

1 Supplyment S: Benchmark dataset contained 1514(106+1408) peptide samples, of which 106 were
2 phosphoglycerylated peptides belonging the positive subset and 1408 were
3 non-phosphoglycerylated peptides belonging the negative subset.
4
5 Positive peptides
6 AC Position Fragments
7 E7EUT5 32 GVFTTMEKAGAHLQG
8 E7EUT5 64 VMGVNHEKYDNSLKI
9 E7EUT5 87 NCLAPLAKVIHDNFG
10 E7EUT5 119 TVDGPSPGKLWRDGRG
11 E7EUT5 140 PASTGAAKAVGKVIP
12 E7EUT5 185 AKYDDIKKVVKQASE
13 E7EUT5 179 CRLEKPAKYDDIKKV
14 E7EUT5 188 DDIKKVVKQASEGPL
15 C9J5S8 23 LDSALPSKVPAFSDK
16 H0YDD8 76 EEKKDEKKEESEESD
17 P04406 27 RAAFNSGKVDIVAIN
18 P06733 335 IAKAVNEKSCNCLLL
19 P06733 343 SCNCLLLKVNQIGSV
20 P49006 144 EGTAQEGKAAATPES
21 Q9Y619 145 YEMETSGKIAKSQNT
22 Q86UP2 292 KDFLLSLKTMFSED
23 Q13541 69 CRNSPVTKTPPRDLP
24 B8ZZL8 56 VGSKGKGGGEIQPV
25 P51814 297 YEKHLSHKQAPTHHQ
26 K7EM90 92 TEQEKIDKLMIEMDG
27 Q5JSZ5 386 VDYSEKLFSDDEEE
28 Q5JSZ5 398 EEEEEVVKDGRPKWN
29 Q9Y597 796 TASPSPKTTTPSPRH
30 B4DPF6 208 LKDLILQKGITQNAL
31 Q5RL73 351 VPKPPEDKPEDVHTS
32 Q9C026 347 KEHEHKLKVVRDQIS
33 H3BTN5 367 MLSGETAKGDYPLEA
34 J3KRX8 91 VRGHNCPPVLFNFYE
35 Q9H1E3 228 STSPPPEKSGDEGSE
36 P68104 330 GNVAGDSKNDPPMEA
37 P15259 100 GGLTGLNKAETAAKH
38 P60174 256 SVTGATCKELASQPD
39 Q6PKG0 1083 QPVREDAKWTSQHSN
40 P14174 78 AQNRSYSKLLCGLLA
41 Q9BYV9 177 TMDSETAKMACPRDQ
42 F8WIT2 446 YDAKQLKKAMEGAGT
43 F8WIT2 442 PPAHYDAKQLKKAME
44 F8WIT2 445 HYDAKQLKKAMEGAG
45 Q9DB16 3 XXXXXMKKMPLFSKS
46 Q8BH04 262 GNSLLGKKCFALRIA
47 Q8BMS1 214 IRADRAKMGGLVDQL
48 Q91V76 75 LLLPLVNKKKVYDLNE
49 P12790 237 VHRQIVKKQQEELLDY
50 P02089 67 KVKAHGKVVITAFNE
51 P02089 83 LKNLDNLKGTTFASLS
52 D3Z563 31 LDLKGGKAKWDSWNKL
53 Q8R1M2 120 QAVLLPKKTESQKVK
54 A8DUK4 96 LSELHCDKLVDPEN
55 A8DUK4 145 VAAALAHKYHXXXXXX
56 J3QMG3 20 AAKDVFNKGYGFGMV
57 P01942 17 NIKAAWGKIGGHGAE
58 P01942 12 GEDKSNIKAAWGKIG
59 P01942 57 SHGSAQVKGHGKVA
60 Q91Y97 243 AGHACTKKYTPQVA
61 Q91Y97 147 KDGVDGKWRVLRRI
62 P23881 199 EMLSAALKAEDNFKD
63 P51881 96 FAFKDKYKQIFLGGV
64 P51881 105 IFLGGVDKRTQFWRY
65 P48962 92 QALNFAFKDKYKQIF
66 Q3UJB0 853 MVAEHAQKQKQKRRK
67 P26040 60 KGFPTWLKLDKKVSA
68 P11983 243 CLDFSLQKTKMKLGV
69 P62908 201 PSGKIGPKKPLPDHV
70 E9PZS8 56 TAYDYSGKNKVPQLQ
71 P12710 96 NKMVTTFKGKISVTE
72 Q8C196 1479 LFAEAVQKSRTVDSK
73 Q8C196 214 KDVKVFGKGNPTKVV
74 Q8C196 811 TFEESFQKALRMCHP
75 Q9DAY2 206 KSSDKNNKFLAMFNL
76 O09172 263 SRGIKSKGYILQAK

77	P18894	263	TIWKSCKLEPTLKN
78	P18894	259	RDHNTIWKSCCKLEP
79	Q9EQF5	256	VMSKSAAKVVADARR
80	P16015	64	KTLLNNGKTCRVVFD
81	Q9QXX4	177	RDNAKTGKVSADFR
82	Q3UL97	53	IPNGHNQKMFSKNKE
83	I7HPV9	971	GIKKVCFKVSEDEQE
84	D3Z041	552	WLPNGTLKIIDRKKH
85	D3Z041	544	LHTGDIGKWLPNRTL
86	F6UB20	63	KVWIYPIKSCKGVS
87	P16879	161	RKYQEASKDKDRDKA
88	P49722	92	VLVHRARKLAQQYYL
89	P11881	569	HSQQDYRKNQEYIAK
90	B1AU42	104	LESKRRLRKYLFQILR
91	Q9EQP2	35	LRSLYQRKVLPLEEA
92	A2AQC3	190	IRCYVRDKEMNSQVY
93	P99028	83	RDHCVAHKLFKNLXX
94	O88844	224	KKYDGRFKDIFQEIY
95	P47806	79	PPRSSVKLTKKRAL
96	B1AS29	367	GRFMNFIKEAQWGL
97	J3QNG0	340	FVRHCIQKSQERVEG
98	F6YLP3	48	IWPRIDQKSCFKSMV
99	B0QZL1	193	AEVYHNLKNVIKEY
100	Q9EP89	383	ARFYVYNKKRLVNT
101	P35585	296	SRIEYMVKAKSQFKR
102	P26443	503	RISGASEKDIVHSGL
103	E9Q1V0	115	RLAILYAKRASVFK
104	D3YYI5	252	DLACRLEKPAKYDDI
105	Q9D020	123	RRKLLQLKEQYYAIE
106	P62814	48	SQPRLYTKTVSGVNG
107	Q920E5	57	EYNALGGKYNRGLTV
108	E9QNN1	1027	GRNALIHKSSVNCPP
109	P22752	96	RNDEELNKLGRVTI
110	P47857	678	FDRNFATKMGAKAMN
111	P11214	167	ARRPNAIKLGLGNHN
112	A6ZI44	254	PDGDHDLKRCQYVTE

113
114

115 Negative peptides

116	AC	Position	Fragments
117	E7EUT5	9	EEMRDPSKIKWGDAG
118	E7EUT5	11	MRDPSKIKWGDAGAE
119	E7EUT5	42	AHLQGGAKRVIISAP
120	E7EUT5	111	HAITATQKTVDGPPSG
121	E7EUT5	144	GAAKAVGKVIPELNG
122	E7EUT5	152	VIPELNGKLTGMAFR
123	E7EUT5	176	DLTCRLEKPAKYDDI
124	E7EUT5	184	PAKYDDIKKVVQAS
125	E7EUT5	196	QASEGPLKGIILGYTE
126	E7EUT5	234	ALNDHFVKLISWYDN
127	E7EUT5	259	LMAHMASKEXXXXXX
128	C9J5S8	30	KVPAFSDKDSLGDDEM
129	C9J5S8	44	MLAAALLKAKSQELV
130	C9J5S8	46	AAALLKAKSQELVTF
131	C9J5S8	63	VAVYFIRKEWKRLPEP
132	C9J5S8	66	YFIRKEWKRLPEPAQR
133	C9J5S8	118	VLLGRFQKDISQGLK
134	C9J5S8	125	KDISQGLKFKEAYER
135	C9J5S8	127	ISQGLKFKEAYEREV
136	C9J5S8	137	YEREVSLKRPLGNRP
137	C9J5S8	151	PGERLNRKMPDFGQV
138	C9J5S8	163	GQVTVEEKLTPRGER
139	C9J5S8	173	PRGERSEKYNDFGNS
140	H0YDD8	10	GNSSPSAKDIKKILD
141	H0YDD8	13	SPSAKDIKKILDSVI
142	H0YDD8	14	PSAKDIKKILDSVIS
143	H0YDD8	38	VIAQGIGKLASVPAG
144	H0YDD8	71	APAAAEKKDEKKEE
145	P04406	3	XXXXMGKVKVGVNG
146	P04406	55	QYDSTHGKFGHTVKA
147	P04406	61	GKFGHTVKAENGKLV
148	P04406	66	TVKAENGKLVINGNP
149	P04406	107	GVFTTMEKAGAHLQG
150	P04406	139	VMGVNHEKYDNSLKI
151	P04406	145	EKYDNSLKIISNASC
152	P04406	162	NCLAPLAKVIHDNFG

153	P04406	215	PASTGAAKAVGKVIP
154	P04406	254	CRLEKPAKYDDIKKV
155	P04406	263	DDIKKVVVKQASEGPL
156	P06733	5	XXXMSILKIHARELF
157	P06733	28	EVDLFTSKGLFRAAV
158	P06733	54	LELRDNDKTRYMGKG
159	P06733	60	DKTRYMGKGVSKAVE
160	P06733	64	YMGKGVSKAVEHINK
161	P06733	71	KAVEHINKTIAPALV
162	P06733	80	IAPALVSKKLNVT EQ
163	P06733	81	APALVSKKLNVT EQE
164	P06733	89	LNVT EQEKIDKLMIE
165	P06733	92	TEQEKIDKLMIE MDG
166	P06733	103	EMDGTENKSKFGANA
167	P06733	105	DGTENKSKFGANAIL
168	P06733	126	CKAGAVEKGVPLYRH
169	P06733	162	GGSHAGNKLAMQEFM
170	P06733	193	AEVYHNLKNVIKEY
171	P06733	197	HNLKNVIKEYGKDA
172	P06733	199	LKNVIKEYGKDATN
173	P06733	202	VIKEYGKDATNVGD
174	P06733	221	APNILENKEGLELLK
175	P06733	228	KEGLELLKTAIGKAG
176	P06733	233	LLKTAIGKAGYTDKV
177	P06733	256	SEFFRSGKYDLDFKS
178	P06733	262	GKYDLDFKSPDDPSR
179	P06733	281	DQLADLYKSF IKDYP
180	P06733	285	DLYKSF IKDYPVVS I
181	P06733	306	DDWGAWQKFTASAGI
182	P06733	330	TNPKRIAKAVNEKSC
183	P06733	358	TESLQACKLAQANGW
184	P06733	394	GLCTGQIKTGAPCRS
185	P06733	420	IEEELGSKAKFAGRN
186	P06733	422	EELGSKAKFAGRNFR
187	P49006	7	XMGSSKAPRGDVT
188	P49006	25	AAGASPAKANGQENG
189	P49006	35	GQENGHVKSNGDLSP
190	P49006	43	SNGDLSPKGEGESPP
191	P49006	77	PSQGAEAKGEVPPKE
192	P49006	83	AKGEVPPKETPKKKK
193	P49006	87	VPPKETPKKKKKFSF
194	P49006	88	PPKETPKKKKKFSFK
195	P49006	90	KETPKKKKKFSFKKP
196	P49006	91	ETPKKKKKFSFKKPF
197	P49006	95	KKKKFSFKKPFKLSG
198	P49006	96	KKKFSFKKPFKLSGL
199	P49006	99	FSFKKPFKLSGLSFK
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201	P49006	157	ESQEPQAKGAEASAA
202	Q9Y619	34	GQPFDTMKVKMQTFP
203	Q9Y619	36	PFDTMKVKMQTFPDL
204	Q9Y619	53	GLTDCCLKTYSQVGF
205	Q9Y619	65	VGFRGFYKGTSPALI
206	Q9Y619	94	FCQQVVRKVAGLDKQ
207	Q9Y619	103	AGLDKQAKLSDLQNA
208	Q9Y619	131	LCPTLVKCR LQ TMY
209	Q9Y619	148	ETSGKIAKSQNTVWS
210	Q9Y619	158	NTVWSVIKSILRKDG
211	Q9Y619	163	VIKSILRKDGPLGFY
212	Q9Y619	204	FFASGRSKDELGPVP
213	Q9Y619	234	VYPVDCIKSRIQVLS
214	Q9Y619	245	QVLSMSGKQAGFIRT
215	Q9Y619	258	RTFINVVKNEGITAL
216	Q9Y619	270	TALYSGLKPTMIRAF
217	Q9Y619	292	LAYEYSRKLMMNQL E
218	Q86UP2	30	LFFWLFMKETLYDEV
219	Q86UP2	40	LYDEVLAKQKREQKL
220	Q86UP2	42	DEVLAKQKREQKLIP
221	Q86UP2	46	AKQKREQKLIPTKTD
222	Q86UP2	51	EQKLIPTKTDKKKAE
223	Q86UP2	54	LIPTKTDKKKAEKKK
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225	Q86UP2	64	AEKKKNNKKKEIQNGN
226	Q86UP2	85	ESVPRDFKLSDALAV
227	Q86UP2	116	SSVRERKKKEKKQKP
228	Q86UP2	117	SVRERKKKEKKQKPV

229 Q86UP2 119 RERKKKEKKQKPVLE
230 Q86UP2 120 ERKKKEKKQKPVLEE
231 Q86UP2 122 KKKEKKQKPVLEEQV
232 Q86UP2 131 VLEEQVIKESDASKI
233 Q86UP2 137 IKESDASKIPGKKVE
234 Q86UP2 141 DASKIPGKKVEPVV
235 Q86UP2 142 ASKIPGKKVEPVVT
236 Q86UP2 150 VEPVPVTKQPTPPSE
237 Q86UP2 162 PSEAAAASKKKPGQKK
238 Q86UP2 171 KPGQKSKNGSDDQD
239 Q86UP2 189 ETLMVPSKRQEALPL
240 Q86UP2 201 LPLHQETKQESGSGK
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246 Q86UP2 283 DKENAEVFKDFLLS
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268 Q86UP2 521 AQQDLQSKFVAKENE
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293 Q86UP2 974 QDENKLFKSQIEQLK
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314	Q86UP2	1173	VKVDESHKTIKQMQS
315	Q86UP2	1176	DESHKTIKQMQSSF
316	Q86UP2	1197	ERLRSENKDIENLRR
317	Q86UP2	1215	HLEMELEKAEMERST
318	Q86UP2	1231	VTEVRELKDLLTELQ
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320	Q86UP2	1240	LLTELQKLLDDSYSE
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322	Q86UP2	1278	TEQNERQKVAGDLHK
323	Q86UP2	1285	KVAGDLHKAQQSLEL
324	Q86UP2	1296	SLELIQSKIVKAAGD
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326	Q86UP2	1321	PETESSEKETMSVSL
327	Q86UP2	1348	AVNQQLTKEKEHYQV
328	Q13541	57	TRIIYDRKFLMECRN
329	B8ZZL8	8	MAGQAFRKFLPLFDR
330	B8ZZL8	28	SAAETVTKGGIMLPE
331	B8ZZL8	36	GGIMLPEKSQKVLQ
332	B8ZZL8	40	LPEKSQKVLQATVV
333	B8ZZL8	70	VSVKVGDKVLLPEYG
334	B8ZZL8	89	VLDDKVCKLNNSKCK
335	B8ZZL8	94	VCKLNNSKCKSDICN
336	B8ZZL8	95	CKLNNSKCKSDICNX
337	B8ZZL8	96	KLNSKCKSDICNXX
338	P51814	49	PDLSPGPKGRSSADH
339	P51814	80	DVTVDFSKEEWQHL
340	P51814	114	SVGYQIPKSEAAFKL
341	P51814	146	CSGEAIGKMQQGIP
342	P51814	201	NNLLSHVKVLIKERG
343	P51814	205	SHVKVLIKERGYEHK
344	P51814	212	KERGYEHKNIIEKIIH
345	P51814	216	YEHKNIIEKIIHVTTK
346	P51814	223	KIIHVTTKLVPSIKR
347	P51814	229	TKLVPSIKRLHNCDT
348	P51814	239	HNCDTILKHTLNSHN
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351	P51814	279	STKNENAKTGANSCE
352	P51814	292	CEHDHYEKHLSHKQA
353	P51814	305	QAPTHHQKIHPEEKL
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361	P51814	520	DCGKSFTKKSQLHVH
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363	P51814	609	FIWKSRLKIHQKSHI
364	P51814	753	SRLNIHQKSHGTGERH
365	P51814	786	HQIIHTGKKPYACTE
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367	Q5JSZ5	17	KGKDGKSKYSTLSLF
368	Q5JSZ5	26	STLSLFDKYKGSVD
369	Q5JSZ5	30	LFDKYKGSVDAIRS
370	Q5JSZ5	67	PANLPSLKSENKGN
371	Q5JSZ5	82	PNIVIVPKDGTGWAN
372	Q5JSZ5	90	DGTGWANKQDQDPK
373	Q5JSZ5	97	KQDQDPKSSSATAS
374	Q5JSZ5	117	LPQPLQKSVSNLQK
375	Q5JSZ5	124	KSVSNLQKPTQSI
376	Q5JSZ5	142	NSVPGGPKSWAQLNG
377	Q5JSZ5	150	SWAQLNGKPVGHEGG
378	Q5JSZ5	183	KAAGGQDKAGKEKGV
379	Q5JSZ5	251	SACTSDSKDPSLRPA
380	Q5JSZ5	290	PAFMCSPKSSENQGT

381 Q5JSZ5 327 QMNDQDGKENRLGLS
382 Q5JSZ5 359 IINAENLKGLDDDLDA
383 Q5JSZ5 384 EEVDYSEKLFSDDE
384 Q5JSZ5 403 VVKDGRPKWNSWDPR
385 Q5JSZ5 426 SADSADAKRTREEGK
386 Q5JSZ5 447 GASRVVRKAPDPQPP
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388 Q5JSZ5 469 APGPDYQKSSMGSMF
389 Q5JSZ5 487 SIEDKEDKPPPRQKF
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391 Q5JSZ5 528 RLAAACAALKQLDQK
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397 Q5JSZ5 619 GSPAQEFKYQKSLPP
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399 Q5JSZ5 642 QQQEQLYKMQHWPV
400 Q5JSZ5 706 LHPSGLMKPMPQES
401 Q5JSZ5 734 VPPLQERKVTPIDSP
402 Q5JSZ5 755 GYMALQSKGYPLPHP
403 Q5JSZ5 763 GYPLPHPKSSDTLAM
404 Q5JSZ5 811 YLSAFDKKAQADFD
405 Q5JSZ5 864 PDFVPEDEKKPECGSW
406 Q5JSZ5 865 DFVPEDEKKPECGSW
407 Q5JSZ5 904 FNISSWDKNGSPNKQ
408 Q5JSZ5 943 TRRSGPIKKPVLKAL
409 Q5JSZ5 944 RRS GP I K K P V L K A L
410 Q5JSZ5 985 EQSPTAEKDEDEEND
411 Q5JSZ5 1025 TKFEEEEKPKAWEA
412 Q5JSZ5 1045 SSDVPPMKRNNWIFI
413 Q5JSZ5 1125 PEDCPRAKPRRRVAS
414 Q5JSZ5 1146 SEYEELPKRRRQRGS
415 Q5JSZ5 1170 EREESTLKKGDCRDS
416 Q5JSZ5 1171 REESTLKKGDCRDSW
417 Q5JSZ5 1182 RDSWRSNKGCS
418 Q5JSZ5 1194 DHSGLDAKSRGPRAF
419 Q5JSZ5 1222 GRRTFVSKESPHWQS
420 Q5JSZ5 1230 ESPHWQSKSPGSSWQ
421 Q5JSZ5 1279 EDSRAEDKRSFFQDE
422 Q5JSZ5 1309 RRPPRQDKPPFRRL
423 Q5JSZ5 1350 PKLCSGDKSGTVGRR
424 Q5JSZ5 1413 SGASLGEKKELAKRS
425 Q5JSZ5 1414 GASLGEKKELAKRSF
426 Q5JSZ5 1418 GEKKELAKRSFSSQR
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430 Q5JSZ5 1509 DLPEASSKKAKEEAK
431 Q5JSZ5 1510 LPEASSKKAKEEAKL
432 Q5JSZ5 1513 ASSKKAKEEAKLAAP
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434 Q5JSZ5 1568 GFIEVLTKKQRRLLE
435 Q5JSZ5 1581 LEEERRKKEQAVQVP
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437 Q5JSZ5 1605 IPPRFACKQNNLCLE
438 Q5JSZ5 1647 PANDSWRKAVTAFSS
439 Q5JSZ5 1665 GSAEQGFKSSQGD
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573	Q9H1E3	83	AEDSEDEKEDHKNVR
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587	P68104	146	LAYTLGVKQLIVGVN
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628	P60174	197	DNVKDWSKVVLAYEP
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638	Q6PKG0	203	PTRKLPKPKDMKEQE
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873	Q91Y97	330	ATQEA FMKRAMANCQ
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1268	P11881	2167	HQLARHNKELQTMLK
1269	P11881	2174	KELQTMLKPGGQVDG
1270	P11881	2190	EALFVYAKHTAQIEI
1271	P11881	2223	EFLTKESKLRIYYTT
1272	P11881	2257	FNEMNWQKKLRAQPV
1273	P11881	2258	NEMNWQKKLRAQPVL
1274	P11881	2364	GAFNVCNKIIFLMSF
1275	P11881	2510	NCTSPAPKEELLPAE
1276	P11881	2523	AEETEQDKEHTCETL
1277	P11881	2619	ICGLERDKFDNKTVT
1278	P11881	2623	ERDKFDNKTVTFEH
1279	P11881	2632	VTFEHHIKKEHNMWH
1280	P11881	2650	FIVLVKVKDSTEYTG
1281	P11881	2727	DQMTQQRKQKQRIGL
1282	B1AU42	9	EMYETLGKVGEGSYG
1283	B1AU42	20	GSYGTVMKCKHKDTG
1284	B1AU42	22	YGTVMKCKHKDTGRI
1285	B1AU42	24	TVMKCKHKDTGRIVA
1286	B1AU42	52	KIATREIKFLKQFRH
1287	B1AU42	73	IEVFRQKKKIHLVFE
1288	B1AU42	74	EVFRQKKKIHLVFEF
1289	B1AU42	100	YCHGLESKRLRKYLF
1290	B1AU42	127	NI IHRDIKPENILVS
1291	Q9EQP2	122	NALVVDPKKPFKRLS
1292	Q9EQP2	123	ALVVDPKKPFKRLSR

1293	Q9EQP2	165	PGILSGEKQRISRQY
1294	Q9EQP2	308	IKRARLAKVHAYIIS
1295	Q9EQP2	327	EMPNMFGKENKKREL
1296	Q9EQP2	330	NMFGKENKKRELIYR
1297	Q9EQP2	331	MFGKENKKRELIYRL
1298	Q9EQP2	360	AGDFPEVKAMQEQLE
1299	Q9EQP2	392	VDNMLTNKISSLMGL
1300	Q9EQP2	448	EWVVAKDKPVYDELF
1301	Q9EQP2	464	TLSPINGKISGVNAK
1302	Q9EQP2	486	LPNSVLGKIWKLADC
1303	Q9EQP2	512	ALAKHLIKIKLDGYE
1304	A2AQC3	71	PLQPVRHKKRVDSP
1305	A2AQC3	223	GDLILVEKNQRVPAD
1306	A2AQC3	257	LDGETDWKLRPLVAC
1307	A2AQC3	350	NTSDPRSKIGLFDLE
1308	A2AQC3	363	LEVNCLTKILFGALV
1309	A2AQC3	450	ISYLLTDKTGTLTQN
1310	A2AQC3	462	TQNEMVFKRLHLGTV
1311	A2AQC3	607	FPFTYESKRMGIIVR
1312	A2AQC3	662	RVLVVAKSLTEEQY
1313	A2AQC3	730	TLRNAGIKVWMLTGD
1314	A2AQC3	863	CGVGVGEGKEGKQASL
1315	A2AQC3	895	VHGRNSYKRSAAALSQ
1316	A2AQC3	957	LVLDDKDVKSEVAMLY
1317	A2AQC3	969	MLYPELYKDLLKGRP
1318	A2AQC3	1073	ATLSFLWKVSVITLV
1319	A2AQC3	1089	CLPLYVLKYLRRRFS
1320	P07724	28	VFRREAHKSEIAHRY
1321	P07724	57	AFSQYLQKCSYDEHA
1322	P07724	88	ESAANCDKSLHTLFG
1323	P07724	152	EAMCTSFKENPTTFM
1324	P07724	198	QCCAEADKESCLTPK
1325	P07724	305	KLQTCCKPLKKAH
1326	P07724	309	CCDKPLLKKAHCLSE
1327	P07724	310	CDKPLLKKAHCLSEV
1328	P07724	438	ILVRYTQKAPQVSTP
1329	P07724	460	NLGRVGTKCCTLPED
1330	P07724	527	TYVPEKFKAETFTFH
1331	P07724	562	ELVKHKPKATAEQLK
1332	P07724	604	PNLVTRCKDALAXXX
1333	F2Z471	109	SFSPNTGKKNAKIKT
1334	F2Z471	110	FSPNTGKKNAKIKTG
1335	F2Z471	113	NTGKKNAKIKTGYSR
1336	F2Z471	200	SIYQKVNKKLETAVN
1337	G3UYJ7	21	RAVYIFAKKNGIPFQ
1338	G3UYJ7	36	LRTIELLLKGQYTDSD
1339	G3UYJ7	76	ILLYLSRKYKAPDHW
1340	G3UYJ7	78	LYLSRKYKAPDHWYP
1341	G3UYJ7	116	CTRAMWQKMMFPVFL
1342	G3UYJ7	191	GMTLLMNKSTEPCAH
1343	O88844	65	KDAAEAIKKYNVGVK
1344	O88844	66	DAAEAIKKYNVGVKC
1345	O88844	81	ATITPDEKRVVEFKL
1346	O88844	87	EKRVEEFKLLQMWKSL
1347	O88844	89	RVVEEFKLLQMWKSPN
1348	O88844	126	RLVTGWVKPIIIGRH
1349	O88844	164	TPKDGTQKVTYMVHD
1350	O88844	187	MGMYNQDKSIEDFAH
1351	O88844	233	IFQEIYDKKYKSQFEA
1352	O88844	234	FQEIYDKKYKSQFEA
1353	O88844	260	DMVAQAMKSEGGFIW
1354	O88844	270	GGFIWACKNYDGDVQ
1355	O88844	321	RHYRMYQKQGETSTN
1356	O88844	374	IEAGFMTKDLAACLK
1357	O88844	408	LGENLKAKLAQAKLX
1358	P47806	183	PRATCQLKSELDMMV
1359	P47806	229	EDLEREEKPEPESVY
1360	P47806	302	MRRHTGEKPHKCTFE
1361	P47806	322	YSRLENLKTHLRSHT
1362	P47806	368	NEKPYVCKLPGCTKR
1363	P47806	374	CKLPGCTKRYTDPSS
1364	P47806	398	GPDAHVTKRHRGDGP
1365	P47806	520	PIGSRGLKLPSTLTHA
1366	P47806	660	PARVQRFKSLGCVHT
1367	P47806	816	HYGQVQVKPEQGCPV
1368	P47806	896	SHSTGQLKAQLVCNY

1369	P47806	931	ELPYQSPKFLGGSQV
1370	P47806	944	QVSQSPAKTPAAAAA
1371	B1AS29	97	DSFEATKKACDQLAL
1372	B1AS29	138	PHIQLRWKHHPLDNK
1373	B1AS29	145	KHHPLDNKDTFYVNL
1374	B1AS29	219	DDSRPLLKEMKRGRE
1375	B1AS29	222	RPLLKEMKRGREFRI
1376	B1AS29	354	SLQCHRHKAWRFGGGR
1377	B1AS29	404	LKEDGLEKVGWVSPA
1378	B1AS29	497	KYGAQDDKGQWNGMV
1379	B1AS29	546	GVSLLYRKPNGTNPS
1380	B1AS29	631	QGSELMPKALSTRII
1381	B1AS29	678	DSADDLAKQTKIEYG
1382	B1AS29	698	ATMTFFFKKSKISTFE
1383	B1AS29	706	SKISTFEKMWAFMSS
1384	B1AS29	778	MGSPYRDKITIALIQ
1385	B1AS29	798	KLHIMKEKWWRGSGC
1386	B1AS29	846	AVGEFIYKLRKTAER
1387	B1AS29	879	CQRRLKHKPQPPMMV
1388	B1AS29	905	NDRRLPGKDSMSCST
1389	J3QNG0	155	PEFYNRFKGRNDLME
1390	J3QNG0	176	IPVSPKSPWSMDE
1391	J3QNG0	199	AGILENPKNQAPPGL
1392	J3QNG0	215	TKTQDPAKAPNTPDV
1393	J3QNG0	277	ENRFIGMKSRGIYET
1394	J3QNG0	400	NINSLRLKEYHRLQS
1395	O70250	33	FDAELSEKGAEAKR
1396	O70250	129	PPPPMDEKHNYTISI
1397	F6YLP3	33	CFLTLRHKRPKAKYI
1398	F6YLP3	36	TLRHKRPKAKYI IWP
1399	F6YLP3	52	IDQKSCFKSMVTAGF
1400	F6YLP3	125	LSFRAWTKILWFQXX
1401	Q9EP89	153	VENRVPCPKPETVMRI
1402	Q9EP89	165	MRIASISKSLTMVAL
1403	Q9EP89	197	YVPEFPEKEYEKEKV
1404	Q9EP89	227	HYEKDIKKVKEEKAY
1405	Q9EP89	241	YKALKMVKGTPPPSD
1406	Q9EP89	263	KGKKNNEKSDAPKAK
1407	Q9EP89	288	SAKPGKKKNDFEQGE
1408	Q9EP89	346	VERASGYKYLDYMQK
1409	Q9EP89	353	KYLDYMQKIFHDLDM
1410	Q9EP89	384	RFYVYNKKKRLVNTP
1411	Q9EP89	385	FYVYNKKKRLVNTPY
1412	Q9EP89	398	PYVDNSYKWAGGGFL
1413	Q9EP89	413	STVGDLLKFGNAMLY
1414	Q9EP89	463	MSWDKEGKYAMAWGV
1415	Q9EP89	474	AWGVVEKKQTYGSCR
1416	P35585	14	YVLDLKGKVLICRNY
1417	P35585	61	GVRFMWIKHNNLYLV
1418	P35585	129	YPQTTDSKILQEYIT
1419	P35585	165	SWRSEGIKYRKNEVF
1420	P35585	168	SEGIKYRKNEVFLDV
1421	P35585	227	FDNTGRGKSKSVELE
1422	P35585	285	WIESVIEKHSHSRIE
1423	P35585	379	GKPPISVKFEIPYFT
1424	P26443	68	EDDPNFFKMVEGFFD
1425	P26443	171	LASLMTYKCAVVDVP
1426	P26443	211	RFTMELAKKGFIGPG
1427	P26443	302	MTPGFGDKTFVVQGF
1428	P26443	444	VSYFEWLKLNHNHVS
1429	P26443	527	QIMRTAMKYNLGLDL
1430	P26443	545	AYVNAIEKVFKVYNE
1431	E9Q1V0	122	KRASVFKLQKPNAA
1432	D3YYI5	72	GKLVINGKPITVFQE
1433	D3YYI5	195	TVDGPGSKLWRDSRG
1434	Q9D020	34	AQYIFTLKRKTGRKT
1435	Q9D020	40	LKRKTGRKTKI IEMM
1436	Q9D020	52	EMMPEFQKSSVRIKN
1437	Q9D020	58	QKSSVRIKNPTRVEE
1438	Q9D020	96	SRFSYNGKRCPTCHN
1439	Q9D020	109	HNIIDNCKLVTDECR
1440	Q9D020	177	ADSDVMLKEGYENFF
1441	Q9D020	238	NGVLKGFKGELIHVF
1442	Q9D020	253	NKHDGALKNTDYFSQ
1443	P62900	6	XXMAPAKKGGEKKKG
1444	P62900	12	KKGGEKKKGRSAIN

1445	P62900	31	EYTINIHKRIHGVGF
1446	P62900	101	EDEDSPNKLYTLVTY
1447	P62814	64	LVILDHVKFPRYAEI
1448	P62814	108	GTSGIDAKKTSCEFT
1449	P62814	403	PSLSRLMKS AIGEGM
1450	P62814	413	IGEGMTRKDHADVSN
1451	P62814	430	YACYAIGKDVQAMKA
1452	Q920E5	14	LDAYNQEKQNFIOHF
1453	Q920E5	144	ASIYRLLKIFYCREQP
1454	Q920E5	194	RYTEKRYKSIVKYKT
1455	Q920E5	223	MAGIDGEKEHANALK
1456	Q920E5	302	PEKVARVKALYEALD
1457	E9QNN1	14	FLYAWCGKRKMPAY
1458	E9QNN1	29	EIRAVGNKNRQKPMC
1459	E9QNN1	54	GMGNSTNKKDAQSNA
1460	E9QNN1	55	MGNSTNKKDAQSNAA
1461	E9QNN1	155	LKDYYSRKEEQEVQA
1462	E9QNN1	196	NQYFQKEKIQGEYKY
1463	E9QNN1	202	EKIQGEYKYTQVGPD
1464	E9QNN1	223	AEMTIYIKQLGRRIF
1465	E9QNN1	269	YSGLTKKKKEGERVEP
1466	E9QNN1	317	PVILNIGKLAHFEP
1467	E9QNN1	395	RELLPVKKFEAEILE
1468	E9QNN1	711	PVPDGVTKVILSTNI
1469	E9QNN1	736	VYVIDSCKQKVKLFT
1470	E9QNN1	738	VIDSCKQKVKLFTA
1471	E9QNN1	822	GIGQFLAKAIEPPPL
1472	E9QNN1	860	PLGRILAKLPIEPRF
1473	E9QNN1	869	PIEPRFGKMMIMGCI
1474	E9QNN1	1010	YPNVCYHKEKRKILT
1475	E9QNN1	1051	PFVVFGEKIRTRALS
1476	E9QNN1	1166	GDGPRPPKMARYDNG
1477	A2A5N1	29	DDMAAAMKAVTEQGH
1478	A2A5N1	122	ESKVFYLMKMGDYFR
1479	Q80ZV3	78	LSSCPEIKWHFIGHL
1480	Q80ZV3	120	KVNSSWQKKGPTEPL
1481	P47857	90	VIGSARCKDFREREG
1482	P47857	285	DIKNLVVKRLGYDTR
1483	P47857	397	HVRPPVSKGGLHTVA
1484	P47857	466	WTGQGGSKLGTKRTL
1485	P47857	630	GLVLRNEKCNENYTT
1486	P47857	649	NLYSEEGKGFDSRK
1487	P47857	656	KGIFDSRKNVLGHMQ
1488	P47857	715	GCVLGMRRKRALVFQP
1489	P47857	727	FQPVTELKDQTD FEH
1490	P47857	744	PKEQWWLKLRPILKI
1491	P47857	750	LKLRPILKILAKYEI
1492	E9QMI7	73	QDR TALQKVKKSVKA
1493	E9QMI7	101	NYAQVLDKFGSNFLS
1494	E9QMI7	209	EIAEEMEKERRLFQL
1495	E9QMI7	242	DLLQNLIKYYHAQCN
1496	E9QMI7	267	KLKQYIEKLAADLYN
1497	E9QMI7	283	KQTQDEEKKQLTALR
1498	E9QMI7	398	KPNAEDKKSFDLISH
1499	E9QMI7	555	SSDMTVRKEYITAKY
1500	E9QMI7	647	QNCGNLDKQTSVGNT
1501	E9QMI7	711	LSQAKSGKFNPHVHV
1502	E9QMI7	765	SSISPQDKLALPGFS
1503	E9QMI7	884	IPPETFQKSSQLTEL
1504	E9QMI7	910	KPVELAPKPQVGELP
1505	E9QMI7	1022	TPVPLPRKINTGKNK
1506	E9QMI7	1027	PRKINTGKNKVRVK
1507	E9QMI7	1029	KINTGKNKVRVKTI
1508	E9QMI7	1077	IEGQPERKGVFPVSF
1509	P11214	191	KPWCYVFKAGKYTTE
1510	P11214	217	SEDCYVGKGVTYRGT
1511	P11214	367	RFPPNHLKVVLGRTY
1512	P11214	449	CELSGYGKHEASSPF
1513	P11214	537	WGLGCGQKDVPGVYT
1514	A6ZI44	153	RPFQVIKSKGGVVG
1515	A6ZI44	207	AKWRCVLKIGEHTPS
1516	A6ZI44	348	INKCPLLKPWALTF
1517	A6ZI44	376	GGKKENLKAQEEYI
1518	A6ZI44	396	NSLACQGKYTPSGQS
1519	Q3UNI1	189	SEPPKRKRKRDINTI
1520	Q3UNI1	191	PPKRKRKRKRDINTI

1521	Q3UNI1	257	FDIEYFRKDPRPFFK
1522	Q3UNI1	330	SCLICKYKVDCEAVR
1523	Q3UNI1	581	CWPNRLAKEQISKRL
1524	Q3UNI1	586	LAKEQISKRLEGNQY
1525			