

**Online Supporting Information S4. Benchmark dataset used for studying the Lys-methylation.** It contains 1,884 samples, of which 226 are positive and 1,518 negative. These data were extracted from UniProtKB/Swiss-Prot database (version UniProt release 2013\_06).

**(A) List of 226 positive Lys-methylation sites and sequence**

Sequence #	Protein ID	Site	Sequences
1	P05141	52	ADKQYKGIIDC
2	Q9Y232	135	PNNARKQISRS
3	P00042	61	DANIKKAVEWS
4	P26358	70	ETKLRKEELSE
5	O75530	66	NAPGRKSWGKG
6	O75530	197	AINELKFHPRD
7	O75530	268	WRINSKRMNA
8	O75530	284	DYNPNKTNRPF
9	Q5VTE0	55	GKGSFKYAWVL
10	Q5VTE0	165	PPYSQKRYEEI
11	P0CE47	57	NAPEEKARGIT
12	O75367	123	RGSKGKLEAII
13	P62807	58	TGISSKAMGIM
14	P68432	5	MMARTKQTARK
15	P68432	10	KQTARKSTGGK
16	P68432	28	TKAARKSAPAT
17	P68432	37	ATGGVKKPHRY
18	P68432	80	IAQDFKTDLRF
19	P09988	15	KSTGGKAPRKQ
20	P09988	28	SKAARKAAPAT
21	P69150	28	SKAARKSAPAT
22	P69150	37	ATGGIKKPHRF
23	P59226	37	ATGGVKKPHRF
24	O15819	10	KQTARKSTGAK
25	O15819	28	SKQAHKQTPVS
26	O15819	40	SSGGVKKVHRF
27	O15819	83	IAQEFKTDLRF
28	Q55BN9	28	NKSSQKSFST
29	Q55BN9	37	STQGLKKTTRF
30	Q55BP0	37	VNEVLKKTTRF
31	P59169	28	TKAARKSAPTT
32	P59169	37	TTGGVKKPHRY
33	P84249	28	TKAARKSAPST
34	P84249	37	STGGVKKPHRY
35	P84249	38	TGGVKKPHRYR
36	P08898	28	TKAARKSAPAS
37	P08898	37	ASGGVKKPHRY
38	P61830	28	SKAARKSAPST
39	P62803	21	AKRHRKVLDRN
40	P04637	370	HSSHLKSKKGQ
41	P04637	373	HLKSKKGQSTS
42	P04637	382	TSRHKKLMFKT

43	Q86L05	122	LRQVPKLLGPG
44	Q7M1B9	105	REIFDKVLAMA
45	P80322	20	QISEFKMAFDM
46	P14909	203	ISRDNKIILLS
47	P14909	385	NEEVIKEGIQK
48	P39462	11	LVEIGKPLSLQ
49	P39462	213	AVEAAKRAGAD
50	P22498	116	NENELKRLDEY
51	P22498	135	YREIFKDLKSR
52	P22498	273	QPLTDKDMEAV
53	P22498	311	VRDDLKGRLDW
54	P22498	332	VKRTEKGYVSL
55	P0C835	16	KTPAGKEAELV
56	P80053	254	GVINEKGIDVG
57	P80053	260	GIDVGKAIEIK
58	P80053	372	DEEAKKLIVDR
59	P80053	391	YDYHQKKLEDH
60	P80053	392	DYHQKKLEDHD
61	P13123	5	MMVKVFKYKYG
62	P13123	7	VKVKFKYKGEE
63	P61991	5	MMATVFKYKYG
64	P61991	7	ATVKFKYKGEE
65	P13125	7	AKVRFKYKGEE
66	P13125	63	LARAEKKKKKK
67	P13125	64	ARAEKKKKKK
68	P39476	61	LQMLEKQKKKK
69	P39476	63	MLEKQKKKKKK
70	P39476	64	LEKQKKKKKKK
71	P26358	142	TPRRSKSDGEA
72	P55907	30	PVEPPKVLGIH
73	P81543	29	PVENPKVLGIH
74	P81539	29	YEPPTKLGIVG
75	P49949	29	PVDPPKVLGIH
76	P49949	101	AAIDVKPPPPP
77	P81542	30	ADPPVKEKALG
78	P00219	29	PVESPVKLVGH
79	O43524	46	QASPAKPSGET
80	O43524	149	SGQPRKCSSRR
81	O43524	230	NEGTGKSSWWI
82	O43524	262	SNKYTKSRGRA
83	O43524	271	RAAKKKAALQT
84	O43524	290	PSQLSKWPGSP
85	O43524	419	FPYTTKGSGLG
86	Q08369	299	CGLYMKLHGVP
87	P16403	34	GGTPRKASGPP
88	P16403	187	PKKAAKSAAKA
89	P10412	26	KKKARKSAGAA
90	P16401	27	KKATKKAAGAG
91	O75367	18	TSRSAKAGVIF
92	P40283	4	MMAPKAEKKP
93	P62807	47	VYKVLKQVHPD
94	P62807	109	PGELAKHAVSE

95	P68432	19	GKAPRKQLATK
96	P68432	24	KQLATKAARKS
97	P68432	57	IRRYQKSTELL
98	P68432	65	ELLIRKLPFOR
99	P68432	123	VTIMPKDIQLA
100	Q42681	28	TKAARKTPATG
101	P09988	19	GKAPRKQLASK
102	P09988	24	KQLASKAARKA
103	P69150	57	IRKYQKSTDLL
104	P69150	80	IAHEFKAELRF
105	O15819	19	AKVPRKHIGSK
106	O15819	24	KHIGSKQAHKQ
107	Q55BN9	19	AKVPRKHLGNK
108	Q55BN9	24	KHLGNKSSQKS
109	Q55BP0	19	AKVPRKHLSSK
110	Q55BP0	24	KHLSSKSSFPS
111	P61830	24	KQLASKAARKS
112	Q41811	21	RKRHRKVLDRN
113	O14979	161	SWDTSKDLTE
114	Q14103	119	KDYFSKFGEVV
115	P16862	180	LAYRMKTDTY
116	O00159	383	RDALAKAVYSR
117	P13538	36	KPFDAKSSVJV
118	Q96RI1	220	IQCKSKRLRKN
119	P04637	372	SHLKSCKGQST
120	P11940	299	VNLYVKNLDDG
121	P06400	810	YISPLKSPYKI
122	P06400	860	SDRVLKRSAEG
123	P0CX43	47	DPQRDKRFSGS
124	P47914	5	MMAKSKNHTTH
125	Q969Q0	53	YGGQTKPIFRK
126	P0CX27	40	LFAQGKRRYDR
127	P0CX27	55	FGGQTKPVFHK
128	P02393	77	KIGVIKVVRAL
129	P02393	88	TGLGLKEAKDK
130	P0A7K2	82	TGLGLKEAKDL
131	P07472	84	TGLGLKEAKAA
132	Q12962	189	SRSKSKDRKYT
133	Q04207	310	TYETFKSIMKK
134	P84747	2	PPPPPKVSPRW
135	Q53688	27	NLWYFKDLGVS
136	Q53688	105	LMDVLKMGKKS
137	Q53688	108	VLKMGKSKYY
138	Q53688	310	ISESIKKIKAQ
139	Q53688	326	FSYEVKRLASQ
140	Q53688	467	EEWKNKVEEWH
141	Q53688	508	FKERIKQHMIK
142	Q53688	513	KQHMIKSVREA
143	Q53688	519	SVREAKINTSW
144	Q53688	638	MYLTYKLLSLR
145	E5KWG9	117	AGGFTKTWSFP
146	B6A879	150	VGDKTKPKLSA

147	B6A879	235	LPQIGKGHIVP
148	B6A879	405	KAKLKKSNIDQ
149	B6A879	518	FFDIVKNYMDA
150	B6A879	620	LYNPGKEIYLK
151	B6A879	625	KEIYLKSISEI
152	Q9L5X8	325	SPFAGKEGKFV
153	Q9L5X8	394	PEVIIKEEDGQ
154	Q6NC90	67	ERLGGKVWVQG
155	Q6NC90	114	YREAVKHRQAA
156	Q6NC90	129	RLIRLKLKPG
157	Q9I756	9	VGIFYKLAGRG
158	D0ZRV8	216	EAFWAKLDALV
159	Q6NEZ3	267	VTEDNKASTSI
160	Q6NEZ3	440	EFEIPKTLAPG
161	D1BQI7	3	MMMYKYITIL
162	D1BQI7	17	GQIAQKLTATL
163	D1BQI7	63	FQNPQKLEQAV
164	D1BQI7	95	KALSRKNIRRV
165	D1BQI7	160	YNDPEKTDYEL
166	D1BQI7	214	GTHYDKPSFHH
167	Q9UKV3	654	SSNSRKSLSPG
168	P18281	35	NVTVKKVDRSS
169	P18281	72	DVHVKKVDRGA
170	Q9SJU4	395	EGMFVKGYTTY
171	Q9ZU52	387	KGMFVKGYTTY
172	P62157	116	TNLGEKLTDEE
173	P62152	95	FRVFDKDGNGF
174	P11118	149	KMMMSKKKKKK
175	P07463	116	TNLGEKLTDEE
176	P04573	96	ILRAFKVFDAN
177	P04573	117	KFIMQKVGEEP
178	P00889	395	EQGKAKNPWPN
179	P00044	78	YLTNPKKYIPG
180	P00044	79	LTNPKKYIPGT
181	P00063	80	YLLNPKKYIPG
182	P00063	94	VFPGLKKPQDR
183	P00078	4	MMPPKARAPL
184	P00078	83	YLENPKKFMPG
185	P00077	4	MMPPKAREPL
186	P00043	79	YLENPKKYIPG
187	P00076	85	AFAGIKAKKDR
188	P00042	79	LENPKKYIPGT
189	P00070	95	VFPGLKKPQER
190	P00047	94	AFGGLKKNKDR
191	P68105	36	CGGIDKRTIEK
192	P68105	79	DISLWKFETSK
193	P68105	318	KNVSVKDVRG
194	Q71V39	165	PAYSEKRYDEI
195	P02993	79	DIALWKFETAK
196	P02993	219	WNIERKEGKAD
197	P02993	318	KNVSVKELRRG
198	P02994	79	DIALWKFETPK

199	Q96KQ7	185	VHRAR <b>K</b> TMSKP
200	P53991	118	IPPGT <b>K</b> INSGK
201	P53991	124	INSGK <b>K</b> EVPTA
202	P07041	80	IAQDF <b>K</b> SDLRF
203	P10587	128	VINPY <b>K</b> QLPIY
204	P13538	131	TVN <b>PYK</b> WLPVY
205	P13538	552	TDTSF <b>K</b> NKLYD
206	P68696	104	GVYNE <b>K</b> IQPGT
207	P11416	347	LEQPD <b>K</b> VDMLQ
208	P27063	12	ASVGF <b>K</b> AGVKK
209	P27064	14	ASVGF <b>K</b> AGVKD
210	P04717	14	AKVGF <b>K</b> AGVKD
211	P04992	14	ASVGF <b>K</b> AGVKE
212	P0A7J7	4	MMMA <b>KK</b> VQAYV
213	P0A7J7	40	IMEF <b>C</b> KAFNAK
214	Q5SLP6	3	MMMM <b>KK</b> VVAVV
215	P0CX53	4	MMM <b>PPK</b> FPDNE
216	P0CX53	11	DPNEV <b>K</b> YLYLR
217	P62986	98	KMICR <b>K</b> CYARL
218	P55072	315	APKRE <b>K</b> THGEV
219	P05547	142	RGKF <b>I</b> KPTLKK
220	P05547	146	IKPTL <b>K</b> KVSKY
221	O95785	1162	PPTAR <b>K</b> MFPGL
222	B6A879	364	NISSD <b>K</b> DGENY
223	B6A879	390	GYSNR <b>K</b> EISIA
224	B6A879	400	ACSGV <b>K</b> AKLKK
225	B6A879	474	GIPME <b>K</b> IHLGY
226	B6A879	498	TRQYT <b>K</b> NGPAL

**(B) List of 1,518 negative Lys-methylation sites and sequence**

Sequence #	Protein ID	Site	Sequences
1	P05141	49	QITAD <b>K</b> QYKGI
2	P05141	94	FAFKD <b>K</b> YKQIF
3	P05141	96	FKDKY <b>K</b> QIFLG
4	P05141	105	LGGVD <b>K</b> RTOFW
5	P05141	245	MQSGR <b>K</b> GTDIM
6	P05141	272	GKAFF <b>K</b> GAWSN
7	Q9Y232	73	DKRKN <b>K</b> KGKTE
8	Q9Y232	74	KRKN <b>K</b> KGKTEY
9	Q9Y232	157	ALVIG <b>K</b> DHESK
10	Q9Y232	162	KDHES <b>K</b> NSQLF
11	P00042	11	KGSE <b>K</b> KGATLF
12	P00042	17	GATLF <b>K</b> TRCLQ
13	P00042	48	GRQSG <b>K</b> AEGYS
14	P00042	60	TDANI <b>K</b> KAVEW
15	P26358	58	LQTEI <b>K</b> NQLCD
16	P26358	83	YLAKV <b>K</b> SLLNK
17	P26358	177	AKGPA <b>K</b> RKPQE
18	P26358	198	IKEED <b>K</b> DQDEK

19	Q5VTE0	41	KRTIEKFEKEA
20	Q5VTE0	129	EAGISKNGQTR
21	P0CE47	238	ERGIKVGEEV
22	O75367	117	ELLAKKRGSKG
23	P62807	12	SAPAPKKGSKK
24	P09988	123	VTIQPKDMQLA
25	P69150	19	AKAPRKQLASK
26	Q55BP0	30	SSFPSKPVNEV
27	Q55BP0	65	DLLIKKLPFQR
28	P61830	126	QKKDIKLARRL
29	P62803	32	IQGITKPAIRR
30	P04637	164	AMAIYKQSQHM
31	P04637	386	KKLMFKTEGPD
32	Q86L05	43	KNYDTKKDKRF
33	Q86L05	53	FSGQIKIGTVT
34	Q86L05	97	IGPKNKKAIKK
35	Q86L05	105	IKKLSKKYDAF
36	Q86L05	147	EDMASKINDVK
37	Q86L05	152	KINDVKSTVKF
38	P14909	34	VEKTKIKIID
39	P14909	80	DELREKIAQYL
40	P14909	94	YGTDVKKEEVI
41	P14909	105	VTPGAKPALFL
42	P14909	142	KLLGGKPIYAN
43	P14909	194	PNDVKKIVDIS
44	P14909	257	GYIVAKREIIQ
45	P14909	285	QKAAVKAFDTF
46	P14909	313	YDELTKVKGVE
47	P39462	136	IVPHYKYMYKL
48	P39462	263	PKALAKQ GK YV
49	P22498	76	QKMGLKIARLN
50	P22498	138	IFKDLKSRGLY
51	P22498	256	KSVSKKPVGII
52	P22498	445	RFGLLKVDYNT
53	P0C835	53	KYFRHKLPDDY
54	P80053	16	YTQQVKKLYKV
55	P80053	54	RGSDGKLTTFM
56	P80053	170	IKITGKVDFAV
57	P13123	52	EKDAPKELLDM
58	P61991	40	DEGGGKTGRGA
59	P26358	284	DEKDEKKHRSQ
60	P26358	291	HRSQPKDLAAK
61	O75530	398	VEDPHKAKCTT
62	O75530	400	DPHKAKCTTTLT
63	Q5VTE0	371	AHIACKFAELK
64	P81542	20	DHAGHKVYAPA
65	P81542	32	PPVKEKALGIH
66	P00219	20	DHSGHKIYGPV
67	O43524	242	NPDGGKSGKAP
68	Q08369	311	PLAMRKEGIQT
69	P16403	110	FKLNKKAASGE
70	P16403	117	ASGEAKPKVKK

71	P16403	130	GTKPKKPVGAA
72	P16403	139	AAKKPKKAAGG
73	P10412	22	KTPVKKKARKS
74	P10412	34	GAAKRKASGPP
75	P10412	121	AKPKAKKAGAA
76	P10412	136	PAGAAKKPKKA
77	P10412	148	GAATPKKSAKK
78	P16401	21	EKSPAkkKATK
79	P16401	23	SPAkkKATKKA
80	P16401	35	GAGAAkRKATG
81	P16401	154	KKAVkKTPKKA
82	O75367	157	KKGARkSKKKQ
83	O75367	236	NTLEkKGGKEF
84	P40283	13	KPAEKkPASEK
85	P40283	33	KAPAEkKPKAG
86	P40283	52	AGGDkKKKMKK
87	Q41811	60	TRGVRkIFLEN
88	O14979	322	QQQQkKGGRGA
89	Q14103	231	CFITfKEEEPv
90	P16862	76	VEAHLkELNSI
91	P16862	197	LNRpQKAIaVM
92	P16862	525	AVNENkIVRKP
93	P16862	548	EAIQAKDFKRA
94	O00159	24	PHRPCKLALGS
95	O00159	274	KGQCAkVSSIN
96	O00159	285	DKSDWkVVRKA
97	O00159	486	DLVEEKFKGII
98	O00159	488	VEEKfKGIISI
99	O00159	595	ELSDkKRPETV
100	O00159	605	VATQfKMSLLQ
101	O00159	618	EILQSkEPAYV
102	P13538	85	SMNPPkYDKIE
103	P13538	207	ASGEKkKEEQS
104	P13538	260	FGATGkLASAD
105	P13538	354	KTAIYkLTGAV
106	Q96RI1	36	SMKPAkGVLTE
107	Q96RI1	196	ECRLRkCKEMG
108	Q96RI1	251	VTSTTKSCREK
109	Q96RI1	289	TNKILkKEEFSa
110	Q96RI1	335	QIALLkGSAVE
111	Q96RI1	474	RVNDHkFTPLL
112	P11940	30	AMLYEKfSPAG
113	P11940	113	KSIDNkALYDT
114	P11940	157	ERAIEkMNGML
115	P11940	277	RQTELkRKFEQ
116	P06400	8	PKTPRkTAATA
117	P06400	80	WLTWEkVSSVD
118	P06400	122	FTELOkNIEIS
119	P06400	143	IDTSTkVDNAM
120	P06400	164	FALFSkLERTC
121	P06400	228	LDYFIkLSPPM
122	P06400	327	EElYlKnkDLD

123	P06400	341	FLDHD <b>K</b> TLQTD
124	P0CX43	91	SVDDL <b>K</b> KLNKN
125	P47914	47	NMRFA <b>K</b> KHNKK
126	P47914	55	NKKGL <b>K</b> KMQAN
127	Q969Q0	6	MVNVP <b>K</b> TRRTF
128	Q969Q0	58	KPIFR <b>K</b> KAKTT
129	Q969Q0	59	PIFR <b>K</b> KAKTTK
130	Q969Q0	89	AIKR <b>C</b> KHFELG
131	P0CX27	76	RLECV <b>K</b> CKTRA
132	P0CX27	89	TLKR <b>C</b> KHFELG
133	P02393	91	GLKEA <b>K</b> DKVDG
134	P02393	114	EAE <b>E</b> A <b>K</b> KQLVE
135	P07472	98	APATL <b>K</b> EGMSK
136	Q12962	212	YGINV <b>K</b> KPHYF
137	Q04207	122	GIQCV <b>K</b> KRDLE
138	Q04207	221	CDKV <b>Q</b> KEDIEV
139	Q04207	301	HRIE <b>E</b> KRKRTY
140	Q04207	425	SAPVP <b>K</b> STQAG
141	Q53688	12	RLQLN <b>K</b> NFNFG
142	E5KWG9	29	TASHD <b>K</b> VWPIL
143	E5KWG9	135	VSELV <b>K</b> LPSIP
144	E5KWG9	278	I <b>A</b> STP <b>K</b> GEYHK
145	E5KWG9	283	KGEY <b>H</b> KIASYY
146	E5KWG9	292	YYQW <b>Q</b> KRVEKL
147	B6A879	93	TTADV <b>K</b> PTENI
148	B6A879	173	DGGGS <b>K</b> EEERG
149	B6A879	290	LREL <b>Q</b> KKAHAM
150	Q9L5X8	126	FAHGL <b>K</b> PIVVI
151	Q9L5X8	438	MAPDG <b>K</b> GRVRM
152	Q6NC90	9	HIDPT <b>K</b> EVFAQ
153	Q6NEZ3	66	YKFN <b>Q</b> KSNFSA
154	Q6NEZ3	108	GYK <b>N</b> A <b>K</b> LTKSS
155	Q6NEZ3	120	RINVG <b>K</b> NVKLD
156	Q6NEZ3	178	TFIPE <b>K</b> TILTN
157	Q6NEZ3	341	VMPGE <b>K</b> VSVSA
158	Q9UKV3	103	LVKRL <b>K</b> GALML
159	P18281	16	QGAAL <b>K</b> HAETV
160	P18281	34	ENVTV <b>K</b> KVDRS
161	P18281	52	K <b>P</b> HEL <b>K</b> HAETV
162	Q9SJU4	246	YDVAE <b>K</b> VWAEV
163	Q9ZU52	120	LYQST <b>K</b> DGKTF
164	Q9ZU52	123	STKDG <b>K</b> TFVDC
165	Q9ZU52	142	GIKVD <b>K</b> GLSPL
166	Q9ZU52	171	SAEY <b>Y</b> KQGARF
167	P62157	22	FSLFD <b>K</b> DGDGT
168	P11118	76	TLMSR <b>K</b> MHDTD
169	P07463	76	SLMAR <b>K</b> MKEQD
170	P04573	43	MDMLT <b>K</b> LGQTY
171	P04573	133	VEEAM <b>K</b> EADED
172	P00889	208	MDLIA <b>K</b> LPCVA
173	P00063	16	PAAGE <b>K</b> IFKTK
174	P00063	107	LIAYL <b>K</b> QSTAA



175	P00078	19	AARGEKLFKGR
176	P00077	19	AAKGEKIFKGR
177	P00077	22	GEKIFKGRAAQ
178	P00077	98	FAGIKKPQERA
179	P00043	60	YTDANKKKGVE
180	P00076	7	DAERGGKLFES
181	P00076	65	EETLHKFLENP
182	P00076	78	YVPGTKMAFAG
183	P00047	13	PGDASKGANLF
184	P00047	97	GLKKNKDRNDL
185	Q71V39	179	VSAYIKKIGYN
186	P02993	172	FEEIKKEVSAY
187	P02994	177	TSNFIKKVGYN
188	P02994	217	WEKETKAGVVK
189	Q96KQ7	139	MTGAGKSPPSV
190	P53991	49	TTDMSKRTVPT
191	P53991	55	RTVPTKLEEGE
192	P53991	69	NTYSNKAPFKA
193	P53991	81	VRSVEKITGPK
194	P53991	164	DPETGKEDPAK
195	P11416	94	FVCQDKSSGYH
196	P11416	166	DRNKKKKEAPK
197	P11416	360	LLEALKVYVRK
198	P27064	227	AEAIFKSQAET
199	P0A7J7	92	KSGSGKPNKDK
200	Q5SLP6	9	VVAVVKLQLPA
201	Q5SLP6	16	QLPAGKATPAP
202	Q5SLP6	70	F'TFVTKTPPAS
203	P0CX53	41	GLSPKKVGEDI
204	P62986	114	NCRKKKCGHTN
205	P55072	20	AILKQKNRPNR
206	P55072	190	EGEPIKREDEE
207	P55072	211	IGGCRKQLAQI
208	P55072	231	HPALFKAIGVK
209	P05547	21	DIDRKKAEVRK
210	P05547	26	KAEVKRLEEQ
211	P05547	46	MTPERKKKLRL
212	O95785	54	YLPVTKEGPRD
213	O95785	128	PRLLEKHAQGR
214	O95785	277	CSIYFKQKEHL
215	O95785	517	DFPLSKPLLHG
216	O95785	702	KHEERKCPYCP
217	O95785	754	FSFQKKKKVA
218	P05141	10	AVSFAKDFLAG
219	P26358	160	PRITRKRSTRQT
220	P26358	179	GPAKRKPQEES
221	P26358	203	KDQDEKRRRVT
222	O75530	89	CVNSLKEDHNQ
223	O75530	184	TMQCIKHVVGH
224	O75530	293	PFISQKIHFDP
225	O75530	322	DLILSKSCENA
226	Q5VTE0	146	YTLGVKQLIVG

227	Q5VTE0	179	VSTYIKKIGYN
228	Q5VTE0	215	WFKGWKVTRKD
229	Q5VTE0	255	LQDVYKIGGIG
230	P0CE47	249	EIVGIKETQKS
231	P0CE47	300	KPGTIKPHTKF
232	P0CE47	304	IKPHTKFESEV
233	P0CE47	314	VYILSKDEGGR
234	O75367	8	SRGGKKKSTKT
235	P62807	13	APAPKKGSKKA
236	P62807	24	VTKAQKKDGKK
237	P62807	29	KKDGKKRKRSR
238	P62807	31	DGKKRKRSRKE
239	P62807	86	LAHYNKRSTIT
240	Q55BN9	64	SELLIKKLPFQ
241	Q55BP0	64	SDLLIKKLPFQ
242	P62803	80	EHAKRKTVTAM
243	Q86L05	90	DIEALKKIGPK
244	Q86L05	95	KKIGPKNKKAI
245	Q7M1B9	18	AEKVLKSKTPV
246	P14909	36	KTKKIKIIDFG
247	P14909	263	REIIQKMGILA
248	P14909	301	MVSLFKKRRDV
249	P14909	315	ELTKVKGVEVS
250	P14909	321	GVEVSKPNGAF
251	P22498	72	HDNAQKMGLKI
252	P22498	102	NFDESKQDVTE
253	Q9Y232	204	PKSPVKSRTAV
254	Q9Y232	348	DIVVRKQDGFT
255	Q9Y232	360	ILLSTKSENN
256	P80053	20	VKKLYKVGELL
257	P80053	97	MIMTWKNSLLL
258	P80053	109	PYGGGKGGVRV
259	P80053	137	IQAIYKYLSE
260	P80053	313	PKVKAKLIVEG
261	P61991	21	DISKIKKVWRV
262	P26358	302	RRPEEKEPEKV
263	O75530	335	CWKPGKMEDDI
264	O75530	344	DIDKIKPSESN
265	Q5VTE0	376	KFAELKEKIDR
266	P55907	74	HPASEKKADPV
267	P81543	20	THEGHKVYGPV
268	P49949	20	EHQGHKVYGPV
269	O43524	195	CVPYFKDKGDS
270	Q08369	328	NLNKSKTPAGP
271	Q08369	402	SAVCSKLSPQG
272	P10412	17	PAPAEKTPVKK
273	P10412	127	KAGAAKAKKPA
274	P16401	22	KSPAKKKATKK
275	P16401	26	KKKATKKAAGA
276	P16401	37	GAAKRKATGPP
277	P16401	143	TPKKAKKAAGA
278	P16401	150	AAGAKKAVKKT

279	O75367	235	GNTLEKKGGE
280	P40283	43	GKKLPKEAGAG
281	P40283	111	LARYNKKPTIT
282	Q41811	17	GKGARKRHRKV
283	O14979	76	GGAAIKGRRR
284	O14979	142	KINASKNQDD
285	O14979	149	QQDDGKMFIGG
286	Q14103	67	ESEGAKIDASK
287	Q14103	111	WDTTKDLKDY
288	Q14103	129	VDCTLKLDPIT
289	Q14103	146	GFVLFKESESV
290	Q14103	176	RAKAMKTKEPV
291	Q14103	178	KAMKTKEPVKK
292	Q14103	255	SKCEIKVAMSK
293	P16862	69	DEKINKNVEAH
294	P16862	323	IEELLKTNRIS
295	P16862	336	QYERMKHLNIC
296	P16862	536	LMESVKLTKAV
297	P16862	539	SVKLTKAVAEA
298	P16862	588	KDKRLKIAIVN
299	O00159	527	HFLTHKLADQR
300	P13538	370	LKFKQKQREEQ
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303	Q96RI1	353	EIFNKKLPSGH
304	Q96RI1	434	LQKLCKIHQPE
305	P11940	104	GNIFIKNLDKS
306	P11940	213	KDLFGKFGPAL
307	P11940	254	DEMNGKELNGK
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309	P06400	130	EISVHKFFNLL
310	P06400	192	SALVVKVSWIT
311	P06400	279	IEVLCKEHECN
312	P06400	319	VENLSKRYEEI
313	P06400	427	IGYIFKEKFAK
314	P06400	429	YIFKEKFAKAV
315	Q86L05	156	VKSTVKFQLKK
316	Q86L05	207	KTLYVKTSMGP
317	P0CX43	39	LQVGLKNYDPQ
318	P0CX43	97	KLNKNKLIK
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320	P0CX43	102	KKLIKLSK
321	P47914	22	HRNGIKKPRSQ
322	P47914	23	RNGIKKPRSQR
323	P47914	48	MRFKAKHNKKG
324	P47914	92	KGVSRKLDRLA
325	P47914	124	CRPKAKAKAKA
326	P47914	149	PAQAPKRTQAP
327	Q969Q0	44	RRYDRKQSGYG
328	Q969Q0	100	GDKKRKQVIO
329	P0CX27	78	ECVKCKTRAQL
330	P02393	6	MSSITKEQVVE

331	P02393	72	AAGANKIGVIK
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333	P0A7K2	109	AEALKKALEEA
334	P07472	110	DGDEAKTKLEE
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336	Q12962	213	GINVKKPHYFT
337	Q04207	56	STDTTKTHPTI
338	Q04207	93	HELVGKDCRDG
339	Q53688	185	TLMSWKNPPSY
340	Q53688	417	DLRYYKISPDQ
341	E5KWG9	296	QKRVEKLLRSO
342	B6A879	11	TYTSSKAMSDI
343	B6A879	83	ADEINKIGNPT
344	B6A879	374	YVLLIKELRSA
345	B6A879	552	LFSEAKGHFIS
346	Q9L5X8	119	RFVTQKAFAHG
347	Q9L5X8	287	GLGELKISDTI
348	Q9L5X8	341	LERLEKELVHN
349	D0ZRV8	13	LIELVKKVNRN
350	D0ZRV8	194	WKAQQKMNEQR
351	Q6NEZ3	80	MPESVKAGTGF
352	Q6NEZ3	105	NLSGYKNAKLT
353	Q6NEZ3	111	NAKLTKSSIRI
354	Q6NEZ3	202	TTNADKPFATV
355	Q6NEZ3	369	APEDVKYIDGT
356	Q6NEZ3	407	WKNESKKNES
357	Q6NEZ3	461	YSNSLKDLVSI
358	D1BQI7	38	YGRQLKTRIPP
359	Q9UKV3	143	KOYLEKQOELL
360	Q9UKV3	223	DEKPRKGERRS
361	Q9UKV3	315	EIPRVKPEEMM
362	P18281	59	AETVDKSGPAI
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365	Q9SJU4	131	STTDGKKMVDV
366	Q9SJU4	132	TTDGKKMVDVL
367	Q9SJU4	348	QNTCLKTWGK
368	Q9ZU52	271	PGAEHKNKASP
369	Q9ZU52	348	QGKPEKIEASQ
370	P62157	14	QIAEFKEAFSL
371	P07463	14	QIAEFKEAFAL
372	P07463	22	FALFDKDGDT
373	P07463	78	MARKMKEQDSE
374	P04573	67	GPKGDKKNIGP
375	P04573	68	PKGDKKNIGPE
376	P04573	112	DFDEFKFIMQK
377	P00889	14	RLFGAKNASCL
378	P00889	34	SSTNLKDILAD
379	P00889	233	GAIDSKLDWSH
380	P00889	317	LTQLQKEVGKD
381	P00889	327	DVSDEKLRDYI
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383	P00889	393	LLEQGKAKNPW
384	P00063	21	KIFKTCAQCH
385	P00078	61	GYAYSKANAES
386	P00078	97	SFAGMKKPQER
387	P00077	33	CHTGAKGGANG
388	P00077	97	SFAGIKKPQER
389	P00043	7	PAPYEKKGSEKK
390	P00076	8	AERGGKLFESR
391	P00076	72	LENPKKYVPGT
392	P00076	88	GIKAKKDRQDI
393	P00047	87	FIPGTMMAFGG
394	P02993	244	SRPTEKPLRLP
395	P02994	129	EAGISKDGQTR
396	P02994	154	IVAVNKMDSVK
397	P02994	170	FQEIVKETSNF
398	P02994	184	VGYNPKTVPFV
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400	Q96KQ7	253	EVTLTKGDPGS
401	Q96KQ7	288	VSDSKSEVEA
402	Q96KQ7	344	RRKAKKKWRKD
403	P53991	101	IETEGKIPFWE
404	P53991	282	EQNNRKGKMY
405	P10587	33	DWSAKKLVWVP
406	P10587	67	QENGGKVTLSK
407	P10587	82	KMNPPKFSKVE
408	P10587	183	ESGAGKTENTK
409	P10587	189	TENTKKVIQYL
410	P11416	109	ACEGCKGFFRR
411	P11416	128	TCHRDKNCIIN
412	P11416	134	NCIINKVTRNR
413	P11416	171	KKEAPKPECSE
414	P11416	227	IDLWDKFSELS
415	P11416	234	SELSTKCI IKT
416	P27064	164	RDKLNKYGRPL
417	P27064	316	FRVLAKALRMS
418	P27064	466	VWKEIKFEFEA
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420	P04717	356	DDYIKKDRSRG
421	P04992	21	GVKEYKLTYYT
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425	Q5SLP6	109	VLEIAKQKMPD
426	P0CX53	96	DRKKDKNVKHS
427	P0CX53	99	KDKNVKHSGNI
428	P62986	27	TIENVKAKIQD
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430	P62986	112	AVNCRKKKCGH
431	P55072	136	FEVYLPYPFLE
432	O95785	105	IVRTMKPHAEL
433	O95785	373	YVQHAKLHMRE
434	O95785	479	VDYFGKAEPSL

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436	P05141	92	LNFAFKDKYKQ
437	P05141	166	LVKIYKSDGIK
438	Q9Y232	17	GKSRKKNWQYE
439	P00042	6	PAPFKKGSEKK
440	P00042	28	CHTVEKGGPHK
441	P00042	95	GLKKEKDRNDL
442	P26358	29	VRRRLKDLERD
443	P26358	45	ECVKEKLNLLH
444	P26358	67	CDLETKLRKEE
445	P26358	81	EGYLAKVKSLL
446	P26358	130	ANSPPKPLSKP
447	P26358	148	SDGEAKPEPSP
448	O75530	70	RKSWGKWKWS
449	O75530	72	SWGKWKWSKK
450	O75530	77	KWKSCKCKYSF
451	O75530	250	DLLGEKIMSCG
452	Q5VTE0	20	HVDSGKSTTTG
453	Q5VTE0	51	AAEMKGSFKY
454	Q5VTE0	84	KFETSKYYVTI
455	Q5VTE0	154	IVGVNKMDSTE
456	Q5VTE0	172	YEEIVKEVSTY
457	P0CE47	137	IVFLNKCDMVD
458	P0CE47	283	LLRGIKREEIE
459	P0CE47	325	HTPFFKGYRPQ
460	O75367	96	LNQLLKGVTIA
461	O75367	142	KSPSQKKPVSK
462	O75367	143	SPSQKKPVSKK
463	O75367	147	KKPVSKKAGGK
464	O75367	152	KKAGGKKGARK
465	O75367	153	KAGGKKGARKS
466	P62807	16	PKKGSKKAATK
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468	O15819	126	VTIMPKDIHLA
469	Q55BN9	123	VTIMVKDIQLA
470	P61830	38	TGGVKKPHRYK
471	P04637	24	FSDLWKLLPEN
472	P04637	139	FCQLAKTCPVQ
473	Q86L05	46	DTKKDKRFSGQ
474	Q86L05	78	CDEATKIGAEF
475	P80322	37	GDISTKELGTI
476	P14909	31	ARNVEKTKKIK
477	P14909	137	YAEVVKLLGGK
478	P39462	313	LAEAGKVKPMI
479	Q9Y232	312	GVTASKRKFID
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481	P0C835	6	MSSGKKAATK
482	P0C835	48	DPETGKYFRHK
483	P80053	45	RIIQVKIQIRG
484	P80053	231	GYIAGKFLSEM
485	P80053	265	KAIEIKEKTGS
486	P13123	22	TSKIKKVWRVG

487	P61991	13	YKGEEKQVDIS
488	P61991	53	EKDAPKELLQM
489	P39476	13	YKGEEKEVDIS
490	P26358	240	EERDEKEEKRL
491	P26358	243	DEKEEKRLRSQ
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494	P26358	281	EDGDEKDEKKH
495	P26358	285	EKDEKKhRSQP
496	P26358	296	KDLAAKRRPEE
497	Q5VTE0	273	ETGVLPKGMVV
498	P81539	13	SLPVVKEEQGV
499	P81539	19	EEQGVKIYGTY
500	P49949	73	HPASEKKADPI
501	O43524	270	GRAAKKKAALQ
502	O43524	455	TIQENKPATFS
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504	Q08369	320	QTRKRKPKNLN
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506	P16403	26	KKKAAKKAGGT
507	P16403	136	PVGAAKKPKKA
508	P16403	152	PKKSAKKTTPK
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510	P10412	32	SAGAAKrkASG
511	P10412	139	AAKKPKKATGA
512	P16401	67	LAALKKALAAG
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514	O75367	160	ARKSKKKQGEV
515	O75367	196	LFLGQKLNLIH
516	O75367	250	VLELRKKNGPL
517	P40283	40	PKAGKLPKEA
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519	P40283	98	NDIFEKLAQEA
520	O14979	137	FAEGSKINASK
521	O14979	212	ELKEHKLDGKL
522	O14979	224	DPKRAKALKGK
523	Q14103	242	KKIMEKKYHNV
524	P16862	33	IDFYTKFLSLE
525	P16862	106	DILAVKDTLNA
526	P16862	144	GVTSTKNAVST
527	P16862	276	CMEFKKREGRL
528	P16862	551	QAKDFKRAMSL
529	O00159	289	WKVVVRKALTVI
530	O00159	444	NYCNEKLOQLF
531	O00159	627	YVRCIKPNDAK
532	P13538	50	KESFVKGTIQS
533	P13538	56	GTIQSKEGGKV
534	P13538	206	AASGEKKKEEQ
535	P13538	273	TYLLEKSRVTF
536	P13538	366	HYGNLKFQKQ
537	Q96RI1	158	TCEGCKGFFRR
538	Q96RI1	174	AVYKCKNGGNC

539	Q96RI1	224	SKRLRKNVKQH
540	Q96RI1	384	MFSFYKSIGEL
541	Q96RI1	390	SIGELKMTQEE
542	P11940	80	DVIKGPVVRIM
543	P11940	129	NILSCKVVCDE
544	P11940	229	TDESGKSKGFG
545	P11940	231	ESGKSKGFGFV
546	P11940	333	EGGRSKGFGFV
547	P11940	348	PEEATKAVTEM
548	P06400	154	SRLKKYDVLV
549	P06400	447	GSQRYKLGVRL
550	P0CX43	18	VKELLKYSNET
551	P0CX43	105	IKKLSKKYNAF
552	P47914	15	HNQSRKWHRNG
553	P47914	63	QANNAKAMSAR
554	P47914	73	RAEAIKALVKP
555	P47914	126	PKAKAKAKAKD
556	P47914	130	AKAKAKDQTKA
557	Q969Q0	13	RRTFCCKCGKH
558	Q969Q0	14	RTFCKKCGKHQ
559	Q969Q0	22	KHOPHKVTQYK
560	Q969Q0	27	KVTQYKKGKDS
561	Q969Q0	97	ELGGDKKRKGQ
562	P0CX27	6	MVNVPKTRKTY
563	P0CX27	9	VPKTRKTYCKG
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567	P02393	102	APSTLKEAVSK
568	P0A7K2	66	AAGANKVAVIK
569	P0A7K2	96	APAALKEGVSK
570	Q04207	62	THPTIKINGYT
571	Q53688	216	QESHSKILDLD
572	Q53688	250	SIIKNKIIIVE
573	Q53688	302	NFTAEEKISISE
574	Q53688	429	HVFNQKRRGKI
575	E5KWG9	16	YSIIEKTAQVV
576	E5KWG9	84	HGLTPKTDHPV
577	E5KWG9	258	FERLIKSAFYD
578	B6A879	148	HYVGDKTKPKL
579	B6A879	152	DKTKPKLSAYI
580	Q9L5X8	54	SNDIEKERGIT
581	Q9L5X8	63	ITILAKNTAIN
582	Q9L5X8	133	IVVINKIDRPG
583	Q9L5X8	254	KTRNGKVGTVM
584	Q9L5X8	427	NIGLRKGELKD
585	Q9L5X8	545	NALKGKQLTNV
586	D0ZRV8	14	IELVKVNRNK
587	Q6NEZ3	92	ALIKIKDISVS
588	Q6NEZ3	208	PFATVKVDPAD
589	Q6NEZ3	238	ATVPEKLNEM
590	Q6NEZ3	242	EKLNEKMDGKV



591	Q6NEZ3	311	TELDTKKPEDT
592	Q6NEZ3	403	YDPEWKNESKK
593	Q9UKV3	58	PSTSRKMAELE
594	Q9UKV3	70	VTLDGKPLQAL
595	Q9UKV3	91	QRGLAKSGQKS
596	P18281	71	EDVHVKKVDRG
597	Q9SJU4	10	TATMLKASPVK
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599	Q9SJU4	150	GIKVDKGLVPL
600	Q9SJU4	378	LAQLGKYTGEG
601	Q9ZU52	238	LEVAEKVWSEV
602	P11118	144	YEEFVKMMMSK
603	P04573	81	LTLCSKWVRQD
604	P04573	153	FMDLIKKSNA
605	P00044	11	AGSAKKGATLF
606	P00063	35	KGAGHKQGNL
607	P00043	11	EKGSEKKGANL
608	P00070	17	PTTGEKIFKTK
609	P02993	84	KFETAKYYVTI
610	P02993	171	RFEEIKKEVSA
611	P02994	44	IEKFEKEAAEL
612	P02994	178	SNFIKKGYNP
613	Q96KQ7	53	EETLPKATPDS
614	Q96KQ7	122	PSSPSKGGSCP
615	Q96KQ7	229	LAKRRKLNSSG
616	Q96KQ7	348	KKKWRKDSPPW
617	Q96KQ7	354	DSPWVKPSRKR
618	Q96KQ7	361	SRKRRKREPPR
619	P53991	73	NKAPFKAKVRS
620	P53991	251	GNSDAKLYDEE
621	P53991	262	LQAIKAYPGQ
622	P10587	85	PPKFSKVEDMA
623	P10587	142	IIDMYKGKKRH
624	P68696	81	RSIYGKKSAG
625	P68696	82	SIYGKKSAGV
626	P68696	94	TVKTSKSILVG
627	P68696	116	ANVVEKLADYL
628	P11416	155	DVGMSKESVRN
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630	P27064	146	PTAYIKTFQGP
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634	P0A7J7	97	KPNKDKVGKIS
635	P0A7J7	113	EIAQTKAADMT
636	Q5SLP6	86	AAGLEKGAHKP
637	P0CX53	48	GEDIAKATKEF
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639	P62986	11	KTLTGKTITLE
640	P62986	48	LIFAGKQLEDG
641	P62986	93	KYNCDKMICRK
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643	P55072	18	STAILKQKNRP
644	P55072	45	SLSQPKMDELQ
645	P55072	60	DTVLLKGKKRR
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650	P05547	63	AEELKKEQERK
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652	P05141	43	VQHASKQITAD
653	P05141	163	GDCLVKIYKSD
654	P05141	171	KSDGIKGLYQG
655	P05141	206	MLPDPKNTHIV
656	Q9Y232	116	RRHTEKQKEST
657	P00042	33	KGGPHKVGPNL
658	P26358	188	ESERAKSDESI
659	P26358	233	GTRTEKKEEERD
660	Q5VTE0	100	HRDFIKNMITG
661	P0CE47	38	TTVLAKEYGGA
662	P0CE47	253	IKETQKSTCTG
663	O75367	7	SSRGGKKKSTK
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665	O75367	137	PAKKAKSPSQK
666	P69150	54	LREIRKYQKST
667	P69150	123	VTIMTKDMQLA
668	P59226	57	IRKYQKSTELL
669	P62803	60	TRGVLKVFLFN
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671	P62803	92	VVYALKRQGR
672	P04637	319	SSPQPKKKPLD
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674	P04637	357	DAQAGKEPGGS
675	Q86L05	61	TVTTPKLSVVCV
676	Q86L05	133	LNKVGKFPDLL
677	Q7M1B9	57	RLTIAKVNTDD
678	P80322	6	SDDYVKARVMF
679	P80322	12	ARVMFKEEQIS
680	P14909	51	DLPTFKRIRDA
681	P14909	58	IRDAAKEALDQ
682	P14909	169	QSKISKRTKMI
683	P14909	242	VNGFSKTFST
684	P14909	354	KLIEEKGVVTI
685	P39462	22	EIGVPKPKGPQ
686	P39462	73	HEIAGKIEEVG
687	P39462	239	RITESKGVDAV
688	P39462	259	LSVYPKALAKQ
689	P39462	315	EAGKVKPMITK
690	P39462	338	NLENFKAIGRQ
691	P22498	35	NTDWYKVVHDP
692	P22498	251	AYDGIKSVSKK
693	P0C835	9	GKKAVKVKTPA
694	P80053	17	TQQVKKLYKVG

695	P80053	207	KEAANKFIGGV
696	P80053	304	ENVINKFNAPK
697	P80053	415	VVRAMKARGIL
698	P13123	13	YKGEEKEVDTS
699	P13123	21	DTSKIKKVWRV
700	P13123	39	YDDNGKTGRGA
701	P13123	48	GAVSEKDAPKE
702	P26358	250	LRSQTKKEPTPK
703	O75530	375	MDFWQKMLALG
704	Q5VTE0	392	LEDGPKFLKSG
705	P55907	75	PASEKKADPVN
706	O43524	259	MDNSNKYTKSR
707	Q08369	318	GIQTRKRKPKN
708	P16403	21	EKAPVKKKAAK
709	P16403	63	SLAALKKALAA
710	P16403	97	TLVQTKGTGAS
711	P16403	122	KPKVKKAGGTK
712	P16403	127	KAGGTPKPKPV
713	P16403	129	GGTKPKKPVGA
714	P10412	23	TPVKKKARKSA
715	P10412	129	GAAKAKKPAGA
716	P16401	133	AAKAKKPAGAT
717	O75367	226	ADIDLKDDLGN
718	O75367	239	EKKGGKEFVEA
719	P40283	36	AEKKPKAGKKL
720	P40283	57	KKMKKKSJET
721	P40283	69	KIYIFKVLKQV
722	P40283	142	VSEGTKAVTKF
723	Q41811	80	EHARRKTVTAM
724	O14979	209	KVLELKEHKLD
725	O14979	250	SEEQIKEYFGA
726	O14979	269	LPMDTKTNERR
727	O14979	288	DEEVPKLLLES
728	O14979	302	QIGSGKCEIKV
729	Q14103	98	QREEWKMFIGG
730	Q14103	153	SESVDKVMQK
731	Q14103	158	KVMDQKEHKLN
732	Q14103	218	LPMDNKTNKRR
733	Q14103	341	QSGYGKVSRRG
734	P16862	58	DSISLKILLRP
735	P16862	225	RSALFKGCRAF
736	P16862	248	GPEYIKEFHWE
737	P16862	432	CDIVSKHRSRG
738	P16862	585	KLPKDKRLKIA
739	O00159	281	SSINDKSDWKV
740	O00159	361	RKIIAKGEELL
741	O00159	455	IELTLKSEQEE
742	O00159	561	TGFLDKNNDLL
743	O00159	578	TMCSSKNPIMS
744	P13538	31	IEAQNKPFDAK
745	P13538	88	PPKYDKIEDMA
746	P13538	208	SGEKKKEEQSG

747	P13538	297	IMSNK <b>K</b> PELID
748	P13538	386	TEVAD <b>K</b> AAYLM
749	P13538	400	SAELL <b>K</b> ALCYP
750	P11940	108	IKNLD <b>K</b> SIDNK
751	P11940	167	LLNDR <b>K</b> VFVGR
752	P11940	221	PALSV <b>K</b> VMTDE
753	P11940	246	HEDA <b>Q</b> KAVDEM
754	P11940	312	DERLR <b>K</b> EFSPF
755	P11940	371	ALA <b>Q</b> R <b>K</b> EERQA
756	P11940	512	TVP <b>Q</b> Y <b>K</b> YAAGV
757	P06400	94	GGY <b>I</b> <b>Q</b> <b>K</b> KKELW
758	P06400	236	PPML <b>L</b> <b>K</b> EPYKT
759	P06400	417	KES <b>I</b> L <b>K</b> RVKDI
760	Q86L05	195	LVSL <b>L</b> <b>K</b> KGWQN
761	P0CX43	54	FSG <b>S</b> L <b>K</b> LPNCP
762	P0CX43	92	VDDL <b>K</b> LNKNK
763	P0CX43	133	LSK <b>A</b> G <b>K</b> FPTPV
764	P0CX43	160	IKF <b>Q</b> L <b>K</b> KVLCL
765	P0CX43	196	VSL <b>L</b> <b>K</b> KNWQNV
766	P47914	87	KPK <b>I</b> P <b>K</b> GVSrk
767	P47914	106	HPK <b>L</b> G <b>K</b> RARAR
768	P47914	114	RARIA <b>K</b> GLRLC
769	Q969Q0	30	QY <b>K</b> K <b>G</b> KDSLya
770	Q969Q0	64	KAK <b>T</b> <b>K</b> KIVLR
771	Q969Q0	65	AK <b>T</b> <b>K</b> KIVLRL
772	Q969Q0	80	PNC <b>R</b> S <b>K</b> RMLAI
773	P0CX27	32	QY <b>K</b> A <b>G</b> KASLFA
774	P0CX27	63	FHK <b>K</b> A <b>K</b> TTKKV
775	P0CX27	66	KAK <b>T</b> <b>K</b> KVVLR
776	P0CX27	98	LG <b>G</b> E <b>K</b> <b>Q</b> KGQA
777	P02393	26	LSE <b>F</b> <b>I</b> <b>K</b> ELEEK
778	P07472	103	KE <b>G</b> M <b>S</b> KEDGDE
779	Q12962	175	AL <b>Q</b> H <b>C</b> KMKGTA
780	Q04207	37	MR <b>F</b> RY <b>K</b> CEGRS
781	Q04207	123	I <b>Q</b> C <b>V</b> <b>K</b> KRDLEQ
782	Q04207	315	KS <b>I</b> M <b>K</b> KSPFNG
783	Q53688	140	DT <b>V</b> I <b>S</b> KGLLKI
784	Q53688	144	SK <b>G</b> L <b>L</b> KIVKDG
785	Q53688	265	F <b>Q</b> E <b>E</b> L <b>K</b> LNSDG
786	Q53688	379	PE <b>A</b> Y <b>T</b> <b>K</b> LQQYM
787	E5KWG9	68	F <b>T</b> M <b>L</b> P <b>K</b> GLDPY
788	E5KWG9	94	V <b>G</b> S <b>L</b> L <b>K</b> EVHEN
789	E5KWG9	126	F <b>P</b> S <b>A</b> E <b>K</b> LKGVS
790	E5KWG9	168	G <b>I</b> D <b>Y</b> S <b>K</b> RTMNL
791	B6A879	210	G <b>D</b> I <b>G</b> N <b>K</b> SKKVQ
792	B6A879	298	H <b>A</b> M <b>G</b> H <b>K</b> LDLAF
793	B6A879	402	S <b>G</b> V <b>K</b> A <b>K</b> LKKS <b>N</b>
794	B6A879	565	T <b>P</b> R <b>T</b> V <b>K</b> QKGEY
795	Q9L5X8	22	H <b>V</b> D <b>H</b> G <b>K</b> TTLVD
796	Q9L5X8	165	D <b>Q</b> L <b>D</b> F <b>K</b> VVYAS
797	Q9L5X8	236	T <b>R</b> G <b>S</b> V <b>K</b> ANQOV
798	Q9L5X8	359	T <b>D</b> D <b>P</b> D <b>K</b> FRVSG

799	D0ZRV8	76	IETLQKSIDNE
800	Q6NEZ3	90	FDALIKIKDIS
801	Q6NEZ3	280	DTSGSKTITAR
802	Q6NEZ3	312	ELDTKKPEDTD
803	Q6NEZ3	408	KNESKKNESY
804	Q9UKV3	41	EGRWRKLPKMP
805	Q9UKV3	81	RVTDLKAALEQ
806	Q9UKV3	113	LENLQKHSTPH
807	Q9UKV3	138	QNSFIKQYLEK
808	Q9UKV3	220	DSDDEKPRKGE
809	Q9UKV3	349	QEEARKSHLAR
810	P18281	23	AETVDKSAPQI
811	Q9SJU4	358	KEENVKAAQDI
812	Q9SJU4	369	LLARAKANSLA
813	Q9SJU4	389	ESEEAKEGMFV
814	Q9ZU52	53	LVKTAKSIASP
815	Q9ZU52	273	AEHKNKASPET
816	Q9ZU52	345	RTWQKPEKIE
817	Q9ZU52	354	IEASQKALLVR
818	Q9ZU52	361	LLVRAKANSLA
819	P62157	78	MARKMKDTDSE
820	P04573	50	GQTYTKRETEA
821	P04573	156	LIKKSKNALKE
822	P00889	107	QKMLPKAKGGE
823	P00889	321	QKEVKGKDVSD
824	P00044	60	TDANIKKNVLW
825	P00044	61	DANIKKNVLWD
826	P00078	22	GEKLFKGRAAQ
827	P00077	61	GFAYSKANADS
828	P00043	96	GLKKAADRNDL
829	P00070	64	AGNKNKAVIWE
830	P00047	61	YTDANKQAGIT
831	Q71V39	215	WFKGWKVERKE
832	P02993	222	ERKEGKADGKT
833	P02994	84	KFETPKYQVTV
834	Q96KQ7	28	ALLEKETRGA
835	Q96KQ7	200	PPVPEKRPPEI
836	Q96KQ7	219	VHSLGKVTSDL
837	Q96KQ7	226	TSDLAKRRKLN
838	P53991	169	KEDPAKKGLCS
839	P53991	194	TGPTGKVLLLP
840	P10587	50	EAASIKEEKGD
841	P10587	66	LQENGGKVTLS
842	P10587	77	KDDIQKMNPPK
843	P10587	136	PIYSEKIIDMY
844	P11416	193	IEKVRKAHQET
845	P11416	238	TKCIIKTVEFA
846	P27064	21	GVKDYKLTYYT
847	P27064	128	NVFGFKALRAL
848	P04717	81	SLDRYKGRCYE
849	P04717	316	FRVLAALRLS
850	P04992	305	VIDRQKNHGIH

851	P0A7J7	45	KAFNAKTDSIE
852	P0A7J7	82	AVLLKKAAGIK
853	Q5SLP6	80	SYLIRKAAGLE
854	Q5SLP6	111	EIAKQKMPDLN
855	P0CX53	54	ATKEFKGIKVT
856	P0CX53	63	VTVQLKIQNRQ
857	P62986	63	DYNIQKESTLH
858	P62986	113	VNCRKKKCGHT
859	P55072	63	LLKGGKRREAV
860	P55072	81	TCSDEKIRMNR
861	P55072	164	RAVEFKVVETD
862	P55072	277	PEIMSKLAGES
863	P55072	288	ESNLRKAFEEA
864	P05547	20	DDIDRKKAEVR
865	P05547	55	RLLLRKKAAEE
866	P05547	99	LRAIIKEYFDH
867	O95785	341	EIQKLKQVPGD
868	O95785	743	SAEEVKAIERR
869	Q9Y232	27	EGPTQKLFLKR
870	Q9Y232	84	YLVRWKGVDSE
871	Q9Y232	118	HTEKQKESTLT
872	Q9Y232	185	SLSSRKNMDLA
873	P00042	10	KKGSEKKGATL
874	P26358	88	KSLLNKDLSLE
875	P26358	194	SDESIKEEDKD
876	O75530	20	MPAAKQKLSS
877	O75530	79	KSKKCKYSFKC
878	O75530	83	CKYSFKCVNSL
879	O75530	275	MMNAIKESYDY
880	Q5VTE0	30	GHLIYKCGGID
881	Q5VTE0	62	AWVLDKLKAER
882	P0CE47	188	AEWEAKILELA
883	P0CE47	264	VEMFRKLLDEG
884	O75367	73	ARDNKKGRVTP
885	P62807	21	KKAVTKAQKKD
886	P62807	28	QKKDGKKRKRS
887	P61830	116	AAIHAKRVTIQ
888	P61830	122	RVTIQKKDIKL
889	P62803	9	RGKGGKGLGKG
890	P62803	45	RRGGVKRISGL
891	P04637	120	HSGTAKSVTCT
892	P04637	351	EALELKDAQAG
893	Q86L05	38	LQINLKNYDTK
894	Q86L05	44	NYDTKKDKRFS
895	Q86L05	59	IGTVTKPKLSV
896	Q86L05	91	IEALKKIGPKN
897	Q86L05	101	NKKAIKKLSKK
898	Q86L05	106	KKLSKKYDAFL
899	Q7M1B9	20	KVLKSKTPVVV
900	Q7M1B9	44	APILDKLAGGY
901	Q7M1B9	82	TLVIFKDGREV
902	P80322	104	FRVLDKNGDGF

903	P80322	112	DGFIDKDEFRA
904	P14909	23	TTLLEYKEIARN
905	P14909	172	ISKRTKMIVFN
906	P14909	302	VSLFKKRRDVM
907	P22498	124	DEYANKDALNH
908	P22498	328	TRTVVKRTEKG
909	P22498	451	VDYNTKRLYWR
910	P0C835	11	KAVKVKTPAGK
911	P0C835	24	ELVPEKVWALA
912	P80053	117	VRVDPKCLTRE
913	P80053	166	LDEYIKITGKV
914	P13123	19	EVDTSKIKKVV
915	P61991	9	VKFKYKGEEKQ
916	P61991	22	ISKIKKVWRVG
917	P13125	9	VRFKYKGEEKE
918	P13125	52	EKDAPKELMDM
919	P39476	19	EVDISKIKKVV
920	P26358	257	PTPKQKLKEEP
921	O75530	342	EDDIDKIKPSE
922	O75530	408	TLTHHKCGAAI
923	Q5VTE0	290	VTTEVKSVEMH
924	Q5VTE0	313	VGFKVKNVSVK
925	Q5VTE0	330	VAGDSKNDPPM
926	Q5VTE0	386	RRSGKKLEDGP
927	P49949	74	PASEKKADPIN
928	O43524	663	NFTGAKQASSQ
929	Q08369	245	CGLYHKMNGIN
930	Q08369	366	EMRPIKTEPGL
931	P16403	64	LAALKKALAAA
932	P16403	106	ASGSFKLNKKA
933	P16403	119	GEAKPKVKKAG
934	P16403	140	AKKPKKAAGGA
935	P10412	21	EKTPVKKKARK
936	P10412	119	GEAKPKAKKAG
937	P10412	122	KPKAKKAGAAK
938	P16401	17	PAPVEKSPAKK
939	P16401	149	KAAGAKKAVKK
940	P16401	153	AKKAVKKTPEK
941	O75367	161	RKSKKKQGEVS
942	O75367	167	QGEVSKAASAD
943	P40283	8	PKAEKPAEKK
944	P40283	18	KPASEKPVEEK
945	P40283	39	KPKAGKKLPKE
946	P40283	54	GDKKKKMKKKS
947	P40283	64	SVETYKIYIFK
948	P40283	72	IFKVLKQVHPD
949	P40283	105	AQEASKLARYN
950	O14979	221	KLIDPKRAKAL
951	O14979	234	KEPPKVFVGG
952	Q14103	72	KIDASKNEEDE
953	Q14103	110	SWDTTKDLKD
954	Q14103	170	KVIDPKRAKAM

955	Q14103	182	TKEPVKKIFVG
956	Q14103	197	DTPEEKIREYF
957	Q14103	221	DNKTNKRRGFC
958	Q14103	237	EEEPVKKIMEK
959	Q14103	243	KIMEKKYHNVG
960	Q14103	251	NVGLSKCEIKV
961	P16862	275	RCMEFKKREGR
962	P16862	369	LDRICKAIDYV
963	P16862	529	NKIVRKPLMES
964	P16862	583	EPKLPKDKRLK
965	O00159	151	KTEATKRLLOF
966	O00159	224	SYLLEKSRVVH
967	O00159	336	TENQLKYLTRL
968	O00159	404	RSLASKDVESP
969	O00159	477	QYFNNKIICDL
970	O00159	571	LFRNLIKETMCS
971	P13538	23	LRKSEKERIEA
972	P13538	108	VLYNLKERYAA
973	P13538	214	EEQSGKMOGTL
974	Q96RI1	188	MYMRRKQOECR
975	Q96RI1	227	LRKNVKQHADQ
976	Q96RI1	317	LVEFTKKLPGF
977	Q96RI1	318	VEFTKKLPGFQ
978	P11940	196	TNVYIKNFGED
979	P11940	259	KELNGKQIYVG
980	P11940	324	TITSAKVMMEG
981	P11940	361	RIVATKPLYVA
982	P06400	63	TALCQKLIKIPD
983	P06400	95	GYIQKKKELWG
984	P06400	153	MSRLLKKYDVL
985	P06400	265	SARIAKQLEND
986	P06400	329	IYLNKNDLDAR
987	P06400	412	CTVNPKESILK
988	P06400	462	MESMLKSEEER
989	P0CX43	78	DVDRAKSCGVD
990	P0CX43	95	LKKLNKNKKLI
991	P0CX43	118	SEVLIKQVPRL
992	P0CX43	156	VRSTIKFQLKK
993	P47914	52	KKHNKGLKKM
994	P47914	56	KKGLKMQANN
995	P47914	77	IKALVKPKEVK
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997	Q969Q0	98	LGGDKRKGQV
998	P0CX27	24	KHTQHKTQYK
999	P0CX27	46	RRYDRKQSGFG
1000	P0CX27	60	KPVFHKAKTT
1001	P02393	66	FDVILKAAGAN
1002	P02393	115	AEEAKQOLVEA
1003	P0A7K2	108	DAEALKKALEE
1004	P07472	67	TSAGEKKNVI
1005	P07472	73	KVNVIKVVREI
1006	Q12962	108	ANGDVKPVVSS



1007	Q12962	177	QHCKMKGTASG
1008	Q04207	79	ISLVTKDPPHR
1009	Q53688	66	ELGGEKEYRRL
1010	Q53688	176	YDTLQKQNYTL
1011	Q53688	362	VKECDKTNEIE
1012	Q53688	371	IEEATKRNPEA
1013	Q53688	445	STHDTKFSEDV
1014	E5KWG9	129	AEKLGKVSELV
1015	B6A879	43	VIFDGKVYTNT
1016	B6A879	531	SLSMGKNGFVL
1017	Q9L5X8	431	RKGELKDMAPD
1018	D0ZRV8	19	KVNRNKVPTPM
1019	Q6NEZ3	123	VGKNVKLDGNQ
1020	Q6NEZ3	352	SLLPNKAPIRV
1021	Q6NEZ3	455	QMGVYKYSNSL
1022	D1BQI7	90	MASIVKALSrk
1023	Q9UKV3	95	AKSGQKSALVK
1024	Q9UKV3	268	ADRNLKTEEEE
1025	Q9UKV3	302	EAPILKEFKEE
1026	Q9UKV3	325	MDERPKTRSQE
1027	Q9SJU4	293	ASYTLKLLRNR
1028	Q9ZU52	8	SASFVKPNTLS
1029	Q9ZU52	370	LAQLGKYSAEG
1030	Q9ZU52	382	NEDAKKGMFVK
1031	P62157	76	TMMARKMKDTD
1032	P04573	64	EARGPKGDKKN
1033	P04573	154	MDLIKKSKNAL
1034	P00889	43	ADLIPKEQARI
1035	P00889	103	IPECQKMLPKA
1036	P00889	352	HAVLRKTDPRY
1037	P00889	450	PLERPKSMSTD
1038	P00063	61	YSAANKNMAVN
1039	P00078	84	LENPKKFMPGT
1040	P00078	90	FMPGTKMSFAG
1041	P00043	18	GANLFKTRCLQ
1042	P00047	19	GANLFKTRCAQ
1043	P00047	81	LENPKKFIPGT
1044	Q71V39	84	KFETTKYYITI
1045	Q71V39	172	YDEIVKEVSAY
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1047	P02994	159	KMDSVKWDESR
1048	Q96KQ7	131	CPSRAKMSMTG
1049	P53991	122	TKINSKGKEVP
1050	P53991	291	MYIQDKVEEYA
1051	P53991	315	YFCGLKGMPG
1052	P07041	123	VTIQSKDIQLA
1053	P10587	53	SIKEEKGDEVT
1054	P10587	144	DMYKGGKRHEM
1055	P10587	188	KTENTKKVIQY
1056	P10587	204	SSHKGKDTSI
1057	P10587	205	SHKGKDTSIT
1058	P11416	262	QITLLKAACLD

1059	P11416	365	KVYVRKRRPSR
1060	P27064	32	PEYETKDTDIL
1061	P27064	201	GLDFTKDDENV
1062	P27064	252	CEEMMKRAIFA
1063	P04717	32	PDYQTKDTDIL
1064	P04717	450	IREACKWSPEL
1065	P04992	81	SLDRYKGHRYR
1066	P0A7J7	10	VQAYVKLQVAA
1067	P0A7J7	51	TDSIEKGLPIP
1068	P0A7J7	100	KDKVGKISRAQ
1069	P0CX53	40	LGLSPKKVGED
1070	P0CX53	86	VITALKEPPRD
1071	P55072	217	QLAQIKEMVEL
1072	P05547	35	EQSLKKQKKGF
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1075	P05547	47	TPERKKKLRL
1076	P05547	48	PERKKKLRLLL
1077	P05547	74	AGERRKIIDQR
1078	P05547	112	QIESDKYDVEL
1079	P05547	122	LEIIRKDYEIN
1080	P05547	139	NDLRGKFIKPT
1081	O95785	279	IYFKQKEHLL
1082	O95785	332	QASREKIIIEE
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1085	P05141	23	AAAIKTAVAP
1086	Q9Y232	31	QKLFLKRNNVS
1087	Q9Y232	69	ERIVDKRKNKK
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1089	Q9Y232	147	NSNFSKTSPKA
1090	Q9Y232	151	SKTSPKALVIG
1091	Q9Y232	175	SQKFRKNTAPS
1092	Q9Y232	191	NMDLAKSGIKI
1093	Q9Y232	200	KILVPKSPVKS
1094	P26358	39	DSLTEKECVKE
1095	O75530	76	GKWKSCKCKYS
1096	O75530	106	FNWHSKEGDPL
1097	Q5VTE0	212	NMPWFKGWKVT
1098	Q5VTE0	244	TRPTDKPLRLP
1099	P0CE47	90	HADYVKNMITG
1100	P0CE47	177	RGSALKALEGD
1101	P0CE47	358	PGDNIKMVVTL
1102	O75367	12	KKKSTKTSRSA
1103	O75367	116	PELLAKKRGSK
1104	O75367	134	TPPPAKKAKSP
1105	O75367	148	KPVSKKAGGKK
1106	P62807	25	TKAQKKGKRR
1107	P62807	44	SVYVYKVLKQV
1108	P62807	117	VSEGTKAVTKY
1109	P62807	121	TKAVTKYTSSK
1110	P62803	6	MSGRGKGGKGL

1111	P62803	17	GKGGAKRHRKV
1112	P04637	291	EENLRKKGEPH
1113	P04637	292	ENLRKKGEPHH
1114	Q86L05	98	GPKNKKAIKKL
1115	Q86L05	130	GPGLNKVGKFP
1116	Q7M1B9	15	SDFAEKVLKSK
1117	P14909	33	NVEKTKKIKII
1118	P14909	95	GTDVKKEEVIV
1119	P14909	193	SPNDVKKIVDI
1120	P14909	220	FVYEGKMRSTL
1121	P14909	337	VSKILKTSGFD
1122	P14909	344	SGFDVKSLAIK
1123	P39462	24	GVPKPKGPQVL
1124	P39462	86	VVGYSKGLVA
1125	P39462	252	LNNSEKTL SVY
1126	P39462	266	LAKQGYVMVG
1127	P22498	304	TRGNEKIVRDD
1128	P22498	374	YDVLTKYWNRY
1129	Q9Y232	219	SESPEKLDPVE
1130	Q9Y232	284	LAVNGKGTSPF
1131	P0C835	34	APKGRKGVKIG
1132	P80053	56	SDGKCLKTFMGW
1133	P80053	118	RVDPKCLTREE
1134	P80053	130	EQLSRKYIQAI
1135	P80053	279	YPEGRKVTNEE
1136	P80053	309	KFNAPKVKAKL
1137	P80053	311	NAPKVKAKLIV
1138	P80053	360	EWANNKMGEII
1139	P80053	371	SDEEAKKLIVD
1140	P13123	28	VWRVGMVSFT
1141	P61991	19	QVDISKIKKVV
1142	P61991	28	VWRVGMISFT
1143	Q5VTE0	311	DNVGFKVKNVS
1144	P55907	21	EHSCHKVYGPV
1145	O43524	606	VMGHEKFPSDL
1146	Q08369	255	NRPLIKPQRRL
1147	Q08369	322	RKRKPKNLNKS
1148	Q08369	421	SQASSKQDSWN
1149	P16403	52	AVAASKERSGV
1150	P16403	81	NNSRIKLGKLS
1151	P16403	90	KSLVSKGTLVQ
1152	P16403	149	GATPKKSAKKT
1153	P16403	153	KKSAKTPKKA
1154	P10412	137	AGAAKPKKAT
1155	P10412	140	AKKPKKATGAA
1156	P10412	149	AATPKKSAKKT
1157	P16401	140	AGATPKKAKKA
1158	P16401	144	PKKAKKAAGAK
1159	P16401	157	VKKTPKAKKP
1160	O75367	159	GARKSKKKQGE
1161	P40283	7	APKAEKPAEK
1162	P40283	23	KPVEEKSKAEK

1163	P40283	25	VEEKSKAEKAP
1164	P40283	28	KSKAEKAPAEK
1165	O14979	216	HKLDGKLLIDPK
1166	O14979	233	GKEPPKKVFG
1167	O14979	289	EEPVKLLESR
1168	Q14103	173	DPKRAKAMTK
1169	P16862	83	LNSITKTQDWR
1170	P16862	415	IFIPEKPATSS
1171	P16862	580	DHNEPKLPKDK
1172	P16862	641	RSLNWKDMLGW
1173	O00159	200	SSRFGKYMDVQ
1174	O00159	269	YLYLVKGQCAK
1175	O00159	357	ALTHRKIIAKG
1176	O00159	396	TWLVGKINRSL
1177	O00159	512	LTFLEKLEDTV
1178	O00159	632	KPNDAKQPGRF
1179	P13538	20	APYLRKSEKER
1180	P13538	60	SKEGGKVTVKT
1181	P13538	64	GKVTVKTEGGE
1182	P13538	74	ETLTVKEDQVF
1183	P13538	191	KTVNTKRVIQY
1184	P13538	237	AFGNAKTVRND
1185	P13538	249	SSRFGKFIRIH
1186	P13538	368	GNLKFKQKQRE
1187	Q96RI1	286	QEITNKILKEE
1188	Q96RI1	352	AEIFNKKLPSG
1189	Q96RI1	431	LDVLQKLCCKIH
1190	P11940	78	NFDVIKGGKPV
1191	P11940	95	DPSLRKSGVGN
1192	P11940	138	DENGSKGYGFV
1193	P11940	268	VGRAQKKVERQ
1194	P11940	269	GRAQKKVERQT
1195	P06400	96	YIQKKKELWGI
1196	P06400	136	FFNLLKEIDTS
1197	P06400	202	TFLLAKEVLQ
1198	P06400	289	NIDEVKNVYFK
1199	P06400	294	KNVYFKNFIPF
1200	P06400	359	QRTPRKSNLDE
1201	Q86L05	161	KFQLKKVLCLA
1202	Q86L05	202	GWQNIKTLYVK
1203	P0CX43	14	VREHVKELLKY
1204	P0CX43	207	GSLVVKSSMGP
1205	P47914	38	KGVDPKFLRM
1206	P47914	82	KPKEVKPKIPK
1207	P47914	103	YIAHPKLGKRA
1208	P47914	122	RLCRPKAKAKA
1209	Q969Q0	28	VTQYKKGKDSL
1210	P0CX27	61	PVFHKKAKTTK
1211	P0CX27	67	AKTTKVVVLR
1212	P0CX27	97	ELGGEKKQKGQ
1213	P02393	58	PAEEEEKTEFDV
1214	P0A7K2	52	EAAEEKTEFDV

1215	P0A7K2	85	GLKEAKDLVES
1216	P07472	112	DEAKTKLEEAG
1217	Q04207	28	IIEQPKQRGMR
1218	Q04207	303	IEEKRKRTYET
1219	Q53688	147	LLKIVKDGDEY
1220	Q53688	158	FLEYFKWKLPL
1221	Q53688	160	EYFKWKLPLTE
1222	Q53688	248	LRSI IKNKII I
1223	Q53688	358	ANQIVKECDKT
1224	Q53688	390	PAVYAKAYEDT
1225	E5KWG9	191	GVFEEKGVRAI
1226	E5KWG9	211	SEELLKFCERS
1227	E5KWG9	229	SWDSPKINRFT
1228	B6A879	121	PDVNFKEDGSQ
1229	B6A879	291	RELQKKAHAMG
1230	B6A879	445	NLYSPKDPGEQ
1231	Q9L5X8	28	TTLVDKLLQQS
1232	Q9L5X8	480	HYGPHKGGNIG
1233	Q9L5X8	499	ANAAGKALTNA
1234	Q6NC90	132	RLKPLKPGKGF
1235	Q6NC90	135	PLKPGKGFGEI
1236	D0ZRV8	36	RLRVRKYRDPQ
1237	D0ZRV8	53	LPESLKALLAY
1238	D0ZRV8	190	HLPQWKAQOKM
1239	Q6NEZ3	145	INDHLKASLEG
1240	Q9UKV3	213	SISEEKGDSDD
1241	Q9UKV3	305	ILKEFKKEEGEE
1242	Q9SJU4	61	LVKTAKTIASP
1243	Q9SJU4	186	GARFAKWRTVV
1244	Q9SJU4	203	SALAVKEAAWG
1245	Q9ZU52	288	TLTMLKRRVPP
1246	P62157	31	GTITTTKELGTV
1247	P04573	14	LGPEEKDECMK
1248	P00889	49	EQARIKTFRQQ
1249	P00889	109	MLPKAKGGEEP
1250	P00889	139	VSWLSKEWAKR
1251	P00889	382	VAQLYKIVPNV
1252	P00078	98	FAGMKKPQERA
1253	P00043	61	TDANKKKGVEW
1254	P00043	62	DANKKKGVEWS
1255	P00070	31	CHTVEKGAGHK
1256	P00070	96	FPGLKKPQERA
1257	P00047	35	QGGANKIGPNL
1258	P00047	47	GLFGRKTGSVE
1259	Q71V39	212	NMPWFKGWKVE
1260	P02993	212	RLPWYKGWNIE
1261	P02994	210	NAPWYKGWEKE
1262	P02994	222	KAGVVKGKTLL
1263	Q96KQ7	341	SSGRRKAKKKW
1264	Q96KQ7	358	VKPSRKRRKRE
1265	P53991	38	PVAATKASTAV
1266	P53991	170	EDPAKKGLCSN

1267	P07041	116	CAIHA <b>K</b> RVTIQ
1268	P10587	11	LSDDE <b>K</b> FLFVD
1269	P10587	72	KVTL <b>S</b> KDDIQK
1270	P68696	91	GVITV <b>K</b> TSKSI
1271	P11416	86	LPRIY <b>K</b> PCFVC
1272	P11416	147	YCRLQ <b>K</b> CFDVG
1273	P11416	164	RNDRN <b>K</b> KKKEA
1274	P27063	6	PQTET <b>K</b> ASVGF
1275	P27064	81	SLDRY <b>K</b> GRCYG
1276	P27064	177	CTIK <b>P</b> KLGLSA
1277	P27064	183	LGL <b>S</b> A <b>K</b> NYGRA
1278	P27064	334	GT <b>V</b> V <b>G</b> KLEGER
1279	P27064	356	DDFVE <b>K</b> DRSRG
1280	P27064	450	IREAS <b>K</b> WSPEL
1281	P04717	8	PQTET <b>K</b> AKVGF
1282	P04992	146	PPAYV <b>K</b> TFQGP
1283	P0A7J7	72	F'TFVT <b>K</b> TPPAA
1284	Q5SLP6	90	EKG <b>A</b> H <b>K</b> PGREK
1285	P0CX53	31	AALAP <b>K</b> IGPLG
1286	P0CX53	93	PPRDR <b>K</b> KDKNV
1287	P0CX53	94	PRDR <b>K</b> KDKNVK
1288	P0CX53	119	RQMRD <b>K</b> SFGRT
1289	P0CX53	146	CRVDF <b>K</b> NPHDI
1290	P62986	6	MQIFV <b>K</b> TLTGK
1291	P55072	112	DVKY <b>G</b> KRIHVL
1292	P55072	148	YRPIR <b>K</b> GDIFL
1293	P55072	295	FEEAE <b>K</b> NAPAI
1294	P05547	12	AEEA <b>K</b> KKQDDI
1295	P05547	68	KEQER <b>K</b> AGERR
1296	P05547	84	RCGQ <b>P</b> KNLDGA
1297	O95785	179	VEDTP <b>K</b> TLDMA
1298	O95785	385	PGQTT <b>K</b> EPFGG
1299	O95785	610	AALEL <b>K</b> QAFRE
1300	O95785	641	IVLV <b>A</b> KLGPQV
1301	O95785	697	PAMAL <b>K</b> HEERK
1302	P05141	63	VVRIP <b>K</b> EQGVL
1303	P05141	147	AADV <b>G</b> KAGAER
1304	P05141	268	RDEGG <b>K</b> AFFKG
1305	Q9Y232	76	KNKK <b>G</b> KTEYLV
1306	Q9Y232	195	AKSGI <b>K</b> ILVPK
1307	P00042	85	YIPGT <b>K</b> MAFGG
1308	P00042	92	AFGGL <b>K</b> KEKDR
1309	P26358	43	EKECV <b>K</b> EKLNL
1310	P26358	134	PKPL <b>S</b> KPRTPR
1311	O75530	22	AAK <b>K</b> Q <b>K</b> LSSDE
1312	O75530	74	GKG <b>K</b> W <b>K</b> SKKCK
1313	O75530	211	LLSV <b>S</b> KDHALR
1314	O75530	332	AIVCW <b>K</b> PGKME
1315	Q5VTE0	44	IEK <b>F</b> E <b>K</b> EAAEM
1316	Q5VTE0	64	VLD <b>K</b> L <b>K</b> AERER
1317	P0CE47	25	HVD <b>H</b> G <b>K</b> TTLTA
1318	P0CE47	295	GQVL <b>A</b> KPGTIK

1319	O75367	9	RGGKK <b>K</b> STKTS
1320	O75367	34	LRYIK <b>K</b> GHPKY
1321	O75367	72	AARDN <b>K</b> KGRVT
1322	O75367	135	PPPAK <b>K</b> AKSPS
1323	P62807	6	MPEPA <b>K</b> SAPAP
1324	P68432	116	CAIHA <b>K</b> RVTIM
1325	P09988	116	CAIHG <b>K</b> RVTIQ
1326	Q55BN9	65	ELLI <b>K</b> KLPFQR
1327	P61830	57	IRRFQ <b>K</b> STELL
1328	P61830	123	VTIQ <b>K</b> KDIKLA
1329	P62803	13	GKGLG <b>K</b> GGAKR
1330	P04637	101	SVPSQ <b>K</b> TYQGS
1331	P04637	132	SPALN <b>K</b> MFQCL
1332	P04637	321	POP <b>K</b> KPLDGE
1333	Q86L05	18	VSOLF <b>K</b> EAQES
1334	Q86L05	24	EAQES <b>K</b> RGFLE
1335	Q86L05	102	KKAI <b>K</b> KLSSKY
1336	P80322	44	LGTIM <b>K</b> RLGMS
1337	P80322	153	DYEEW <b>K</b> EIQE
1338	P14909	166	DDLQ <b>S</b> KISKRT
1339	P14909	281	TSFVQ <b>K</b> AAVKA
1340	P14909	334	FPNV <b>S</b> KILKTS
1341	P14909	349	KSLAI <b>K</b> LIEEK
1342	P39462	31	PQVLI <b>K</b> VEAAG
1343	P39462	61	EDLGV <b>K</b> LPVTL
1344	P39462	172	SLDPT <b>K</b> TLLVV
1345	P39462	192	AVQIA <b>K</b> AVSGA
1346	P39462	320	KPMIT <b>K</b> TMKLE
1347	P39462	323	ITK <b>T</b> MKLEEAN
1348	P22498	219	GYVGV <b>K</b> SGFPP
1349	P22498	255	IKSV <b>S</b> KKPVGI
1350	Q9Y232	388	AADD <b>S</b> KLVLLS
1351	Q9Y232	417	LTDDR <b>K</b> RESTK
1352	Q9Y232	422	KREST <b>K</b> MAEAI
1353	P0C835	37	GRKGV <b>K</b> IGLFK
1354	P0C835	42	KIGLF <b>K</b> DPETG
1355	P80053	202	VATIA <b>K</b> EAANK
1356	P80053	239	SEMG <b>A</b> KIVGVS
1357	P80053	247	GVSD <b>S</b> KGGVIN
1358	Q5VTE0	385	DRRS <b>G</b> KKLEDG
1359	P00219	10	NYRT <b>S</b> KPVVGD
1360	O43524	176	ESSPD <b>K</b> RLTLS
1361	O43524	197	PYFKD <b>K</b> GDSNS
1362	O43524	360	SPSV <b>S</b> KPCTVE
1363	P16403	17	APPAE <b>K</b> APVKK
1364	P16403	22	KAPV <b>K</b> KKAACK
1365	P16403	23	APV <b>K</b> KKAACKA
1366	P16403	46	SELIT <b>K</b> AVAAS
1367	P16403	85	IKLGL <b>K</b> SLVSK
1368	P16403	109	SFKLN <b>K</b> KAASG
1369	P16403	121	AKPKV <b>K</b> KAGGT
1370	P16403	137	VGA <b>A</b> KPKKAA

1371	P16403	148	GGATP <b>K</b> KSAKK
1372	P16403	157	KKTP <b>K</b> KAKKPA
1373	P10412	117	ASGEA <b>K</b> PKAKK
1374	P16401	55	AVAAS <b>K</b> ERNGL
1375	O75367	189	TVLST <b>K</b> SLFLG
1376	P40283	12	KKPAE <b>K</b> KPASE
1377	P40283	34	APA <b>E</b> K <b>K</b> PKAGK
1378	P40283	51	GAGGD <b>K</b> KKKMK
1379	P40283	53	GGD <b>K</b> KKMKKK
1380	P40283	56	KK <b>K</b> KK <b>K</b> KSVE
1381	Q42681	64	ELVIR <b>K</b> L <b>P</b> F <b>Q</b> R
1382	Q41811	13	GKGL <b>G</b> K <b>G</b> ARKR
1383	O14979	180	VDCTI <b>K</b> TD <b>P</b> V <b>T</b>
1384	O14979	204	AASVD <b>K</b> VLE <b>L</b> K
1385	O14979	227	RAKAL <b>G</b> K <b>E</b> PP
1386	O14979	229	KAL <b>G</b> K <b>E</b> PP <b>K</b> K
1387	O14979	306	GKCEI <b>K</b> V <b>A</b> Q <b>P</b> K
1388	O14979	311	KVAQ <b>P</b> K <b>E</b> VY <b>R</b> Q
1389	Q14103	114	TKKDL <b>K</b> DY <b>F</b> SK
1390	Q14103	161	DQKEH <b>K</b> L <b>N</b> G <b>K</b> V
1391	Q14103	165	HKL <b>N</b> G <b>K</b> V <b>I</b> DP <b>K</b>
1392	Q14103	238	E <b>E</b> P <b>V</b> K <b>K</b> I <b>M</b> E <b>K</b> K
1393	Q14103	260	KVAMS <b>K</b> E <b>O</b> Y <b>Q</b> Q
1394	P16862	25	SVQSY <b>K</b> AA <b>I</b> D <b>F</b>
1395	P16862	66	LRPDE <b>K</b> I <b>N</b> K <b>N</b> V
1396	P16862	150	NAVST <b>K</b> P <b>T</b> PP <b>P</b>
1397	P16862	168	SGLSS <b>K</b> V <b>H</b> S <b>Y</b> T
1398	P16862	438	HRSRG <b>K</b> R <b>T</b> T <b>I</b> V
1399	O00159	146	ESGAG <b>K</b> TE <b>A</b> T <b>K</b>
1400	O00159	188	AFGNA <b>K</b> T <b>L</b> R <b>N</b> D
1401	O00159	209	VQFDF <b>K</b> G <b>A</b> P <b>V</b> G
1402	O00159	535	DQ <b>R</b> TR <b>K</b> S <b>L</b> G <b>R</b> G
1403	O00159	594	SELSD <b>K</b> K <b>R</b> P <b>E</b> T
1404	P13538	147	LAYRG <b>K</b> K <b>R</b> Q <b>E</b> A
1405	P13538	148	AYRG <b>K</b> K <b>R</b> Q <b>E</b> A <b>P</b>
1406	P13538	186	ESGAG <b>K</b> T <b>V</b> N <b>T</b> K
1407	P13538	296	Q <b>I</b> M <b>S</b> N <b>K</b> K <b>P</b> E <b>L</b> I
1408	P13538	349	FSADE <b>K</b> T <b>A</b> I <b>Y</b> K
1409	Q96RI1	33	EMMS <b>M</b> K <b>P</b> A <b>K</b> G <b>V</b>
1410	Q96RI1	120	EMP <b>V</b> T <b>K</b> K <b>P</b> R <b>M</b> G
1411	Q96RI1	198	RLR <b>K</b> C <b>K</b> E <b>M</b> G <b>M</b> L
1412	Q96RI1	218	TEI <b>Q</b> C <b>K</b> S <b>K</b> R <b>L</b> R
1413	Q96RI1	256	KSCRE <b>K</b> TE <b>L</b> T <b>P</b>
1414	Q96RI1	413	DRQYI <b>K</b> D <b>R</b> E <b>A</b> V
1415	Q96RI1	420	REAVE <b>K</b> L <b>Q</b> E <b>P</b> L
1416	P11940	177	RFK <b>S</b> R <b>K</b> E <b>R</b> E <b>A</b> E
1417	P11940	188	LGAR <b>A</b> K <b>E</b> F <b>T</b> N <b>V</b>
1418	P11940	208	DDER <b>L</b> K <b>D</b> L <b>F</b> G <b>K</b>
1419	P11940	279	TEL <b>K</b> R <b>K</b> F <b>E</b> Q <b>M</b> K
1420	P11940	284	K <b>F</b> E <b>Q</b> M <b>K</b> Q <b>D</b> R <b>I</b> T
1421	P06400	240	L <b>K</b> E <b>P</b> Y <b>K</b> T <b>A</b> V <b>I</b> P
1422	P06400	420	IL <b>K</b> R <b>V</b> K <b>D</b> I <b>G</b> Y <b>I</b>



1423	Q86L05	160	VKFQLKKVLCL
1424	Q86L05	196	VSLLLKKGWQNI
1425	P0CX43	24	YSNETKKRNFL
1426	P0CX43	25	SNETKKRNFL
1427	P0CX43	101	NKKLIKKLSKK
1428	P0CX43	106	KKLSKKYNAFI
1429	P0CX43	147	DDLKYGKVTDVR
1430	P0CX43	195	FVSLLLKKNWQN
1431	P47914	33	RYESLKGVDPK
1432	P47914	51	AKKHNNKGLKK
1433	P47914	79	ALVKPKKEVKPK
1434	P47914	84	KEVKPKIPKGV
1435	Q969Q0	17	CKKCGKHQPHK
1436	Q969Q0	61	FRKKAKTTKKI
1437	P0CX27	15	TYCKGKTCRKH
1438	P0CX27	86	AQLTLKRCKHF
1439	P0CX27	100	GEKKQKGOALQ
1440	P02393	107	KEAVSKEEAEE
1441	P0A7K2	71	KVAVIKAVRGA
1442	P0A7K2	101	KEGVSKDDAEA
1443	P07472	68	SAGEKKNVIK
1444	P07472	87	GLKEAKAAVDG
1445	Q12962	161	SLAAQKFISDI
1446	Q04207	195	NTAELKICRVN
1447	Q04207	218	FLLCDKVQKED
1448	Q04207	314	FKSIMKKSPFN
1449	Q53688	256	IIIVEKILGFQ
1450	B6A879	107	ILVEDKYTEET
1451	B6A879	212	IGNKSKKVQEV
1452	B6A879	213	GNKSKKVQEVW
1453	B6A879	567	RTVKQKGEYAA
1454	B6A879	573	GEYAAKNKLG
1455	Q9L5X8	8	TPQIDKLRNIA
1456	Q9L5X8	543	TVNALKKGQLT
1457	Q6NEZ3	41	DTQAPKPVNTV
1458	Q6NEZ3	62	AWGLYKFNQKS
1459	Q6NEZ3	226	ESASIKQDVQI
1460	Q6NEZ3	332	ATSLLLKPAKVM
1461	Q9UKV3	44	WRKLPKMPEAV
1462	Q9UKV3	238	QARAAKLSEGS
1463	Q9UKV3	294	DDEGQKSREAP
1464	P18281	47	LEEVAKPHELK
1465	Q9SJU4	82	NATCGKRLASI
1466	Q9SJU4	147	IVPGIKVDKGL
1467	Q9SJU4	268	EGILLKPSMVT
1468	Q9SJU4	353	KTWGGKEENVK
1469	Q9ZU52	50	SDELVKTAKSI
1470	P11118	87	TEEEIKEAFRV
1471	P00889	76	GMRGMKGLVYE
1472	P00889	193	GIHRTKYWELI
1473	P00889	215	PCVAAKIYRNL
1474	P00063	19	GEKIFKTKCAQ

1475	P00063	30	CHTVDKGAGHK
1476	P00063	87	YIPGTKMVFPG
1477	P00077	16	PGDAAKGEKIF
1478	P00043	12	KGSEKKGANLF
1479	P00043	94	FGGLKKAKDRN
1480	P00076	22	CHSAQKGVNST
1481	P00076	52	YSNANKNAAIV
1482	P00076	87	AGIKAKKDRQD
1483	P00070	62	YSAGNKNKAVI
1484	P00047	95	FGGLKKNKDRN
1485	Q71V39	219	WKVERKEGNAS
1486	P02993	44	IEKFEKEAQEM
1487	P02993	51	AQEMGKGSFKY
1488	P02994	214	YKGWEKETKAG
1489	P02994	224	GVVKGKTLLEA
1490	Q96KQ7	343	GRRKAKKKWRK
1491	Q96KQ7	345	RKAKKKWRKDS
1492	Q96KQ7	368	EPPRAKEPRGV
1493	P53991	6	MASLRKPSNHA
1494	P53991	234	NVPSYKFTGLF
1495	P53991	285	NRKGGKMYIQD
1496	P10587	17	FLFVDKNFVNN
1497	P10587	145	MYKGGKRHEMP
1498	P10587	202	VASSHKGKKDT
1499	P11416	118	RRSIQKNMVYT
1500	P11416	165	NDRNKKKEAP
1501	P11416	167	RNKKKKEAPKP
1502	P27064	161	QVERDKLNKYG
1503	P27064	305	VIDRQKNHGMH
1504	P04717	227	AEAIYKSQAET
1505	P04717	355	RDDYIKKDRSR
1506	P04992	236	ETGEIKGHYLK
1507	P04992	241	KGHYLKATAGT
1508	P0A7J7	87	KAAGIKSGSGK
1509	P0A7J7	95	SGKPNKDKVGK
1510	P0CX53	130	LASVTKEILGT
1511	P62986	88	RQLAQKYNCDK
1512	P55072	109	PCPDVKYGKRI
1513	P05547	13	EEAKKKQDDID
1514	P05547	56	LLLRKKAEEEL
1515	P05547	62	AAEELKKEQER
1516	O95785	550	QLGRNKSTVHP
1517	O95785	753	RFSFQKKKKKV
1518	O95785	755	SFQKKKKKVVAN