

Supplementary Material

Table S1.

Primer sequences of qRT-PCR

Primers	Sequences
TRPV5-Forward	5' - GTTGGTGCCTCTCGCTACTT - 3'
TRPV5-Reverse	5' - GCACTACCTCGCCATTACATTG - 3'
TRPV6-Forward	5' - GCAGAAGAGGATCTGGGAATCAC - 3'
TRPV6-Reverse	5' - GCACCTCACATCCTTCAAACCTT - 3'
CaBP-d9k-Forward	5' - TTCAGTCAGAGTTCCTCCAGCC - 3'
CaBP-d9k-Reverse	5' - TCTTCGTAACCTAACTTCTCCATCGC - 3'
PMCA1b-Forward	5' - CTCAGTTGCGTATAGCGGTGT - 3'
PMCA1b-Reverse	5' - AGACATCTCCATAGCTCTCCTG - 3'
β -actin-Forward	5' - AGCCATGTACGTAGCCATCC - 3'
β -actin-Reverse	5' - CTCTCAGCTGTGGTGGTGAA - 3'

Table S2.

Information of the peptides identified from *de novo* sequencing in DSPs.

No.	Sequence	Mass(Da)	No.	Sequence	Mass(Da)
1	KDGRPGPLGPA	1105.5879	317	AGPSGPSGLERGP	1180.5835
2	KDRGPGPLGPA	1105.5879	318	TSAPGSSVGTQM	1121.5022
3	VPGPMGPSGPR	1050.5281	319	VGPDDL	613.3071
4	PLPEFT	702.3588	320	TSLGKN	618.3337
5	LPSPLRP	778.4701	321	AGPSVFEGGSP	916.429
6	VPLPV	523.337	322	TSPEGLHGTGVP	1150.5618
7	GPVGPAG	553.2859	323	QPGPGA	567.2653
8	ASGPAGPR	711.3663	324	QTGFDLPQ	946.4396
9	GDAGPAGPK	768.3766	325	QLGADGR	757.3718
10	AGPAGPR	624.3343	326	AGPAMGFLGGAP	1086.5168
11	SGPMGPR	700.3326	327	LAGPLGSSHKP	1104.5928
12	GPAGGPR	610.3187	328	FPFPLPK	844.4847
13	FGFDWD	785.302	329	TVFSNVP	762.3912
14	AGPAGPK	638.3387	330	LPQPPQ	678.3701
15	QTGPAG	529.2496	331	VGPGPSPGVGPA	990.5134
16	AGPLG	455.238	332	SHSLLL	767.4541
17	LDLSYDHL	974.4709	333	KDRGPGPL	880.4766

18	QFGADGVAGPK	1087.5298	334	AGPPPPQ	704.3493
19	GPAGPAGGPR	835.43	335	FPHFDL	774.3701
20	GPAGPAGPR	778.4085	336	TSPADVVGSGP	985.4716
21	KDYLDKHLPR	1325.7092	337	GPSGPEGLR	868.4402
22	GHRGFSGL	829.4194	338	AMGDF	581.2155
23	VPGPMGPSGPR	1066.5229	339	EVGAGALGPAP	937.4869
24	FGSGLDGAK	850.4185	340	KFTVGVP	788.4432
25	AGPEGPR	682.3398	341	AAAPPLPGPGSP	1030.5447
26	AGPAGPR	666.3449	342	TVFLP	575.3318
27	FDLSGH	674.3024	343	FGLGQA	591.3016
28	GPMGPR	629.2955	344	VTKYH	646.3439
29	LPLKPR	722.4803	345	AGPLDPVGGPA	991.4974
30	GHRGFG	629.3033	346	TSLKGAP	672.3806
31	GPAGPQGPR	835.43	347	TSATGAP	603.2864
32	VGPMPGPSGPR	1107.5496	348	TSPGKGAP	713.3708
33	LSFPTTKT	893.4858	349	QFGLDAPAADPGTVGGSPQ	1825.8481
34	MSPGA	477.1893	350	QLGLDGVGPPLGGAP	1388.73
35	GPMGPR	613.3006	351	QEFGLGVSPAP	1142.5608
36	NPQGPR	667.3401	352	QNLGAEGFGPA	1101.509
37	TDLSDLHA	870.4083	353	TGAGPSGPSGLSPDR	1354.6477
38	LGP GP	439.243	354	AGPSGPSGLANNVG	1196.5786
39	VGPVGAP	595.3329	355	VEGPALSESDLHA	1436.7146
40	GPMGLMGPR	914.4466	356	PAAPAGPEPPGGL	1171.5872
41	KLTLK	643.4268	357	GPDPAGPAGVKGGVP	1274.6619
42	TAFWG	580.2645	358	KDGLPPSVGWPGGLAAP	1659.8621
43	KMGPR	629.3319	359	AGPSVTADLMPQ	1227.5806
44	KAATPA	599.3279	360	VSPGEFGA	762.3548
45	AGPAGPAGPR	891.4562	361	TSPAPGLKPVSGPGP	1360.7351
46	LGPVG	441.2587	362	TSPGVDGGPA	856.3926
47	LPQGPAP	678.3701	363	AGPSPNPAGP	905.4243
48	AGPGAGPR	681.3558	364	APAPAGLNGPSVP	1188.6138
49	TGLAAW	617.3173	365	TSADRGGAP	830.3882
50	GHRGFSGLQ	957.478	366	AVNGPGSGPR	910.462
51	AGAPG	413.191	367	GPLGPEGPR	878.461
52	VADYLDKHLPR	1325.7092	368	QAPPGATLMQSLGGPA	1552.7556
53	EGPVG	457.2172	369	QMGER	661.2853
54	VPGPMG	556.2679	370	QPATKPLGDVPGPA	1388.73
55	FPHFDLSGH	1055.4824	371	VAALPGA	597.3486
56	FGPAEVGSP	859.4075	372	GPGAGPR	610.3187
57	SVPGPMGPSGPR	1137.5601	373	TSPAGFVGSGP	975.4661
58	GPSTPPAP	722.3599	374	AGAVEFN	748.3392
59	LGFLGPQ	730.4014	375	GVADALASPSPPGA	1208.6038
60	TSPGAGLHGASVP	1149.5779	376	THPGAP	578.2812
61	GTPGPMGPSGRP	1109.5288	377	TVPPLP	622.369

62	FGSGLQ	607.2966	378	GAPAGEGPA	767.3449
63	LPGAPKDAAP	935.5076	379	QFPGSPGAVG	957.4556
64	KALGPA	597.3486	380	AGATSPVGGAP	925.4505
65	EGGGAP	486.2074	381	QLNNNGLMGPR	1254.614
66	GPAGPAAAFGVGP	1067.54	382	KTGSNSTAP	903.4297
67	GFSGLDGAK	850.4185	383	STPGLPGGVP	880.4654
68	QTAAGPSGP	826.3821	384	QPGDNGPLGDVPPQ	1431.6631
69	VDAVLRNTAAP	1125.6143	385	QLDTLSDLHA	1111.551
70	KGTVGP	599.3279	386	AGPSPAASGQP	980.4563
71	SPPGAP	524.2594	387	GAPATTGGPGPQ	1051.4934
72	GPSGPKEVGPSSHP	1331.647	388	QPGPLGDVG	880.429
73	KGDRGPPLGGPA	1162.6094	389	TSAPGFAVGGAP	1030.5083
74	KDGRPGPLGAPG	1162.6094	390	QAKMGSVGP	915.4484
75	TASPGGAP	656.3129	391	EGTGL	475.2278
76	QDGAPGKDGVRG	1155.5632	392	TSPGAKGNGAP	955.4723
77	GVADALHR	908.4828	393	LGTTYPPQ	875.4388
78	VGPAGRGPLG	879.4926	394	STAGGPGPA	713.3344
79	EGLRGPR	783.4351	395	QPPSGGPV	779.3813
80	HFDLSGH	811.3613	396	QGAP	413.191
81	FKLLSHS	830.465	397	TSPGPSP	641.3021
82	QPAGPSLGPQ	992.4927	398	TSAWPQ	688.3181
83	TLLLPGAP	780.4745	399	AGAATSPGAP	840.3977
84	ALGLDGRPGPLGPA	1331.7197	400	TSAAVTFKGAPGA	1176.6138
85	QFGLGEGPA	916.429	401	QLGLDRGPPGLGPA	1388.7412
86	KDRGVPSPGPA	1121.5828	402	ALGLDGRGPPLGAP	1331.7197
87	RPGPMGVFFT	1107.5535	403	QEFGLGKTAPAGA	1287.6458
88	TSPAGPGLPGGVP	1105.5767	404	AGFGLPQEWPGKEGSP	1697.8049
89	AGVMGPYPGPK	975.4847	405	TSLPGWGDV	930.4447
90	VADPSFGAV	861.4232	406	TPSPGLSPVGGAP	1135.5874
91	QPSGEFGPAP	1027.4611	407	GFSPGGDVA	805.3606
92	GAPGPMGP GP	878.3956	408	QPPLGVPG	763.4228
93	VSPGFAGEPQ	987.4661	409	PGRGPLGPA	820.4555
94	TGDAGPA	587.2551	410	TSACCC	757.2194
95	KPSPLRP	835.4916	411	EVSFLPQPPQE	1269.624
96	AGRGPPGEPQ	1006.4832	412	ASYGGPAGPR	931.4511
97	GPSGPQ	541.2496	413	TAAGLW	617.3173
98	AGPKG	470.2489	414	KDAKTSPGGAP	1069.5403
99	TSTPGAP	629.3021	415	QFGADGVA	805.3606
100	KAVEVMT	792.4052	416	KGPAGPR	723.4028
101	NYFPH	676.2969	417	AGAPGSTAPAP	937.4505
102	FDLSHG	674.3024	418	QFGPK	617.3173
103	KLNDAAGAPK	983.54	419	TPAAGPA	583.2966
104	TGGSPQGPR	855.4199	420	PGALPPQEK	935.5076
105	ALGLDGRGPPLGGAP	1388.7412	421	QADGVAGPKW	1069.5193

106	TSPLMAGP	772.3789	422	QEFGLGGAP	916.429
107	AATGPGVAP	739.3864	423	TVYYGDLGYPGPK	1428.6924
108	QAGEPPMATYYGPSGASGPAGRP	2260.0217	424	PVLPVSVSVE	1024.5804
109	QLGER	643.3289	425	QPSGVTSAAQVH	1180.5837
110	QPSGPSGLSDPGR	1253.6001	426	QSPGVVHSGAP	1076.5251
111	AGPGAPG	567.2653	427	MMVLDKHLPR	1254.6577
112	AALGGPA	555.3016	428	AGPVSW	657.3122
113	LSGAKFPK	846.4963	429	PGADVPPGGAP	836.4028
114	TSLFEAP	763.3752	430	TSPGHAAAP	807.3875
115	EGVAAPAP	710.3599	431	AALPGPSAEAVGAP	1206.6243
116	SGDGSVQFGPA	1020.4512	432	QPAGGVSGP	810.3871
117	QPGFDSPGR	1001.4566	433	QAGPGAGPVGVP	1047.5349
118	TVGLPVELPK	1051.6277	434	GPAGGPLGPVG	877.4657
119	ALSELH	668.3493	435	FDLSHGSAGA	960.4301
120	TTTGPA	546.265	436	TSAPMVGP	774.3582
121	QGGSVAMVGGADGVAGPK	1614.7671	437	VPLPLH	674.4115
122	QGAGVMGFLGPGA	1160.5647	438	TSLAFPGAP	859.4439
123	LGPDSFGAA	833.3919	439	AGPSVFGNGPQ	1071.4985
124	LGMLGPK	730.4047	440	GDDGMP	606.1956
125	GFDGDF	656.2442	441	TPGAAAGGPA	768.3766
126	GATSPPA	641.3021	442	TSPSGPA	615.2864
127	FESFGDLST	1001.4341	443	PGVPGPA	593.3173
128	QFGQDGLAGPK	1158.5669	444	TSDVGPA	645.2969
129	AADGPQ	557.2445	445	TTMMGAP	739.2881
130	QDGAPGKDRNV	1155.5632	446	TSVSSGVP	732.3654
131	FGTGLQ	621.3122	447	TAFGADV GKPGA	1089.5454
132	AGGRVPGPMGPSGPR	1433.7197	448	FDLSHGGT	832.3715
133	AGPSVEW	786.3548	449	TSALTVMFGPLGRDPAP	1728.887
134	TAAGLSH	655.3289	450	TSGLSVPMGPGSP	1185.5701
135	LDGSW	576.2543	451	QEGDLGFLGPQ	1201.5615
136	TAAPGTA	587.2914	452	QPSDAGP	712.3028
137	FGDGDFYAR	1046.4458	453	QAGAAPTGPQFGGPSGPAVGAP	1932.9329
138	VAPGPQ	567.3016	454	QLATPA	599.3279
139	TSLLPGAP	754.4225	455	AGPGPAGPR	820.4191
140	QFGVDGLKSTW	1278.6245	456	QEFGLPVSGPAGA	1270.6194
141	AGAVFGEPGA	916.429	457	QATVQMLLGPSGEGLQ	1685.8293
142	TSAAMGAP	704.3163	458	STAVDGFW	881.3919
143	GPSGPQGSPGPLNPA	1331.647	459	QPGLPGPAG	834.4235
144	QGGSLMVGGGADGVAGPK	1614.7671	460	AGVGFPMP	873.4055
145	KTGPLGPPSGP	1048.5552	461	QPAMVGQPGLQ	1182.5703
146	TMFPEVPELEPM	1434.6411	462	QAPGTATSTVGLGQNNPA	1724.833
147	QSGFGHGFGGPA	1159.5046	463	GATGGDDW	819.3035
148	LPSDFTAP	846.4123	464	AGPSGPSGLDQTAAAP	1395.6631
149	AAVGSGPQGPSGASGPAGRP	1676.823	465	QVGPSPGVGPA	1006.5084

150	AGPVG	441.2223	466	VADSPGR	700.3504
151	AGPLG	413.2274	467	MAASVP	574.2785
152	GPSSGPG	557.2445	468	QPVSPGLTPPQ	1161.603
153	QLGALGH	736.3868	469	TSPAAFMAP	891.416
154	QAPGA	484.2281	470	VGGAAASGPMGPR	1126.5552
155	TSEGLGPA	730.3497	471	AGPSVFGGPS	916.429
156	TSAPGAGNGGPA	955.4359	472	TSAMPGAP	746.3269
157	QAGPAGGKP	823.4188	473	TSPEGLHTAAPA	1150.5618
158	DGDSCRQHMGLMGPR	1628.7148	474	TVAGPLG	613.3435
159	PGGPGSP	567.2653	475	TSPKAAHGPA	935.4824
160	GLPGPVG	595.3329	476	GPSAPAAGPSGP	964.4614
161	QPEGVPGAGVGP	1105.5403	477	GPFFT	567.2693
162	TYFKPH	791.3966	478	TSEWRGE	863.3773
163	GPSPAVGPR	836.4504	479	RDAAGDGPA	828.3726
164	QAATSPPGGAP	994.4719	480	TPSVYGH	759.3552
165	QEVGPAP	738.3548	481	GPTSAAVNGGAP	997.4828
166	QLSELSDLHA	1111.551	482	QAPGAATPPQ	978.4771
167	AVEV	416.2271	483	QPGALGPQ	808.4079
168	EVSFA	551.2591	484	TTPLTVP	727.4116
169	STGLSVPGPMRPGSP	1495.7454	485	FDGDW	638.2336
170	KGDVPSRGPGLPGAP	1445.7627	486	AGLPPPSGP	833.4283
171	QSGFHGGFGAP	1102.4832	487	GPDLFE	718.3173
172	GPAGADGDERGAGAP	1296.5693	488	GPAEPAEGVGP	979.461
173	TAAPAVGPLGSSGPPPA	1445.7515	489	TEPA	416.1907
174	QLGEFGFAVPGA	1233.603	490	TSAPGGPSGVGP	982.4719
175	TSLGPW	659.3279	491	FDYC	603.1999
176	TSAWVGPA	787.3864	492	VSGAFSDGM	869.3589
177	LPGGPERGPAPP	1143.6035	493	TPGVGP	526.2751
178	EPLPF	601.3111	494	TVFLPQPPGA	1025.5546
179	AGPGSP	484.2281	495	QKPG	470.2489
180	GAFGGADVAGAPK	1144.5513	496	TSAPGTH	669.3082
181	LDGRPGPLGPA	1048.5664	497	QAPPGYPGAVG	1054.5083
182	PLGPEGPR	821.4395	498	QPGPCPR	852.3912
183	FGSVADGAK	850.4185	499	PEDFKLLG	917.4858
184	YGDLSF	700.3068	500	PCGPR	627.2798
185	TSPGVFMPQ	962.4531	501	AGPVGGA	666.3337
186	TSTPSGVGP	801.3868	502	PAGPLQ	581.3173
187	GPAGPEGPR	836.414	503	TSPGAAVSGSP	899.4348
188	TSPAGWVGSGP	1014.4771	504	SVPGLDRNP	953.493
189	DRGDAGPK	814.3933	505	QGVSTVLTSK	1018.5659
190	SGLPDSR	730.361	506	VVLPGAP	651.3955
191	TLAPPLVSVE	1024.5804	507	SGNDGL	561.2394
192	TSTGNGAP	703.3137	508	TSPATVSGP	815.4025
193	KSVPGPMGSP	997.4902	509	TAAGMSVP	732.3476

194	VSTVLTSK	833.4858	510	QDVARTGLGPA	1125.5779
195	QPLGAGP	680.3493	511	QPSGELSNVSPGP	1309.615
196	TSGLSVPGGGNRGSPGP	1495.7378	512	QEFGLGPSVPAGA	1270.6194
197	TSLMGPA	675.3262	513	TSMKGSPDGVAGPK	1330.655
198	TSPGDLLGPLGGDVPPQ	1618.8203	514	PLGGAPGPVG	820.4443
199	QGGMLSVGGGADGVAGPK	1614.7671	515	TSPGLGGNHVMAPQ	1364.6506
200	QGAGVMGFLGAGP	1160.5647	516	QGAGVMGFGVAAPG	1217.5862
201	TAAPFPGSP	843.4127	517	GPPSGPGAP	735.3551
202	QAGPAGPK	766.3973	518	TSPGSLMPPGSGP	1183.5542
203	QVMGFQLGP	975.4848	519	QEMM	611.1931
204	QLGMLGPK	900.4739	520	SGPGAGPSGPLGQP	1177.5728
205	SHLPSDFTPA	1070.5032	521	AGAVTSGLLGPLGRDPPA	1689.905
206	NAAGVMGFSVGPA	1176.5598	522	AGPSGPSVASPDR	1196.5786
207	AGPAGEPPQ	864.3977	523	GFSCMRAGPK	1109.511
208	AGPYGPSGPVG	957.4556	524	QSAMVGDLGAGPK	1287.6128
209	QVGPSPGVGAP	1006.5084	525	LGAATAPA	670.3649
210	TGPAGPAGLPGPVG	1146.6033	526	KDPTSGLNGPLGRDPAP	1690.8638
211	TSPGVQGQLGSW	1215.5884	527	KDAHAGPAP	904.4402
212	QPLSSHGPK	991.5087	528	NGLWFNGSPGDVGAGKP	1671.8005
213	TSPDGLTHKGPAATTGPPA	1774.885	529	GPGAP	439.2067
214	KMGPMGPSGPR	1155.553	530	QPVAAGGPA	766.3973
215	NPGGVP	581.2809	531	QPDSGPA	670.2922
216	VMGMLGGKP	904.451	532	QPAGPLGPGV	891.4814
217	NPSGPT	571.2602	533	QLGFGPSGP	900.4341
218	GYFPH	619.2755	534	TSAPGFPPQ	900.4341
219	QKGSPPVRLGGPA	1207.6672	535	STAVSGH	657.3082
220	QTGPA	472.2281	536	QDLEQGPAP	1084.4824
221	AGQMGRP	757.3541	537	AGPSGPAP	694.3286
222	TAAYPAP	689.3384	538	VATPPQ	611.3279
223	QEFGLGLSGPPGA	1270.6194	539	VQPGMPGPSGRP	1178.5867
224	TAAPGCH	712.2963	540	QPGFDLGGAP	999.4661
225	QSGFHGGFGPA	1102.4832	541	QFGAGL	633.3122
226	TSPDVGPQ	799.3712	542	QAVYPGEPQ	1029.4767
227	TSPGVSP	643.3177	543	NPGPFSAPGGVP	1137.5454
228	TAAPFPGPS	843.4127	544	TSAHEGPAP	865.3929
229	AGPSVTTW	859.4076	545	TVFLPQPPQ	1025.5546
230	ASVGPMGPSGPR	1153.5549	546	GSNKAPEGPR	1053.5203
231	VPGLGEGPGAPAP	1117.5767	547	TVPGPPLP	776.4432
232	QPRPGPLGPA	1030.5559	548	TSAAGPPSGVGP	996.4876
233	GAAGLEGSCGGPK	1201.5398	549	AGAVPSGPGV	852.4341
234	QPAGPSTLGGAW	1182.5669	550	PNGPQ	553.2496
235	AGPSPPQ	694.3286	551	TSAQTPGAP	828.3977
236	KLSGP	542.3064	552	VPVELE	726.3799
237	TSPAPGGFGLPGA	1127.561	553	TAPCPPQ	769.3428

238	TSPAGLAGSGP	913.4505	554	TSPSPGPA	712.3392
239	TASPGQNGQP	955.4359	555	TSPSVGPSPG	884.424
240	GAAVDPPGGAP	949.4504	556	TSAGAADVGPQ	972.4512
241	TVAGGPGAP	725.3708	557	AGPVDGPAP	821.3919
242	GPGVP	425.2274	558	TVFGLP	632.3533
243	AGPGAEEAPAP	878.4133	559	GPAGPVGVSGPLG	1063.5662
244	ALGLDGRGP	896.4716	560	QSGPAATGFGPQ	1158.5305
245	KGGAGKGPAP	937.4981	561	TSPGAMDKHLPR	1324.6558
246	QPGAGVDAPGP	1006.4719	562	TSPGLDSVGPAP	1193.5928
247	AGPSPPA	637.3071	563	QLGPSVGEAAPLQP	1404.7249
248	FGVPLP	628.3584	564	TSPGDLLGPLSSPPGAP	1561.7988
249	GAPAGPDL	738.3548	565	TSPGLGGDVVHGLAPQ	1503.7681
250	EGKGPVG	642.3337	566	TSPGVPTHAGLFQSNR	1764.8906
251	AGPSVFGPSGE	1045.4717	567	AGPLGDLGVGDHK	1276.6411
252	LGAPG	413.2274	568	AGAVGASTPFGAAGGFATAPGA	1846.885
253	AGPAAPAP	692.3493	569	TSGLSVHCKVSPGAP	1495.7454
254	GPRPQ	553.2972	570	QEFGLGKTAAPGA	1287.6458
255	TSPGVYNGGAP	1018.4719	571	TSGLSVMFYLGSPGP	1511.7329
256	QLGLAGHH	873.4457	572	TAAGPWDLGFVQAP	1428.7036
257	TSPAGPSVGGSP	1012.4825	573	PGTAADGPAGLPGPVG	1332.6672
258	QGGPAGGPR	837.4093	574	GVMGPYPGPK	904.4476
259	AVEKLLSR	914.5549	575	TSAPPMGATPGAP	1153.5437
260	GPAGERG	642.3085	576	GAAGLTGPAP	852.4341
261	QPGSPVGLGAP	1020.524	577	QPGQVSPSHAGPLGPTPSGP	1908.9329
262	GPSGKMGP	729.348	578	TAASSPV	631.3177
263	TGEGEARDQ	961.4101	579	TDVELSRPPQ	1140.5774
264	ALGLDNVPGPLGAP	1331.7085	580	AGLGEFGLPQGVGSGP	1483.7307
265	TSWTVEGAP	946.4396	581	TGLGGVPMFGSPGA	1262.5964
266	QGAGVMGFGLGAP	1160.5647	582	TNLWFYSLGAGP	1324.6453
267	GPPDAGPAGPLPGV	1257.6353	583	TSAPGLMVGP	944.4637
268	TSPGPYGLYGNGGAP	1406.6465	584	AVDAAAAMLAGPA	1127.5645
269	QSGFAATGPGPAG	1158.5305	585	AGPAP	453.2223
270	GPAGFAAPVG	842.4286	586	AGSPGLSAHK	923.4824
271	QFGLPGSP	843.4127	587	KWDWGWA	989.4395
272	AGPAGFPGSPGKP	1180.5876	588	TAPGPGAFN	830.3922
273	KDATSGPAGPDPPQ	1378.6365	589	AGPPPQ	607.2966
274	EVSFLPQPPQ	1140.5815	590	APGGGPT	555.2653
275	TLSSGPA	631.3177	591	LSFLPQPP	897.496
276	QVSPTPGGSP	967.4611	592	TVFDLAGP	818.4174
277	GPAGPSGAPGKDGR	1222.6055	593	AGPSMH	656.2588
278	TSPEGLHGTGPV	1150.5618	594	GPAVFEPQ	843.4127
279	QLGPFGR	912.4818	595	PAGGPLG	567.3016
280	FGSVADGKA	850.4185	596	TSASGGAGP	703.3137
281	TVHKPP	677.386	597	KDPGVGAPGLGP	1063.5662

282	GPVALAGPGSP	921.4919	598	TAAHSVP	681.3445
283	VGP GPMGQKTH	1123.5444	599	TSLMVSGPQ	934.443
284	QPAPVGAPGA	905.4606	600	VGSAGPSVGSGP	1012.4825
285	LPGAYM	650.3098	601	VSPGPMQHTGK	1153.5549
286	AGPR	441.2336	602	DHLYW	732.3231
287	TSPGVLLLP	895.5378	603	TSLSGGPA	688.3392
288	TVFLPQ	703.3904	604	AVDASMTAGPK	1143.5593
289	VALGPMGPSGPR	1137.5964	605	QVGTSDRGPA	1028.4886
290	QATPA	486.2438	606	GEGAKDGSP	816.3613
291	TSVSGVGP	773.3919	607	SHSLL	668.3857
292	TSPGPAGLLGPLGRDPAP	1671.8943	608	TAAPFSGP	746.3599
293	PFLEV	603.3268	609	GPSTATFGSGAP	1048.4824
294	YPLVSRP	830.465	610	EGLGPA	542.27
295	GFSGLDGKS	866.4134	611	TAAEYLP	763.3752
296	VPLPLHR	830.5126	612	NFGDF	598.2387
297	GSTGEQGDR	947.3944	613	TASPSTPGAP	884.424
298	TSFGPK	635.3278	614	TLLVVGAP	768.4745
299	TSGWAGP	674.3024	615	QGRP	456.2444
300	QKGDAQPGPK	1024.53	616	QERTSGPGPS	1056.4836
301	QEGLMGPR	928.4437	617	GTSPV	459.2329
302	ALPELSRAQ	1025.5505	618	AGPEGVGP	724.3391
303	AGGKGEK	687.3551	619	TAAPGSTAMAP	973.4539
304	QSGPDGK	729.3293	620	AATADSVP	772.3603
305	TSVGGGAGP	772.3715	621	FDLSHGSA	832.3715
306	TPSPVAKGDAPP	1135.5874	622	AGPAEPPVGSGP	1076.5137
307	GPASTPKC	816.3799	623	TVSFVPSGP	889.4545
308	VGGAGPSPGPGPR	1104.5676	624	FPLDL	603.3268
309	VPGLDAGTAAPAP	1135.5874	625	GQPGLGPAP	834.4235
310	QPGSSTPLG	884.424	626	TVYSVP	664.3432
311	TAAVAHPLGSSGPPAP	1428.7361	627	DLGTSEPQ	845.3766
312	VAGTPPQ	668.3493	628	QPAGVTAANGPLGRDPPA	1729.8748
313	ASPTPGLPGGVP	1048.5552	629	QPLSTGPVA	910.476
314	QPGPSVP	722.3599	630	TSAPAAFMATPGPA	1288.6121
315	QFGVGW	734.3387	631	TSNGPVEFSLP	1146.5557
316	FGPAP	487.243	632	TSPGVAEESLAGPA	1284.6196