW7	329	IGRVPDTRSLNLEKAGVDTSPDTQKIL	-	-	-	+
6151	P26368	225	MAFDGIIFQGQSLKIRRPDHYQPLPGM	-	-	-	-
6152	P26368	70	DRRRRSKPLTRGAKKEEHGGLIRSPRHE	+	-	-	-
6153	Q8WVY7	282	RPFMKAHLNRDKDKELLKLTQYLKEIA	-	-	-	-
6154	Q8WVY7	117	EVVEVENREENLLKISRRVKEYKVEIL	+	-	-	-
6155	P61086	61	DTPYEGGRYQLEIKIPETYPFNPPKVR	-	-	-	-
6156	P61086	14	MANIAVQRIKREFKEVLKSEETSKNQI	+	-	-	-
6157	P61088	94	DKLGRICLDILKDKWSPALQIRTVLLS	-	-	-	-
6158	P61088	82	VRFMTKIYHPNVDKLGRICLDILKDKW	+	-	-	-
6159	Q96K76	1066	MVHVDKRITLAAFQHLPEFVGVLSSH	-	-	-	-
6160	Q96K76	122	DKSLLDANFEPGKKNFLHLTDKDGEQP	+	-	-	-
6161	A6NIH7	184	RMIERHYFREHLKNFDFDFGFCIPSS	-	-	-	-
6162	A6NIH7	24	AASAAGPGGLVAGKEEKKKAGGGVLNR	+	-	-	-
6163	A0AVT1	709	WSQCVELARLKFEKYFNHKAQLLHCF	-	-	-	-
6164	A0AVT1	544	KINSQIKIDAHLNKCVCPTTETIYNDEF	+	-	-	-
6165	A0AVT1	729	LQLLHCFPLDIRLKDGSFLWQSPKRPP	+	-	-	-
6166	Q6ZU65	1062	PKPLPSPKPSASPSPSLSAKPSVSTKL	-	-	-	-
6167	Q6ZU65	1068	PKPSASPSPSLSAKPSVSTKLISKSNP	+	-	-	-
6168	Q6ZU65	1148	SGLPPTKNLQAPSCLTNSSSTGTVGKN	+	-	-	-
6169	O60656	91	STSYTLEDLDREFKAFAHAQWKAQVRS	-	-	-	-
6170	O60656	99	LDREFKAFAHAQWKAQVRSIYSLMGS	-	-	-	+
6171	Q86VQ6	539	CCGLSEEKAEVYKENLEIYHTLFWP	-	-	-	-
6172	Q86VQ6	379	SILLRGFDQEMAEKVGSYMEQHGKFL	-	-	-	+
6173	O75643	285	LSRFYDDAIVSQKKADEVLEILKTASD	-	-	-	-
6174	O75643	971	HTAALMLDKNNLVKYDKKTGNFQVTEL	+	-	-	-
6175	Q9NPG3	805	GPQVAVPVPQPQVVFHAGTQQQKNFT	-	-	-	-
6176	Q9NPG3	222	YDKEKKSCKSKFSKAGFTALNASKEKK	+	-	-	-
6177	Q86UV5	898	VSSSETEEDKEEAKPDGEKDPDFNQSN	-	-	-	-
6178	Q86UV5	956	GEKALLVSANQTLKELKIQIMHAFSVA	+	-	-	-
6179	O60701	430	WDMFKELDYERIHKMLKPAFIFDGRR	-	-	-	-
6180	O60701	107	KTYGMGKGRAADLKYEACARRIVQNS	+	-	-	-
6181	Q9Y5K5	154	NSFARQQMFEDTKTSAKEEDAFHFVS	-	-	-	-
6182	Q9Y5K5	47	EIWSLEPENFEKLPVHGLIFLFWQWP	-	-	-	+
6183	Q9Y5K5	158	RQQMFEDTKTSAKEEDAFHFVSYPVP	+	-	-	-
6184	Q9Y5K5	289	QKLKRYKIEINIRRKHNYLPFIMELLKT	-	-	-	+
6185	Q96T88	592	LLRRDDDEPGPWTKEGKDRIKKLGLTM	-	-	-	-
6186	Q96T88	399	MASATSSSQRDWKGCMACVGRTKECTI	+	-	-	-

6187	Q96T88	546	VRVVRNVKGGKNS	KY	YAPAEGNRYDGIY	+	-	-	-
6188	P61081	92	SFKVGQGYPHDPP	KV	KCETMVYHPNID	-	-	-	-
6189	P61081	3	MMMMMMMMMMMI	KL	FSLKQQKKEES	+	-	-	-
6190	P62256	73	KYPFKSPSIGFMN	KI	FHPNIDEASGTV	-	-	-	-
6191	P62256	60	EGGVWKVRVDLPD	KY	PFKSPSIGFMNK	+	-	-	-
6192	Q14139	444	SDAFFLNLGAALL	KL	CQPFCKPRSSRL	-	-	-	-
6193	Q14139	386	FMAQFHEKIYQML	KN	LLQLSPETKHCI	+	-	-	-
6194	Q9H3U1	626	AKYAKQHVPEQHP	KD	KPSFVRARVKKL	-	-	-	-
6195	Q9H3U1	70	QAVLHRNRAACHL	KL	EDYDKAETEASK	+	-	-	-
6196	Q9H3U1	483	RASFITANGVSL	KL	DLYKCSEKDSIRI	+	-	-	-
6197	P13051	123	YFIKLMGFVAEER	KH	YTVPPPHQVFT	-	-	-	-
6198	P13051	295	SVYRGFFGCRHFS	KT	NELLQKSGKKPI	+	-	-	-
6199	Q9UPT9	152	QGVGEKFSTWEPT	KR	ELELLKHNPARR	-	-	-	-
6200	Q9UPT9	129	QDYIYDKDMEII	AK	EEQRKAWKMQGVG	+	-	-	-
6201	Q5T4S7	3981	LQYEMLLLTDSIS	KE	EDSCWELRLCAL	-	-	-	-
6202	Q5T4S7	1084	LLELASTTKCSSV	KY	DVEIVEEYFARQ	+	-	-	-
6203	P51784	814	YCPSCQHQHLATK	KL	DLWMLPEILIIH	-	-	-	-
6204	P51784	245	FLVEPQEDTRLWA	KN	SEGLDRLYDTH	+	-	-	-
6205	P54578	284	NQLQLSCFINQEV	KY	LFTGLKLRLQEE	-	-	-	-
6206	P54578	449	YVSWVKRKQDEWI	KF	DDKVSIVTPED	+	-	-	-
6207	Q93009	272	ALQRVFYELQHSD	KP	VGTKKLTKSFGW	-	-	-	-
6208	Q93009	869	NYEGTLRDLLQFF	KP	RQPKKLYYQQLK	+	-	-	-
6209	Q93009	1084	SHPRPWLGLDHFN	KA	KRSRYTYLEKA	+	-	-	-
6210	Q93009	1096	NKAPKRSRYTYLE	KA	KIHNNNNNNNNN	+	-	-	-
6211	Q16851	60	EFEHTKKDLDFGR	KL	FHRFLQEGGPSV	-	-	-	-
6212	Q16851	438	PTVPLVKLGSSFT	KV	QDYLRRFESIPD	+	-	-	-
6213	P52758	101	DFNTVNEIYKQYF	KS	NFPARAAYQVAA	-	-	-	-
6214	P52758	13	MMSSLIRRVISTAK	AP	GAGPYSQAVL	-	-	-	+
6215	P52758	60	VSGGVAEEAKQAL	KN	MGEILKAAGCDF	-	-	-	+
6216	P52758	67	EAKQALKNMGEIL	KA	AGCDFTNVVKTT	-	-	-	+
6217	Q9P0L0	211	DEGLRLRKVAHSD	KP	GSTSTASFRDNV	-	-	-	-
6218	Q9P0L0	125	VWKEAKPDELMD	SK	LRCVFEMPENNDK	+	-	-	-
6219	Q13564	351	KYIKLQNVYREKA	KD	AAVGNHVAKL	-	-	-	-
6220	Q13564	6	MMMMMMMMMAQL	GL	LLKEQKYDRQLRL	+	-	-	-
6221	Q13564	341	TIPDMIADSGKYI	KL	QNVYREKAKKDA	+	-	-	-
6222	Q96IX5	16	GPESDAQYQFTGI	KY	FNSYTLTGRMN	+	-	-	-
6223	Q96IX5	17	PESDAQYQFTGIK	KY	FNSYTLTGRMNC	+	-	-	-
6224	O60763	596	FISKHELYSRASQ	KP	QPNFPSPEYMIF	-	-	-	-
6225	O60763	202	LLQALTRSNGAIQ	KI	AFENAFERLLD	+	-	-	-
6226	P45880	23	RPMCIPPSYADLG	KA	ARDIFNKGFGFG	-	-	-	-
6227	P45880	31	YADLGKAARDIFN	KG	FGFGLVKLDVKT	+	-	-	+
6228	P45880	120	KLTFDITTFSPNT	GK	SGKIKSSYKREC	+	-	-	-
6229	Q96JH7	243	GRELFWHALREN	LK	HFQQHLARYQAL	-	-	-	-
6230	Q96JH7	408	GGCVIGGDRSLQD	KY	LLRLVAAMEEVF	+	-	-	-
6231	Q14119	107	SCHTGIKLVSRPK	KT	PTTVVPLISTIA	-	-	-	-
6232	Q14119	362	QQQQQQHVTSWPG	KQ	VETLRLWEEAVK	+	-	-	-
6233	P21796	201	TEFGGSIYQVKNK	KL	ETAVNLAWTAGN	-	-	-	-
6234	P21796	20	YADLGKSARDVFT	KY	GFGGLIKLDLKT	+	-	-	+
6235	P21796	109	KLTFDSSFSFNTG	KN	AKIKTGYKREH	+	-	-	-
6236	P21796	252	NSSLIGLGYTQTL	KP	GIKLTLSALLDG	+	-	-	-
6237	P21796	266	PGIKLTLSALLDG	KN	VNAGGHKLGLGL	+	-	-	-
6238	Q9Y277	113	DTIFVPNTGKKSG	KL	KASYKRDCFSVG	-	-	-	-
6239	Q9Y277	12	MMCNTPTYCDLG	KA	KDVFNKGYGFG	+	-	-	-
6240	Q9Y277	15	CNTPTYCDLGKAA	KD	VFNKGYGFGMVK	+	-	-	-
6241	Q9Y277	20	YCDLGKAAKDVFN	KY	GFGMVKIDLKT	+	-	-	+
6242	Q9Y277	90	TDNTLGTEISWEN	KL	AEGKLTLDTIF	+	-	-	-
6243	Q9Y277	109	KLTLDTIFVPNTG	KS	GKLKASYKRDC	+	-	-	-
6244	Q9Y277	266	PGVKLTLALIDG	KN	FAGGHKVGLGF	+	-	-	-

6245	Q00341	303	EKKKKTTTTIAVEV K KSQHKYVIGPKGN	-	-	-	-
6246	Q00341	991	EVPPDLHRYVIGQ K GSGIRKMMDEFEV	+	-	-	-
6247	P18206	71	GKETVQTTEDQIL K RDMPPAFIKVENA	-	-	-	-
6248	P18206	173	YTKNLGPGMTKMA K MIDERQQELTHQE	+	-	-	-
6249	P18206	496	NSRPAKAAVHLEG K IEQAQRWIDNPTV	+	-	-	-
6250	Q709C8	1440	LNFEIKEVVVTLM K KSEKKGRPLHELN	-	-	-	-
6251	Q709C8	3538	LRGVVGGVTGIIT K PVEGAKKEGAAGF	+	-	-	-
6252	Q9Y4B6	1343	FGSSFRTFNATDY K PIATIDVKRNIFD	-	-	-	-
6253	Q9Y4B6	701	CVCGBPDRISSIG K FISGTPRRKLPQN	+	-	-	-
6254	O75351	23	KAIDLASKAAQED K AGNYEEALQLYQH	-	-	-	-
6255	O75351	10	MMMMSSSTSPNLQ K AIDLASKAAQEDK	+	-	-	-
6256	Q5VIR6	112	EAQKAIQQQLFGKI K DIKDKAEKSEQMV	-	-	-	-
6257	Q5VIR6	110	LEEAQKAIQQQLFG K IKDIKDKAEKSEQ	+	-	-	-
6258	Q5VIR6	360	AIQRTTNFEGFLA K RFSGCTLTDTGLK	+	-	-	-
6259	Q7Z5K2	536	SVKKPINKQGDKS K ENTRKIFSGPKRS	-	-	-	-
6260	Q7Z5K2	168	ASISSCNKLITSD K VENFHEEHEKNSH	+	-	-	-
6261	O75717	314	ENVCDPSGKTSSS K VSSRVEKDYNDF	-	-	-	-
6262	O75717	671	WTPICNTREHCKG K SDHYWVVGIHENP	+	-	-	-
6263	O75717	962	LSRTTNNEKSP I K PLIPKPKPKQASA	+	-	-	-
6264	Q9BTA9	57	EKMRDAGDPSPPN K MLRRSDSPENKYS	-	-	-	-
6265	Q9BTA9	302	SKLPTPTSSVPAQ K TERKESTSGDKPV	+	-	-	-
6266	P61964	227	NPPVSFVKFSPNG K YILAATLDNTLKL	-	-	-	-
6267	P61964	112	SNLLVSASDDKTL K IWDVSSGKCLCTL	+	-	-	-
6268	Q9NW82	33	QLAVTMGFTGFG K KARTFDLEAMFEQT	-	-	-	-
6269	Q9NW82	452	VTGTSIQRGCGSG K LVFFERTFQRVY	+	-	-	-
6270	Q8IWA0	671	FLTKSQSLLTFST K SPEEKLTPTSKQL	-	-	-	-
6271	Q8IWA0	466	AEKSEQPTLVTA S KDGYFKVWILTDDS	+	-	-	-
6272	P50552	286	RRRKATQVGEKTP K DESANQEEPEARV	-	-	-	-
6273	P50552	283	MLARRRKATQVGE K TPKDESANQEEPE	+	-	-	-
6274	Q9UN37	220	KLVKNFLFELARQH K PSIIFIDEVDSL	-	-	-	-
6275	Q9UN37	8	MMMMMMTTSTLQ K AIDLVTKATEEDK	+	-	-	-
6276	Q9C0J8	365	SDGSLLFWHVGVE K EVGGMEMAHEGMI	-	-	-	-
6277	Q9C0J8	46	AQQQAMQQLTFDG K MRKAVNRKTIDY	+	-	-	-
6278	Q9HAV4	125	IKDALSRIVVEM I K REWPQHWPDLIE	-	-	-	-
6279	Q9HAV4	396	ILSRDPLLLAI P K YLASMTNLVKMG	+	-	-	-
6280	Q9P253	802	LPFFPDFVTIDHF K EAICSSLKAYNHH	-	-	-	-
6281	Q9P253	362	LTGQVVLRDHFLE K FGPLKHMVKDSST	+	-	-	-
6282	Q96SY0	396	DDNKSPFPLQPK N KRSYAQNVTWIKP	-	-	-	-
6283	Q96SY0	418	VWIKPSGLQTDVQ K ILRNARKLPEKTQ	+	-	-	-
6284	Q9Y2W2	610	QRKSEDDSAVPLA K AAPKSGPSVPVSV	-	-	-	-
6285	Q9Y2W2	13	MMGRRSTSTKSG K FMNPTDQARKEAR	+	-	-	-
6286	Q9Y2W2	565	ATIEKKATATISA K PQITNPKAEITRF	+	-	-	-
6287	Q96S55	335	KTILFIDEIHRFN K SQQDTFLPHVECG	-	-	-	-
6288	Q96S55	633	NAPTRLMKDLGYG K GYKNPMYSEPVD	+	-	-	-
6289	Q9UBQ0	24	IPHRCNSLPAKF K LLVPGKIQHILCT	-	-	-	-
6290	Q9UBQ0	50	TGNLCTKESYDYL K TLAGDVHIVRGDF	+	-	-	-
6291	P55060	486	NVNEFPVLKADGI K YIMIFRNQVPKEH	-	-	-	-
6292	P55060	574	LTLPGSSENEYIM K AIMRSFSLQEA	+	-	-	-
6293	P55060	824	DGIQPKMFGMVLE K IIPEIQKVSQGNV	+	-	-	-
6294	O43592	293	DQEEDVDFLARFS K LVNGMGQSLIVSW	-	-	-	-
6295	O43592	634	LTPLMEKFKILLE K LMLAQDEERQASL	+	-	-	-
6296	Q5THJ4	1605	GLFSHSSLSNTS K SLSVKEVKSFTQI	-	-	-	-
6297	Q5THJ4	3524	DQLPPPFRIDNFS K VPVFTQHGVAEP	+	-	-	-
6298	P13010	35	NSIPGIESPFQAK K VITMFVQRQVFA	-	-	-	-
6299	P13010	144	HIEIFTDLSSRFS K SQLDIIHSLKKC	+	-	-	-
6300	P13010	265	TIGSNLSIRIAAY K SILQERVKKTWTV	+	-	-	-
6301	P13010	332	DIVPFSKVDEEQM K YKSEGKCFSVLGF	+	-	-	-
6302	P13010	660	IKFSEEQRFNNFL K ALQEKVEIKQLNH	+	-	-	-

6303	P13010	665	EQRFNFLKALQE K VEIKQLNHFWEIV	+	-	-	-
6304	Q8TAF3	318	SADPPPAIWVATT K STVNKWTLGKIH	-	-	-	-
6305	Q8TAF3	214	AKLMKLKGHTDNV K ALLNDRGTQCLS	+	-	-	-
6306	Q8TAF3	578	IPFYLQPHASSGA K TLKKDRLSASDML	+	-	-	-
6307	O95785	1275	GSPIDTLREILKK K SKPCLIKKEPPAG	-	-	-	-
6308	O95785	1162	GHSPITASPPPTAR K MFPGLAAPSLPKK	-	-	+	-
6309	Q9NQW7	598	LNNYHLTCRDVIG K ELQKQGRQEALEW	-	-	-	-
6310	Q9NQW7	304	SDKASYAVSETIP K DHRCCMPYTPICI	+	-	-	-
6311	P12956	262	KETRKRALSRLK L LNKDIVISVGIYN	-	-	-	-
6312	P12956	31	EEQEENLEASGDY K YSGRDSLIFLVDA	+	-	-	-
6313	P12956	331	RSQIYGSRQIILE K EETEELKRFDDPG	+	-	-	-
6314	P12956	338	RQIILEKEETEEL K RFDDPGLMLMGFK	+	-	-	-
6315	P12956	461	FTEKIMATPEQVG K MKAIVEKLRFITYR	+	-	-	-
6316	O75083	569	VYVWTLSDPETRV K IQDAHRLHHVSSL	-	-	-	-
6317	O75083	28	VERGVSKIIGGDP K GNNFLYTNGKCVI	+	-	-	-
6318	O75083	81	PSGFYIASGDVSG K LRIWDTTQKEHLL	+	-	-	-
6319	O75083	95	LRIWDTTQKEHLL K YEYQPFAGKIKDI	+	-	-	-
6320	O75083	115	AGKIKDIAWTEDS K RIAVVGEKREKFG	+	-	-	-
6321	O75083	480	GNVRLYSILGTT L KDEGKLLLEAKGPVT	+	-	-	-
6322	O14980	590	HDGVQDMACDT F IKIAQKCRHFVQVQ	-	-	-	-
6323	O14980	446	VENDQGEVVREFM K DTDSINLYKNMRE	+	-	-	-
6324	O14980	693	KDPETVKQLGS I LKTNRACKAVGHPF	+	-	-	-
6325	Q9H0D6	616	PAASGNFLPPSWR K LMSDPDSSIIDFY	-	-	-	-
6326	Q9H0D6	286	VKDCEGLPREKK G KHDELADSLPCAEG	+	-	-	-
6327	Q92889	396	ALTEVLKEIEAEN K ESEALGGPGQVLI	-	-	-	-
6328	Q92889	289	QLGAKTKSLVQD L KILRTLQYLSQYD	+	-	-	-
6329	P67809	93	TKEDVVFVHQTA K KNNPRKYLRVSGDG	-	-	-	-
6330	P67809	301	RRRRPENPKPQDG K ETKAADPPAENSS	+	-	-	-
6331	P67809	304	RPENPKPQDG K ETKAADPPAENSSAPE	+	-	-	-
6332	A8MVJ9	95	VDPYNILAGKHK M KKKSTVPNPNLHWR	-	-	-	-
6333	A8MVJ9	20	KRRPGAGAGPQ C EKTVDVKKSKFCEAD	+	-	-	-
6334	A8MVJ9	187	LKEVTDKKKT N LFKNVDEKLTETAREL	+	-	-	-
6335	A8MVJ9	234	KTFHGTGLVPPVD K NNVGYRELPELDA	+	-	-	-
6336	Q6ZSR9	288	PMAGKPFPRPQ S LSKYSRHYSPEDPSP	-	-	-	-
6337	Q6ZSR9	19	LPLYPDPSRVPGT K TQNNLES DY LARD	+	-	-	-
6338	Q8N4Q0	175	ISLKELGGLSEG K VLVTAAAGGTGQF	-	-	-	-
6339	Q8N4Q0	35	LDFOGSAIPQAMQ K LVVTRLSPNFREA	+	-	-	-
6340	Q6PJT7	418	TPRISPPIKEE T KGDSVEKNQGTQQR	-	-	-	-
6341	Q6PJT7	357	LPPSKQANKNL I LKAISEAQESVTKTT	+	-	-	-
6342	Q9UQR1	143	DKKQIREPVDLQ K KKRKQRSPAKILT	-	-	-	-
6343	Q9UQR1	607	SSSDKANMLQEY S KFLQQALDRTSQND	+	-	-	-
6344	Q15942	33	YAPQKKFGPVVAP K PKVNPFRPGDSEP	-	-	-	-
6345	Q15942	265	PRGPPASSPAPAP K FSPVTPKFPTVAS	+	-	-	-
6346	Q15942	272	SPAPAPKFSPVTP K FTPVASKFSPGAP	+	-	-	-
6347	Q15942	279	FSPVTPKFPTVAS K FSPGAPGGSGSQP	+	-	-	-
6348	P17026	90	HTGKKSHKCADCG K SFFQSSNLIQHRR	-	-	-	-
6349	P17026	18	KPKAGISRSSSQ G KAYENKRKTGRQRQ	+	-	-	-
6350	P17026	23	ISRSSSQGKAYEN K RKTGRQRQKMGMT	+	-	-	-
6351	Q86VM9	889	GQNSKAPAAPADR K RQLSPQSKSSSKV	-	-	-	-
6352	Q86VM9	814	PPGQPQQGT F VAHKEIKLTLLNKAADK	+	-	-	-
6353	Q96KR1	860	SEAAIILNSC V EPKMQVTITLTSPPIR	-	-	-	-
6354	Q96KR1	509	KTSTPKINFVGG N KLQSTGNKAEDIKG	+	-	-	-
6355	Q96KR1	516	NFVGGNKLQSTG N KAEDIKGTECVKST	+	-	-	-
6356	O14628	389	LAGEKLSKCETWY K GFNHSPNPSKHQR	-	-	-	-
6357	O14628	408	PNPSKHQRNEIG G KPFKCEECDSIFKW	+	-	-	-
6358	O60281	368	KALRLESTENT E VKISICKTISCLLPD	-	-	-	-
6359	O60281	1117	GCTRTYNSSQ S IGHMKTAHPDQYAAF	+	-	-	-
6360	O60281	2042	TQNTHSNVA V IPEKQLVEKKSPDKTES	+	-	-	-

6361	O95218	132	ESDGEYDEFGRKKK K YRGKAVGPASIL	-	-	-	-
6362	O95218	18	NFRVSDGDWICPD K KCGNVNFARRTSC	+	-	-	-
6363	O95218	54	EAKMMKAGGTEIG K TLAEKSRGLFSAN	+	-	-	-
6364	O95218	92	WARRSECNMCNTP K YAKLEERTGYGGG	+	-	-	-
6365	O75152	575	MREKHMQKQQERE K SVLTPLRGDVASC	-	-	-	-
6366	O75152	764	SMKTRRLSSASTG K PPLSVEDDFEKLI	+	-	-	-
6367	Q6FIF0	154	KPKQKKNRCFMCR K KVGLTGFECCGN	-	-	-	-
6368	Q6FIF0	204	EKIRKENPVVVG E KIQKIIIIIIIIII	+	-	-	-
6369	Q96F45	406	QLAAAAAGSLGCS K PAGSSPLAGASPP	-	-	-	-
6370	Q96F45	209	GGGGGGGGVSSE K SGFRVPSATCQPF	+	-	-	-
6371	Q9HCE3	1249	KQNGAGEDNQEN K PSHEDESPDGAVS	-	-	-	-
6372	Q9HCE3	175	NVLTGSAPQQDYD K LKALGGENSSTGT	+	-	-	-
6373	P43403	541	TMWEALSYGQKPY K KMKGPEVMAFIEQ	-	-	-	-
6374	P43403	603	EQRMACYYSLAS K VEGPPGSTQKAEA	+	-	-	-
6375	O76080	148	STSQSEEKAP E L P KPKNRCFMCRKKV	-	-	-	-
6376	O76080	209	AKIRKENPVVVA E KIQRIIIIIIIIIII	+	-	-	-
6377	Q5BKZ1	383	IRKQQTNNQTEVV K IEKDVMEGVTV	-	-	-	-
6378	Q5BKZ1	247	ARGIKRKMMQPF N KPSGTFIKPKLAK	+	-	-	-
6379	P17020	263	SVLKNRHRSHMSE K AYQCCECGKAFRG	-	-	-	-
6380	P17020	487	SVLRKHQIIHTG E KPYRCSVCGKAFSH	+	-	-	-
6381	O60315	1018	DKTFQKSSSLLRH K YEHTGKRPHQCQI	-	-	-	-
6382	O60315	377	SAITQLRNKLENG K PLSMSEQTGLLKI	+	-	-	-
6383	O43361	503	KAFLTQAHLVGHQ K IHTGERPYECTQC	-	-	-	-
6384	O43361	466	LVQHQKIHTDAFS K RSDLIQHKRIDIR	+	-	-	-
6385	O43361	539	LVQHEKIHTDAFS K RSDLIQHKRIDLR	+	-	-	-
6386	Q96AP4	161	ETTYSPPECPCFG K IEEHSEDMETHVK	-	-	-	-
6387	Q96AP4	262	RSEESRQEIEEFQ K LQRQYGLDNSGGY	+	-	-	-
6388	O43264	215	LQTELHLYTEQSH K EKTPMPPISSVL	-	-	-	-
6389	O43264	777	LFQNTERRAAAL A KIKKKKKKKKKKKK	+	-	-	-
6390	O43149	2581	ISSTESELQQSY A KQRRSKSAALLHKE	-	-	-	-
6391	O43149	2667	DMFMQLEEKHEW E KILQKVLQGCREDM	+	-	-	-
6392	Q8IYH5	281	CTDSQVQVKLEDH K IVTACLPVEHVNQ	-	-	-	-
6393	Q8IYH5	394	SPRRAAPTRGSPT K NSSPYRENGQFEE	+	-	-	-
6394	Q8IYH5	701	GNRTAKQVASRVQ K YFIKLTAGIPVP	+	-	-	-