

Supporting Information

**Core-Shell magnetic microporous covalent organic
framework with functionalized Ti (IV) for
phosphopeptide enrichment**

Fengjuan Ding[†], Yameng Zhao[†], Haiyan Liu^{*,†}, and Weibing zhang^{*,†}

[†]Shanghai Key Laboratory of Functional Materials Chemistry, School of Chemistry and Molecular Engineering, East China University of Science and Technology, Shanghai 200237, People's Republic of China

* Haiyan Liu, East China University of Science and Technology, Shanghai 200237, P. R. China.
E-mail: hyliu@ecust.edu.cn.

* Weibing zhang, East China University of Science and Technology, Shanghai 200237, P. R. China.
E-mail: weibingzhang@ecust.edu.cn. Tel: +86-21-64252145. Fax: +86-21-64233161.

Contents:

1. Experiment section

1.1 Preparation of Fe₃O₄@SiO₂@TpPa-Ti⁴⁺

1.2 Sample preparation

2. Supporting figures

3. Supporting tables

1. Experiment section

1.1 Preparation of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$

Synthesis of Fe_3O_4 particles: 2.70 g of ferric chloride was dissolved in 100 mL of ethylene glycol and sonicated for 5 min to obtain a yellow transparent liquid. After adding 7.20 g of anhydrous sodium acetate, the mixture was mechanically stirred at room temperature for 30 min. Then the obtained homogeneous solution was transferred into a 200 mL Teflon reaction vessel and heated at 200 °C for 8 h to obtain Fe_3O_4 particles.

350 mg of Fe_3O_4 particles were dispersed in a mixture containing 160 ml of ethanol, 40 ml of water and 1.5 ml of concentrated aqueous ammonia, and then sonicated for 30 min. 1.0 ml of tetraethyl orthosilicate was added dropwise, and mechanically stirred at room temperature for 6 h. Then the surface of nanoparticles was modified with amino groups. $\text{Fe}_3\text{O}_4@\text{SiO}_2$ was dispersed in 60 ml of isopropanol. 1.0 ml of 3-aminopropyltriethoxysilane was added dropwise, protected with nitrogen and mechanically stirred at room temperature for 24 h to obtain $\text{Fe}_3\text{O}_4@\text{SiO}_2-\text{NH}_2$.

$\text{Fe}_3\text{O}_4@\text{SiO}_2-\text{NH}_2$ (150 mg) was dispersed in dioxane (10 mL), Tp (10 mg) and acetic acid (6 M, 500 µL) were added into the suspension, and heated at 120 °C for 1 hours to get the Tp-functionalized Fe_3O_4 nanospheres ($\text{Fe}_3\text{O}_4 @\text{SiO}_2-\text{Tp}$).

$\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-NO}_2$ nanospheres were prepared by in-situ synthesis. Briefly, the synthesized $\text{Fe}_3\text{O}_4@\text{SiO}_2-\text{Tp}$ (50 mg) was dispersed in mesitylene/dioxane (1:1) (2.5 mL) and mixed with Tp solution (mesitylene/dioxane =1: 1, 0.1 mmol, 1 mL), Pa- NO_2 solution (mesitylene/dioxane=1: 1, 0.15 mmol, 1 mL) and aqueous acetic acid (6 mol/L, 0.5 mL). The mixture was sonicated for 3 minutes, and then heated under vacuum at 120 °C for 48 hours. The resulting red solid was washed thoroughly with DCM/acetone and then dried under vacuum overnight. Hereafter, Nitro groups of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-NO}_2$ were reduced to amino group by sodium borohydride to get $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-NH}_2$. At the same time, the imine linking units were reduced to secondary amines.

For immobilizing metal ions, firstly, $\text{Fe}_3\text{O}_4@\text{SiO}_2-\text{NH}_2$ spheres were dispersed in 60 mL acetonitrile solution containing 60 mmol/L phosphorus oxychloride and 2,4,6-trimethylpyridine, and then stirred at room temperature with nitrogen for 12h to get $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-PO}_4^{3-}$. The resulting nanospheres were dispersed in 50 mmol/L $\text{Ti}(\text{SO}_4)_2$ aqueous solution and mechanically stirred overnight at room temperature to obtain $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$.

1.2 Sample preparation

1 mg of α -casein was dissolved in 1 mL of NH_4HCO_3 buffer (50 mM, pH=8.3), and digested by trypsin (0.025 mg) for 17 h at 37 °C with an enzyme/substrate ratio of 1:25 (w/w).

1 mg of BSA was dissolved in 1 mL of NH_4HCO_3 buffer (50 mM, pH=8.3) containing 8M urea. After this, 5 µL of DTT (200 mM) was added and incubated at 60 °C for 45 min. Then 20 µL IAA (200 mM) was added and the mixture were incubated in the dark for 30 min at room temperature. Finally, the mixtures were digested by trypsin for 17 h at 37 °C with an enzyme/substrate ratio of 1:25 (w/w). The obtained proteolytic digests were stored in a cryogenic refrigerator at -80 °C for further use.

The preparation of HeLa cell and rat brain lysate: HeLa cells were harvested in a 175 cm² culture flask and washed twice with ice-cold PBS buffer (pH 7.4), and then resuspended in lysis buffer (8 M urea, 50 mM Tris-HCl, PH=7.4) consisting of 2% protease inhibitor cocktail, 1% Triton X-100, 1 mM $\text{C}_3\text{H}_7\text{Na}_2\text{PO}_6$, 1 mM $\text{Na}_4\text{P}_2\text{O}_7$, 1 mM NaF, and 1 mM Na_3VO_4 . The suspension was then sonicated for 180 s. After sonication, the lysis was centrifuged at 15000g at 4 °C for 20 min. The rat brain was

treated as Hela cell following above procedures. Then the supernatant was collected and five volumes of precipitation solution (50% acetone/49.9% ethanol/0.1% acetic acid) were added to precipitate the protein at -20 °C for at least 2 h. For rat brain lysate, before precipitation, the ice-cold 75% ethyl alcohol was used to wash the protein pellet to remove pigment. The protein precipitate was collected by centrifugation at 15000g at 4 °C for 20 min. Subsequently, the obtained protein pellet was resuspended in 50 mM NH₄HCO₃ buffer and the concentration of the protein was determined by using the Bradford assay. The procedure of the protein digestion was the same as that of BSA.

2. Supporting figures

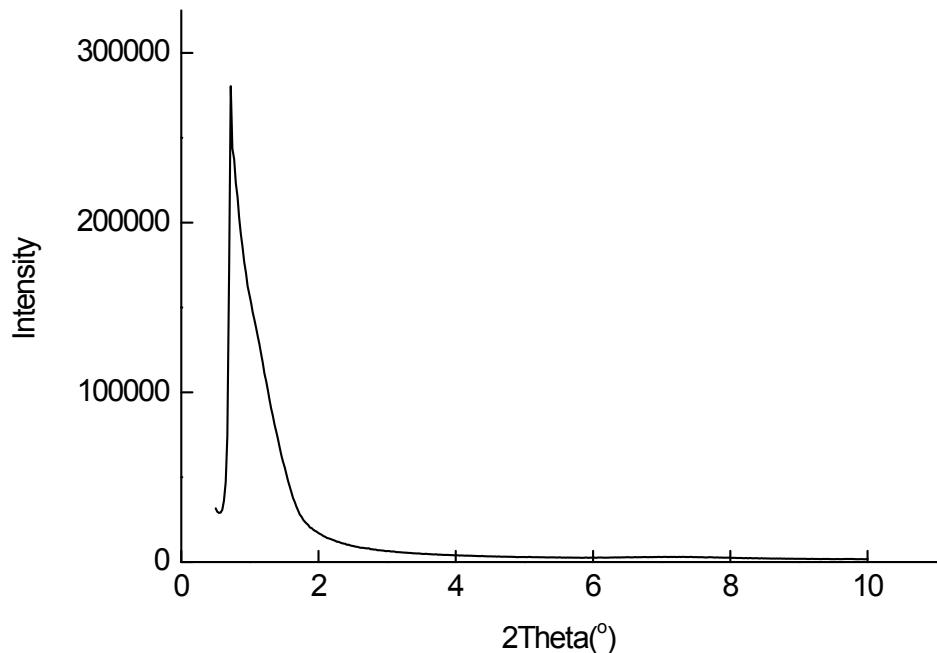


Figure S1. Small-angle PXRD of the $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$ nanoparticles.

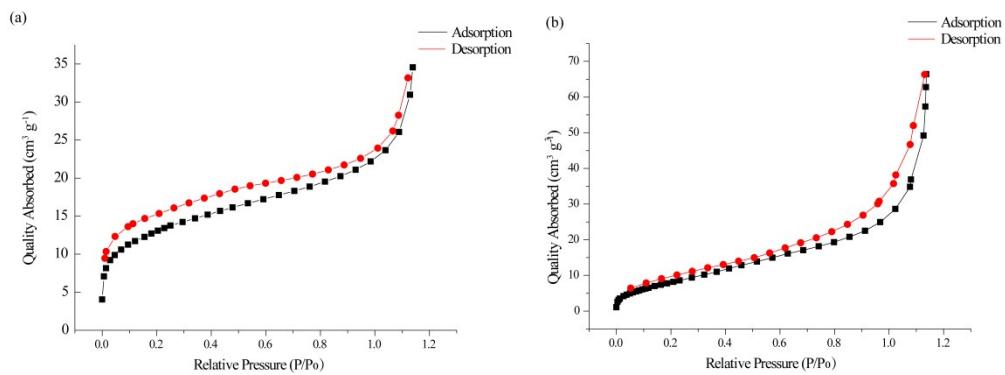


Figure S2. N_2 adsorption–desorption curve of (a) $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-NO}_2$ nanoparticles and (b) $\text{Fe}_3\text{O}_4@\text{SiO}_2$ core.

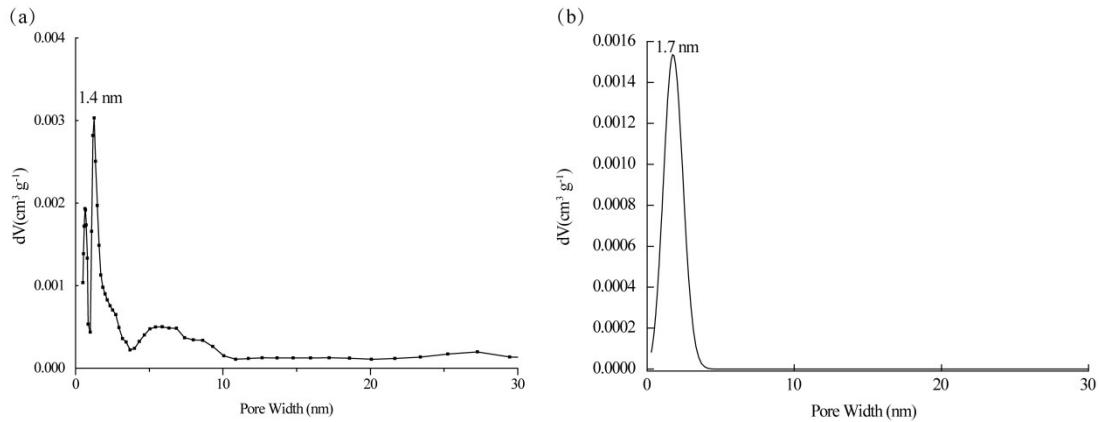


Figure S3. Pore size distribution of (a) $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$ and (b) $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-NO}_2$ nanoparticles.

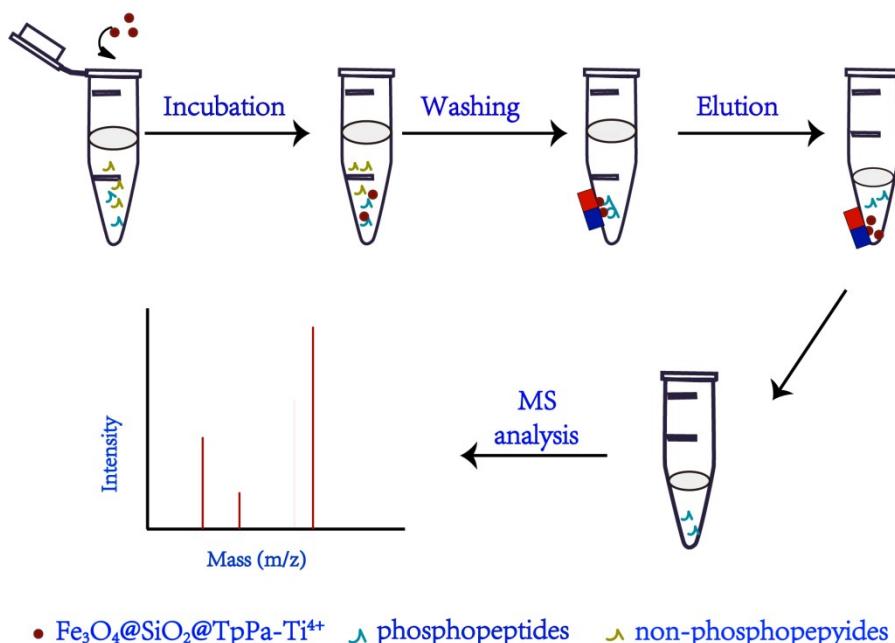


Figure S4. Enrichment processes of phosphopeptides by $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$ nanoparticle^s.

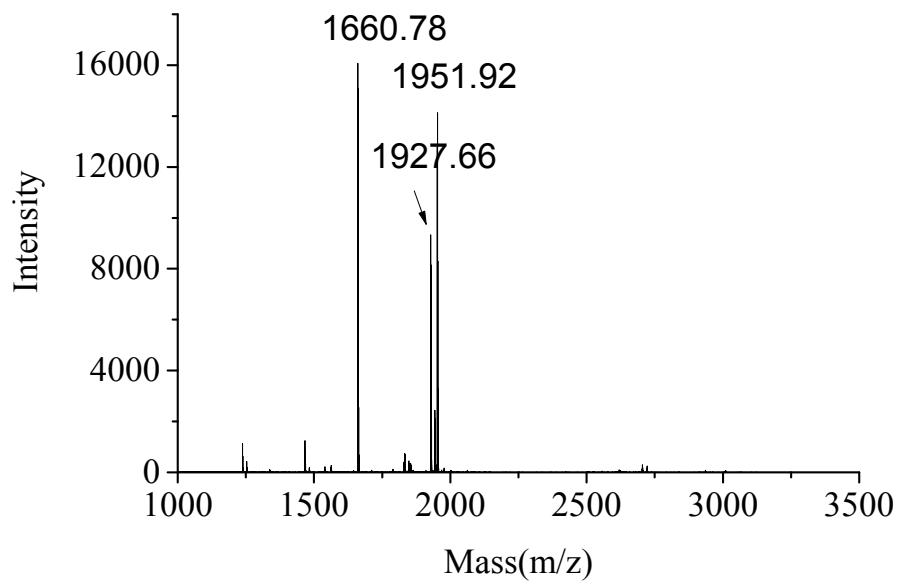


Figure S5. MALDI-TOF mass spectra of the tryptic digest of α -casein enriched by $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$ nanoparticles. These three phosphopeptides ($m/z=1660.8$, 1927.7 and 1951.9) were selected as marker.

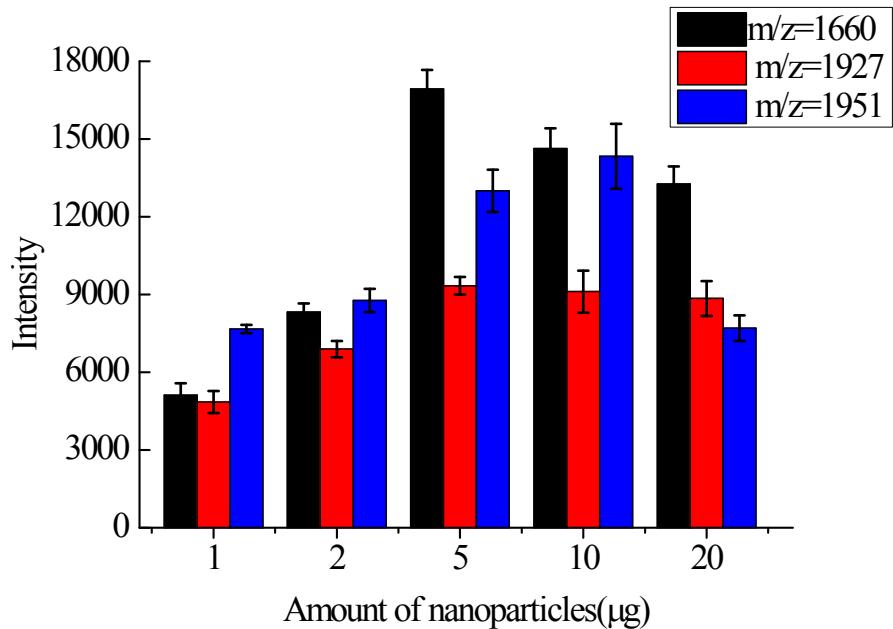


Figure S6. Detection of phosphopeptides enrichment capacity of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TpPa-Ti}^{4+}$ nanoparticles from $1 \mu\text{g}$ α -casein tryptic digest.

3. Supporting tables

Table S1. Detailed information of the phosphopeptides enriched by Fe₃O₄@SiO₂@TpPa-Ti⁴⁺ nanoparticles from α -casein and non-fat milk tryptic digest.

No.	m/z	Peptide Sequence	No. of phosphate groups	α -casein	Non-
				casein	fat milk
$\alpha 1$	1026.52	EKVNEL[pS]K	1		✓
$\alpha 2$	1237.51	TVDM[E][pS]TEVF	1	✓	✓
$\alpha 3$	1253.50	TVD[Mo]E[pS]TEVF	2	✓	✓
$\alpha 4$	1337.73	HIQKEDV[pS]ER	1	✓	✓
$\alpha 5$	1411.51	EQL[pS]T[pS]EENSK	2		✓
$\alpha 6$	1466.66	TVDM[E][pS]TEVFIK	1	✓	✓
$\alpha 7$	1482.63	TVD[Mo]E[pS]TEVFTK	1	✓	✓
$\alpha 8$	1539.63	EQL[pS]T[pS]EENSKK	2	✓	✓
$\alpha 9$	1660.84	VPQLEIVPN[pS]AEER	1	✓	✓
$\alpha 10$	1832.88	YLGEYLIVPN[pS]AEER	1	✓	✓
$\alpha 11$	1847.76	DIGSE[pS]TEDQAMEDIK	1	✓	✓
$\alpha 12$	1927.72	DIG[pS]E[pS]TEDQAMEDIK	2	✓	✓
$\alpha 13$	1943.71	DIG[pS]E[pS]TEDQA[Mo]EDIK	2	✓	✓
$\alpha 14$	1951.98	YKVPQLEIVPN[pS]AEER	1	✓	✓
$\alpha 15$	1981.44	NMAINP[pS]KENLCSTFCK	1	✓	✓
$\alpha 16$	2080.07	KYKVPQLEIVPN[pS]AEER	1	✓	
$\alpha 17$	2618.77	NTMEHV[pS][pS][pS]EE[pS]IISQETYK	4	✓	✓
$\alpha 18$	2634.80	NT[Mo]EHV[pS][pS][pS]EE[pS]IISQETYK	4	✓	✓
$\alpha 19$	2677.99	VNEL[pS]KDIDG[pS]E[pS]TEDQAMEDIK	3	✓	
$\alpha 20$	2703.89	Q*MEAE[pS][pS][pS][pS]EEIVPN[pS]VEAQK	5	✓	✓
$\alpha 21$	2720.87	QMEAE[pS][pS][pS][pS]EEIVPN[pS]VEAQK	5	✓	✓
$\alpha 22$	2736.87	Q[Mo]EAE[pS][pS][pS][pS]EEIVPN[pS]VEAQK	5	✓	✓
$\alpha 23$	2746.83	NTMEHV[pS][pS][pS]EE[pS]IISQETYKQ	4	✓	✓
$\alpha 24$	2924.47	NTMEHV[pS][pS][pS]EESIISQETYKQEK	3	✓	✓
$\alpha 25$	2935.13	KEKVNEL[pS]KDIDG[pS]E[pS]TEDQAMEDIKQ	3	✓	
$\alpha 26$	2952.17	KEKVNEL[pS]KDIDG[pS]E[pS]TEDQA[Mo]EDIKQ	3	✓	✓
$\alpha 27$	3007.98	NANEEEYSIG[pS][pS][pS]EE[pS]AEVATEEVK	4	✓	✓
$\alpha 28$	3025.15	FPQ[pS]LQ[pS]LYQGPIVLNPWDQVKR	2		✓
$\alpha 29$	3026.46	NANEEEYSIG[pS][pS][pS]EE[pS]AEVATEEVK	4		✓
$\alpha 30$	3088.13	NANEEEY[pS]IG[pS][pS][pS]EE[pS]AEVATEEVK	5	✓	✓
$\beta 1$	1031.44	FQ[pS]EEQQQTEDELQDK	1		✓
$\beta 2$	1561.85	RELEELNVPGEIVE[pS]L[pS][pS][pS]EESITR	4	✓	✓
$\beta 3$	2061.8	FQ[pS]EEQQQTEDELQDK	1	✓	✓
$\beta 4$	2352.8	NVPGEIVESL[pS][pS][pS]EE[pS]ITR	4		✓
$\beta 5$	2556.11	FQ[pS]EEQQQTEDELQDKIHPF	1	✓	
$\beta 6$	2966.01	ELEELNVPGEIVE[pS]L[pS][pS][pS]EESITR	4		✓
$\beta 7$	3122.12	RELEELNVPGEIVE[pS]L[pS][pS][pS]EESITR	4	✓	✓

p: phosphorylated site. [Mo]: Oxidation on methionine. *: Pyroglutamylation on the N-terminal Q.

✓ : identified phosphopeptides.

Table S2. Detailed information of the phosphopeptides enriched by Fe₃O₄@SiO₂@TpPa-Ti⁴⁺ nanoparticles from human serum tryptic digest.

No.	m/z	Peptide Sequence	No. of phosphate groups
1	1389.46	D[pS]GEGDFLAEGGGV	1
2	1460.51	AD[pS]GEGDFLAEGGGV	1
3	1545.56	D[pS]GEGDFLAEGGGVR	1
4	1616.59	AD[pS]GEGDFLAEGGGVR	1

p: phosphorylated site.

Table S3. Detailed information of the phosphopeptides captured by Fe₃O₄@SiO₂@TpPa-Ti⁴⁺ from Hela cell tryptic digests.

Phosphorylation sites are indicated by lowercase s, t and y at serine, threonine and tyrosine, respectively.

No.	Protein	Pepitde sequence	[M+H] ⁺	RT	Charg	Missed
			[min]	e	Cleavages	
1	A0FGR8-6	EPtPSIAsDIsLPIATQELR	2378.0524	72.5361	3	0
2	A1X283	NSGEPLPPKPGPGsPSHPGALLDGVSR	2815.3588	34.968	3	0
		KNSGEPLPPKPGPGsPSHPGALLDGVSR	2943.464	47.6891	4	1
3	A2ASS6	TcEIEIGQLKEQsVLEFR	2259.067	57.3446	3	1
4	A2BEA6	SmVEsQIQQQALAFRHyQAAVR	2737.2536	41.0545	4	1
5	A2RUR9	RNADmLyNKDSEQLR	1948.8631	18.0431	4	2
6	A5A6M3	DVYLsPR	929.41527	18.6185	2	0
7	B4RCL1	KAsGLPVAVGFGIKTPER	1907.0284	56.1741	3	2
8	E9PAV3	VQGEAVSNIQENTQtPTVQEESEEEVDETGVVK	3940.7685	43.6446	4	0
		FKVQGEAVSNIQENtQTPTVQEESEEEVDETGVVK	4215.924	84.2664	4	1
9	O00178	LHGGFDsDcsEDGEALNGEPELDLTSK	3052.2055	51.7327	3	0
10	O00193	SAsPDDLGSSNWEAADLGNEER	2515.001	46.9533	2	0
		RsASPDDLGSSNWEAADLGNEER	2671.109	45.1063	3	1
		sASPDDLGSSNWEAADLGNEERK	2643.1003	43.524	3	1
11	O00203	NFYEsDDDQKEK	1597.6103	14.0172	2	1
12	O00264	IVRGDQPAASGDsDDDEPPPLPR	2484.1221	27.5813	3	1
		EGEEPTVYsDEEEP KDESARK	2504.0478	19.0886	3	2
		EGEEPTVYsDEEEP KDESAR	2375.9488	21.1396	2	1
		GDQPAASGDsDDDEPPPLPR	2115.8609	27.541	2	0
13	O00267	sAAGsEKEEEPEDEEEEEEEYDEEEEEEDDRPPK	4574.6432	39.7158	4	1
14	O00273	SISASKAsPPGDLQNPK	1776.8587	22.596	3	1
15	O00308	TTPATGEQsPGAR	1352.5895	9.2505	2	0
16	O00418	ESEN SGD SGyPSEKR GEL DDPEPR	2730.1333	30.0941	3	2
17	O00425	QGsPGSVSK	926.40288	7.7321	2	0
18	O00461	EADPEsEADR	1198.4273	11.0235	2	0

19	O00469-2	EKDSPTPETFQMLsPPKGVFmYISNR	3095.454	42.0058	4	2
20	O00499	SPsPPDGSPAATPEIR	1658.7564	25.4871	2	0
		VNHEPEPAGGATPGATLPKSPsQLR	2591.2628	36.456	3	1
		GNKSPSPPDGsPAATPEIR	1957.9059	23.588	3	1
21	O00505	NVPQEESLEDsDVDADFK	2116.8738	42.0159	2	0
22	O00559-2	KLsGDQITLPTTVDYSSVPK	2229.1115	46.5483	3	1
23	O00566	sPVFsDEDsDLDFDISKLEQQSK	2869.1325	73.9344	3	1
		KSPVFsDEDsDLDFDISKLEQQSK	2917.27	63.5648	3	2
24	O00712-5	KPEKPLFSSAsPQDSSPR	2037.9801	35.369	3	0
25	O14545	LDSQPQETsPELPR	1676.7585	23.77	2	0
		ALPSLNTGSSsPR	1366.6441	26.1156	2	0
		STsGPRPGcQPSSPcVPK	1978.8585	20.5917	3	0
26	O14617-5	KVPVPEGLDLDAWINEPLsDsEsEDERPR	3532.5238	74.6878	4	1
		HRPsEADEEELAR	1618.6856	20.0898	3	0
27	O14639	TLsPTPSAEGYQDVR	1700.7687	28.7185	2	0
		RSsGREEDDEELLR	1770.774	39.2348	3	2
28	O14646	ASSSGPRsPLDQR	1437.6522	14.6449	3	1
29	O14737	KVMDsDEDDDY	1411.4648	21.4292	2	1
30	O14745	sASSDTSEELNSQDSPPK	1958.7912	20.2903	2	0
		EALAEAALEsPRPALVR	1872.9714	43.3769	3	0
31	O14974	KTGsYGALAEITASK	1576.7666	34.5867	3	1
		RLASTsDIEEKENR	1727.8044	17.5036	3	2
		RStQGVTLTDLQEAEK	1855.8966	33.161	3	1
		STGVSFWTQDSDENEQQQsDTEEGSNKK	3370.3744	39.0756	3	1
32	O15027-5	QIDsSPVGGETDETTVSQNYR	2363.0118	29.9779	3	0
		AQQELVPPQQQAsPPQLPK	2164.0929	38.4077	3	0
		FTGsFDDDPDPHRDPYGEVDRR	2802.1635	35.9046	4	2
		RSSLsSHSHQSQIYR	1852.8491	22.5869	4	1
		sLHSAHSLASR	1245.578	24.2688	3	0

33	O15042	RHsTsPsPSR ESLcDsPHQNLSPRLLENK	1351.4612 2317.0854	5.0247 39.2006	3	1 0
34	O15047	DTGSEVPSGsGHGPcTPPPAPANFEDVAPTGsGEPGATRESPK	4361.841	41.1385	4	1
35	O15085-2	SLGGESSGGttPVGSFHTEAAR	2264.9397	32.2025	3	0
36	O15127	AAsSAAQGAFQGN	1259.5107	15.863	2	0
37	O15164	SEWLDPSQKsPLHVGETR NESEDNKFsDDsDDDFVQPR	2146.0149 2518.8993	37.6303 35.0419	3	1 1
38	O15173-2	LLKPGEEPSEYtDEEDTKDHNKQD	2897.2529	23.1922	3	2
39	O15234	STVTGERQsGDGQESTEPVENK YGsPPQRDPNWNGER	2415.0373 1852.7864	10.6251 27.3134	3	1 1
40	O15357	VGEGSssDEESGGTLPPPFDPPPLPDSAIFLPPSLDPLPGPVVR	4693.2433	84.5362	4	0
41	O15427	LHKPPADsGVDLR	1484.724	21.1006	3	0
42	O15439	KDNEESEQPPVPGtPTLR DNEESEQPPVPGtPTLR	2073.9595 1945.86	31.7519 31.7595	3	1 0
43	O15530	ANsFVGTAQYVSPELLTEK	2134.0223	55.9011	3	0
44	O15541	AAYGDLssEEEEENEPESLGVVYK VTHNPmIQKtRDSGK	2804.1332 1807.8642	56.0939 53.1276	3	0 2
45	O43159	ALEAASLSQHPPSLcIsDsEEEEER	3073.2597	46.5052	3	0
46	O43290	RVsEVEEEKEPVPQPLPSDDTR	2616.2179	30.3413	3	2
47	O43306	DAEPPsPTPAGPPR	1468.6533	14.5739	2	0
48	O43395	WDEQTNTKGDDDEEsDEEAVKK	2735.0932	26.7211	3	2
49	O43399-7	NSATFKsFEDR	1381.5833	22.892	3	1
50	O43432-3	GGsSKDLLDNQSQQEEQRR	2126.9575	26.009	3	2
51	O43491	EVRsPTKAPHQLQIEGK EVAENQQNQSSDPEEKGSQPPAAEsQSSLRR	1983.0511 3689.6479	32.0107 15.7228	4	2
52	O43493	DSPSKSsAEAQTPEDTPNK LSPHAFKTEsGEETDLISPPQEEVK	2068.8809 2848.3513	10.2516 48.376	2	1 1
53	O43583	LtVENSPKQEAGISEGQGTAGEEEEK	2797.2499	23.0107	3	1
54	O43719	LFEEsDDKEDEDADGKEVEDADEK	2837.128	27.6102	3	2

		VLDEEGsEREFDEDsDEKEEEEDTYEK	3440.284	34.6082	3	2
		VFDDEsDEKEDEEYADEK	2271.8522	27.2175	3	1
		EsSPEKEAEEGcPEKESEEGcPK	2702.0683	15.5214	3	2
		RSDsVSASER	1173.4927	11.9149	2	1
		SDsVSASER	1017.392	9.568	2	0
		HFsEHPSTSK	1236.5082	20.8492	3	0
		ESEEGNPVRGSEEDsPKK	2053.8711	16.9227	3	2
55	O43768-4	KSSsLVTSK	929.47344	12.0115	2	1
56	O43847-2	RGsLSNAGDPEIVK	1522.7322	25.3591	2	1
57	O43896	RNsLDGGGR	1011.44	12.2697	2	1
58	O43933	TAsQEGcQELTQEQR	1844.7526	20.5805	2	0
59	O60264	TPTsPLK	823.3994	11.4786	2	0
60	O60271	LHQLsGSDQLESTAHSR	1945.8905	32.4008	3	0
		SAsQsSLDKLDQELK	1808.7864	39.7132	2	1
61	O60318	EKKPGDGEVsPSTEDAPFQHSPLGK	2717.2555	49.671	4	1
62	O60343	HAsAPSHVQPSDSEK	1656.6998	16.737	3	0
63	O60353	LREQDcGEPAsPAASISR	2023.8944	19.9338	3	1
64	O60504	LcDDGPQLPTsPR	1535.6642	29.9779	2	0
65	O60678	GAVENEEDLPELsDsGDEAAWEDEDADLPHGK	3714.4241	55.6405	3	0
66	O60763-2	DLGHPVEEDELESGDQEDEDDEsEDPGKDLDHI	3916.5565	46.6676	4	1
67	O60784-2	AADRLPNLSSPsAEGPPGPPSGPAPR	2575.2482	39.8536	3	1
68	O60825	RNSFtPLSSSNTIR	1659.7941	34.308	3	1
69	O60832	KREsEsEsDETTPAAPQLIK	2452.027	31.7751	3	2
		AGLESGAEPGDGDsDTTKK	1914.803	10.9065	2	1
		AGLESGAEPGDGDsDTTK	1786.7078	13.7044	2	0
		AGLESGAEPGDGDsDTTKKK	2042.9038	19.6056	3	2
70	O60841	NKPGPNIEsGNEDDDASFK	2113.8802	23.3313	2	0
		QSFDDNDsEELEDKDSK	2080.7931	20.5994	3	1
		KQsFDDNDsEELEDKDSK	2288.8599	16.0934	3	2

	KWDGsEEDEDNSK		1618.5966	10.9276	2	1
	WDGsEEDEDNSK		1490.5053	10.8729	2	0
	KWDGsEEDEDNSKK		1746.6905	23.0113	3	2
	WDGsEEDEDNSKK		1618.6043	14.0477	2	1
	VEMYsGsDDDDDFNKLKP		2234.837	44.2686	3	1
	SRINssGEsGDESDEFLQSR		2439.8803	37.8343	3	1
71	O60884	EAYNDssDEESSSHGPGVQcAHQ	2787.966	14.355	3	0
72	O60927	AFGESSTEsDEEEEVGcGHTHcVR	2819.0277	21.5885	3	0
73	O60930	KsASPEVSEGHENQHGQESEAK	2445.0429	23.6467	4	1
74	O60934	IPNYQLsPTKLPSINK	1893.0013	46.3578	3	1
75	O75061-2	SATSTSAsPTLR	1258.5774	12.8	2	0
76	O75116	SQLQALHIGLDSSsIGsGPGDAEADDGFPEsR	3373.4498	61.3735	3	0
77	O75122-3	sRSDIDVNAAAGAK	1454.6681	19.7225	2	1
78	O75146	QHYVLAGASGSPGEEVAIRPsTAPRsVTTK	3226.5531	47.8089	4	1
79	O75151	ESAsPTIPNLDLLEAHTK	2015.9819	50.8556	3	0
80	O75152	VQQSSESSTsSPSQHEATPGAR	2338.0027	12.4085	3	0
81	O75153	SEDPPGQEAGsEEEGSSASGLAK	2298.9309	19.592	3	0
82	O75179	APsPAPSSVPLGSEKPSNVSQDR	2387.137	27.5881	3	0
83	O75190	HAPHcLsEEEQEQRPR	2126.8781	22.947	4	0
84	O75351	EGQPSPADEKGNDsDGEGESDDPEKK	2797.1065	15.6217	3	2
85	O75376	HEAPsSPISGQPcGDDQNASPSK	2446.0017	19.5656	3	0
	SHVSSEPYEPsPPQVPVVHEK		2522.2088	51.5636	3	0
	AQLsPGIYDDTSAR		1573.6976	33.1684	2	0
	QQQLEEEAAKPPEPEKPVsPPPVEQK		2989.4733	34.3812	4	0
86	O75379	NLLEDDsDEEEDEFFLR	2065.8436	70.5982	2	0
87	O75396	NLGsINTELQDVQR	1666.7896	44.8146	2	0
	ANNLSSLsKK		1141.5656	14.7343	2	1
88	O75400	HKsDsPEsDAEREK	1854.6418	14.1449	3	2
	DSGNWDTsGsELsEGELEKR		2435.8846	43.8777	3	1

89	O75475	QSNASsDVEVEEKETSVSKEDTDHEEK QSNASsDVEVEEK TGVTSsDsEEEGDDQEGER TGVTSsDsEEEGDDQEGERKK TGVTSsDsEEEGDDQEGERKRR ETSVSKEDtDHEEKASNEDVTK ETSVSKEDtDHEEK QVETEEAGVVTTATASVNLKVsPK	3116.3185 1501.6158 2259.7754 2387.8709 2543.9822 2558.0944 1713.6907 2538.2832	20.9205 10.7415 10.7454 11.5986 13.5952 23.6867 13.3897 84.4196	4 2 2 3 3 4 3 3	2 0 0 1 2 2 1 1
90	O75494	sFDYNYR sRsRsFDYNYR sRsFDYNYR	1044.3896 1690.593 1367.4859	28.3754 24.7137 29.2562	2 3 2	0 2 1
91	O75528	ESGADGASTsPR	1214.4722	5.4563	2	0
92	O75533	KLSSWDQAEtPGHtPSLR	2169.9529	39.1236	3	1
93	O75569	HRAEAPPLEREDsGTFSLGK	2277.0792	44.2561	4	2
94	O75643	EEAsDDDmEGDEAVVR	1862.6694	17.2758	2	0
95	O75683	ELsPAALEKR	1193.5991	21.4787	2	1
96	O75691	SLSDNGQPGtPDPADSGGTSAK	2138.8904	14.6223	2	0
97	O75717	NQVEEDAEDsGEADDEEKPEIHKPGQNSFSK	3538.4857	37.4477	4	0
98	O75794	DDPPtHSQPDSDDEAEIQWSDDENTATLTAPEFPEFATK	4555.8976	67.9742	4	0
99	O75821	GIPLATGDTsPEPELLPGAPLPPPK	2544.3213	59.6061	3	0
100	O75909	AVVVsPKEENK	1279.6326	10.3311	2	1
101	O75976	SLLSHEFQDETtEEETLYSSKH	2885.1679	52.9667	3	1
102	O76021	AAESETPGKsPEKKPK ATNEsEDEIPQLVPIGK EKsPSLGK ATNEsEDEIPQLVPIGKK	1763.8646 1919.917 925.44127 2048.0044	10.2054 47.8373 9.4549 44.5532	4 3 2 3	2 0 1 1
103	O76094	TVSSsPPTsPRPGSAATVSASTSNIPPR	2895.3785	37.4726	3	0
104	O88477	QGsPVAAGAPAK	1133.5373	9.4441	2	0
105	O94776	GHLSRPEAQSLsPYTTSANR	2252.0625	41.6738	3	0

106	O94782	ASEIDQVVPAAQSSPINcEKR	2379.1205	31.5772	3	1
107	O94804	QVAEQGGDLsPAANR	1592.716	13.8172	2	0
108	O94826	AsPAPGSGHPEGPGAHLDMNSLDR	2450.0751	31.2894	3	0
		KTPEGRAsPAPGSGHPEGPGAHLDMNSLDR	3118.4434	33.9013	5	2
109	O94842	LSttPSPTssLHEDGVEDFRR	2571.0331	36.7462	3	1
110	O94874	KDDDsDDESQSSHTGK	1830.67	9.0447	3	1
111	O94875-11	tSPGRVDLPGSSTTLTK	1796.8914	27.5005	3	1
		SFTSSSPsSPSR	1306.5356	10.6522	2	0
		RKsEPAVGPPR	1273.643	13.9166	3	2
112	O94880	sFVPEEKHEERVPR	1947.907	28.9913	4	2
113	O94913	SRsPIIHSsPK	1281.579	10.7738	3	1
114	O94979-8	AQGEPVAGHEsPKIPYEK	2016.9507	21.7627	3	1
		EQtLSPTITSGLHNIAr	1917.9508	44.523	3	0
115	O95071	RIsQSQPVR	1150.5763	10.3483	2	1
116	O95218-2	sRsPESQVIGENTK	1691.709	17.92	2	1
		EVEDKEsEGEEEDEDDEDLSK	2419.9193	15.7266	3	1
		ENVEYIEREEsDGEYDEFGRK	2673.1227	39.037	3	2
		ENVEYIEREEsDGEYDEFGR	2545.0261	43.0041	3	1
		sRsPESQVIGENTKQP	1916.8207	22.3328	3	2
		EVEDKEsEGEEEDEDLSKYK	2711.0757	34.1728	3	2
117	O95232	ESDTKNEVNGTSEDIKSEGDTQsN	2664.0946	23.5568	3	2
118	O95251	LSQSSQDSsPVR	1370.5986	9.5884	2	0
119	O95297	DYTGeSTSESLsPVKQAPR	2162.9527	27.9612	3	1
120	O95359	QVSDLGsKGHEHPEGDPGEVPAPSPQER	2879.2939	24.6973	3	1
		VQNsPPVGR	1033.4871	9.7032	2	0
		RKStDSVPISK	1297.6553	13.0536	3	2
		sSDSEEAFETPESTTPVK	2020.8353	32.4636	2	0
		KTLPPLTTAPEAGEVTSPDsGGQEDSPAk	2863.3225	34.1859	3	1
		LFAGSLAPLLQPGAAGGEIPAVQASSGsPK	2871.4819	70.383	3	0

		FSsPTEELDYR	1423.5816	36.5094	2	0
121	O95365	VRGGAPDPSPGATATPGAPAQPSSPDAR	2665.253	20.7093	3	1
		HFKDEDEDDEVAsPDGLGR	2210.9033	31.9112	3	1
		GGAPDPSPGATATPGAPAQPSSPDAR	2410.0768	23.6007	3	0
122	O95391	LVEQANsPK	1065.4999	9.2691	2	0
123	O95400	HSLDSDEEEDDDGGSSKYDILASEDVEGQEAATLPSEGGVR	4503.8756	50.8924	4	1
		KGPGQPsSPQRRLDR	1602.7807	23.0235	3	2
124	O95425-3	HAHSSLQQAASRSPsFGDPQLsPEARPR	3261.4821	39.9722	4	1
		DSSFTEVPRsPK	1429.6435	23.6842	2	1
125	O95453	NLSPsQEEAGLEDGVsGEISDTELEQTDS _c AEPLOSEGR	4195.7241	65.2861	3	0
		NNsFTAPSTVGKR	1458.6807	22.0885	3	1
126	O95466-3	EAAAQEAGADTPGKGEPPAPKsPPK	2481.1752	14.4546	4	2
		RDsELGPGVK	1137.5352	17.8735	2	1
127	O95674	VAHEPVAPPEDKESESEAKVDGEtASDSES R	3362.4721	21.7312	4	2
128	O95684	EKGPTTGEALDLSDVHsPPKsPEGK	2793.2555	37.4791	4	2
129	O95785	NPEDKSPQLSLSPRPAsPK	2128.0585	32.8978	3	1
130	O95817	VPPAPVPcPPPSPGP sAVPSSPK	2379.1042	36.6806	3	0
		SQsPAASDcSSSSSSASLPSSGR	2279.9229	14.088	2	0
		AAPSTAPAEAtPPKPGEAEAPPKHPGVLK	2896.4828	26.1574	4	1
		AAPSTAPAEAtPPKPGEAEAPPK	2265.0873	23.1554	3	0
131	P00533	YSsDPTGALT ED SIDD TFLPVPEYINQSVPK	3478.5871	76.679	3	0
		ELVEPLtPSGEAPNQALLR	2114.0647	50.0589	3	0
132	P00558	ALEsPERPFLAILGGAK	1848.9723	63.2217	3	0
133	P01106-2	KFELLPtPPLSPsRR	1897.9495	47.6015	3	2
134	P01891	KGGSYsQAASSDSAQGSDVSLTAcKV	2641.1517	33.9915	3	2
135	P02545	sVGGSGGGSGFDNLVTR	1646.7276	35.0633	2	0
		SGAQASSTPLSPtR	1439.6575	14.1685	2	0
		ASSHsSQTQGGGSVTK	1598.6858	10.1203	3	0
		ASSHsSQTQGGGSVTKK	1726.7818	12.1406	3	1

		LRLsPSPTSQR	1321.6672	23.4293	3	1
136	P02545-2	LRLsPsPTSQR	1401.634	17.5586	2	1
		sGAQASSTPLSPTR	1439.6602	14.3413	2	0
		ASsHsSQTQGGGSVTK	1678.6525	5.2908	3	0
137	P02765	cDSSPDsAEDVRK	1545.5961	10.0788	2	1
		cDSSPDsAEDVR	1417.4957	12.1927	2	0
138	P04049-2	AAHTEDINAcTLTTsPR	1937.8484	31.2859	3	0
139	P04792	QLsSGVSEIR	1155.5494	39.0686	2	0
		GPsWDPFRDWYPHSR	1982.8487	65.6456	3	1
		GPsWDPFR	1041.4244	49.2416	2	0
140	P04920	TSPSsPAPLPHQEATPR	1852.8622	17.905	3	0
		RRPGAsPTGETPTIEEGEEDEDEASEAEGAR	3352.4234	34.4125	3	1
		ALTQPSPVSTPSSVQFFLQEDDSADR	2902.3398	64.5545	3	0
141	P05114	EDLPAENGETKTEESPAAsDEAGEK	2613.0774	21.9622	3	1
142	P05129	TFcGTPDyIAPEIIAYQPYGK	2484.141	68.5458	3	0
143	P05387	KEEsEEsDDDmGFGLFD	2125.7042	60.2074	2	1
		LASVPAGGAVAVSAAPGsAAPAAGSAPAAAEEK	2854.4093	36.1751	3	0
144	P05388	VEAKEEsEEsDEDMGFGLFD	2422.8711	71.3394	2	1
145	P05455	TKFAsDDEHDEHDENGATGPVKR	2635.1127	20.4697	5	2
		FAsDDEHDEHDENGATGPVKR	2405.9728	15.7477	4	1
		FAsDDEHDEHDENGATGPVK	2249.8731	14.9803	3	0
		TKFAsDDEHDEHDENGATGPVK	2479.0141	18.1381	4	1
146	P05783	SLGSVQAPSYGARPVsSAASVYAGAGGSGSR	2934.3913	40.0201	3	0
147	P05787-2	ISsSSFSR	950.39787	13.136	2	0
		SyTSGPGSR	991.39018	9.5274	2	0
		SYKVsTSGPR	1161.5368	16.5391	2	1
148	P06241	DGsLNQSSGYR	1263.5068	11.3794	2	0
149	P06493	IGEGtyGVVYK	1345.5496	30.6061	2	0
150	P06536	STsVPENPK	1038.4535	9.6465	2	0

151	P06748	cGSGPVHISGQHLVAVEEDAEsEDEEEEDVK SIRDtPAKNAQK	3460.4682	42.1834	4	0
152	P07199	TPAAPAsPAAVPSEGSGGTTGWR	2292.032	32.6314	3	0
153	P07355-2	LSLEGDHSTPPSAYGsVK	1924.8825	30.0131	3	0
154	P07814	EYIPGQPPLSQSSDsSPTR	2125.9588	33.7482	2	0
155	P07900-2	DKEVsDDEAEEK ESEDKPEIEDVGsDEEEEKKDGDK ESEDKPEIEDVGsDEEEEK ESEDKPEIEDVGsDEEEEKK ERDKEVsDDEAEEK	1473.5657 2816.1621 2272.9007 2400.9876 1758.7119	9.6995 21.1119 21.8494 29.1096 21.3628	2 3 2 3 3	1 2 0 1 2
156	P07910	mESEGGADDsAEEGDLDDDDNEDRGDDQLELIKDDEK MESEGGADDsAEEGDLDDDDNEDR EAEEGEDDRDsANGEDDS	4293.7028 2778.9743 2019.6629	46.5065 37.1467 9.3075	4 3 2	2 0 1
157	P07948	SKGKDSLsDDGVDLK	1643.7662	36.4028	3	2
158	P08238	IEDVGsDEEDDSGKD IEDVGsDEEDDSGKD IEDVGsDEEDDSGK EKEIsDDEAEEEKGEK EKEIsDDEAEEEK EREKEIsDDEAEEEK	1945.7978 1817.7004 1574.579 1944.8003 1630.6432 1915.7799	10.553 10.5677 11.5236 11.8482 15.1791 25.999	4 2 2 3 2 3	2 0 1 2 1 2
159	P08240	GTGSGQLQDLDcsssDDEGAAQNSTKPSATK	3409.2989	28.6593	3	0
160	P08243	KVADHGSEHyEVLFNSEEQIQLDEVIFSLETYDITtVR	4727.2011	75.1076	5	1
161	P08559-4	YHGHsMSDPGVSYR	1672.6661	38.9593	3	0
162	P08621	YDERPGPsPLPHR DDTSRYDERPGPsPLPHR	1600.7322 2174.9726	30.3237 40.4827	3 4	0 1
163	P08670	LRsSVPGV ETNLDSLPLVDTHSKR EtNLDSLPLVDTHSK TYsLGSALRPSTS	1050.5486 1904.9264 1748.8187 1575.7641	14.595 36.7436 39.9684 34.0718	2 3 3 3	1 1 0 0

		SVsSSSYR	952.3814	11.0849	2	0
164	P08775	YSPTSPYsPTSPK	1592.6965	23.6968	2	0
		YSPTsPTYSPTTPK	1606.7062	26.1899	2	0
165	P09601	DQsPSRAPGLR	1263.591	10.6792	2	1
166	P09651	SEsPKEPEQLRK	1507.7196	13.5999	3	2
		SEsPKEPEQLR	1379.6243	13.5401	3	1
		EDsQRPGAHLTVK	1517.718	14.5427	3	0
167	P0C1Z6	RTPAPPEPGsPAPGEGPSGR	1993.9275	24.2312	3	1
168	P0DJ93	ELVGDTGsQEGDHEPsGsETEEDTSSSPHR	3396.2226	20.5035	3	0
169	P10412	KAPKsPAK	906.48259	8.752	2	2
		KATGAAtPKK	1052.5534	12.3292	2	2
170	P10644	TDSREDEIsPPPPNPVVK	2056.9706	25.7918	3	1
171	P11274	ASASRPQPAPADGADPPPAEEPEARPDGEGsPGK	3388.5155	24.2238	4	0
172	P11388-4	IKNENTEGsPQEDGVELEGLK	2366.0855	37.4653	3	1
		SVVSDLEADDVKGSVPPLsSSPPATHFPDETEITNPVPK	4041.9494	66.3592	4	1
173	P11717	LVSFHDDsDEDLLHI	1834.804	55.8553	2	0
		ALSSLHGDDQDsEDEVLTIPERK	2577.1842	46.7938	3	0
174	P11831	ALIQTcLNSPDsPPRSDPTTDQR	2649.2087	36.15	3	1
175	P12270	TDGFAEAIHsPQVAGVPR	1931.911	38.9638	3	0
		APQsPR	735.31999	4.7863	2	0
176	P12694-2	sVDEVNYWDKQDHPISR	2167.957	44.18	3	1
		IGHHStSDDSSAYR	1612.638	24.8565	3	0
177	P13051	KAPAGQEEPgtPPSSPLSAEQLDR	2542.2024	33.9642	3	1
		HAPsPEPAVQGTGVAGVPEESGDAAAIPAK	2890.3872	36.6894	3	0
178	P13639	FtDTRKDEQER	1504.6489	19.3943	3	2
179	P13861	VADAKGDsEsEEDEDLEVVPVPSR	2633.0764	36.3611	3	1
		RVsVcAETYNPDEEEEDTDPR	2591.044	29.8303	3	1
180	P15056	RDSsDDWEIPDGQITVGQR	2253.9959	46.7458	3	1
		sSSAPNVHINTIEPVNIDDLIR	2484.2367	61.5526	3	0

		SNPKsPQKPIVR	1430.7561	19.2778	3	1
181	P15151	ENSsSQDPQTEGTR	1615.6294	6.5764	2	0
182	P15336	TQSEESRPQLQQPATSTTETPASPAHtTPQTQSTS	4090.8737	26.9707	4	0
183	P15924	NLTIRSssFsDTLEESSPIAAIFDTENLEK	3554.5539	84.3798	3	1
		RAssKGGGGYTcQSGSGWDEFTK	2583.019	36.1877	3	2
		ssSFSDTLEESSPIAAIFDTENLEK	2877.2144	84.4106	2	0
		AEsGPDLR	924.38713	10.559	2	0
184	P16284	FyREKEGKPFyQmTSNATQAFWtK	3214.32	35.2805	4	2
185	P16333	RKPsVPDSASPADDSFVDPGER	2409.0831	44.6806	3	1
186	P16401	KVAKsPK	837.46221	14.2657	2	2
		VAKsPK	709.36693	2.0838	2	1
187	P16403	VAKsPK	709.36528	3.288	2	1
188	P16949	SKESVPEFPLsPPK	1621.7979	39.1088	3	1
		ASGQAFELILsPR	1468.7302	52.3151	2	0
		ESVPEFPLsPPKK	1662.862	32.5139	3	2
		ESVPEFPLsPPK	1406.6719	46.2585	2	0
		RAsGQAFELILsPR	1704.7992	52.3227	3	1
		RKsHEAEVLK	1276.6475	50.9675	3	2
189	P16989	NYAGEEEEGsGssEGFDPPATDR	2769.9295	41.785	2	0
190	P17096	KQPPVSPGTALVGSQKEPSEVPtPK	2638.37	31.4647	4	2
		KLEKEEEEGISQESEEEQ	2316.9708	21.0956	3	2
191	P17096-2	KQPPKEPSEVPtPK	1641.8296	26.1355	3	2
192	P17676	AYLGYQAVPSGSSGsLSTSSSSPPGTPSPADAK	3278.4953	41.9122	3	0
193	P17812	sGSSSPDSEITELKFPSINHD	2327.0277	51.6719	3	1
194	P18583-9	SVESTsPEPSK	1227.5175	9.147	2	0
		RRsFsIsPVR	1444.598	25.8121	3	2
		DTEEPLPVKESDQTLAALLsPK	2461.2211	65.6393	3	1
		ESDQTLAALLsPK	1452.7084	49.9002	2	0
		EMEHNTVcAAGTsPVGEIGEEK	2425.0127	33.147	3	0

195	P18615-3	SIsADDLQESSR	1502.6053	19.0548	2	0
196	P18754-2	RRsPPADAIPK	1287.6603	18.2237	3	2
197	P18858	TIQEVLLEEQsEDEDREAK	2227.9768	35.5025	3	1
		RTIQEVLEEQsEDEDREAK	2384.0731	51.3345	3	2
198	P18887	TKPTQAAGPsSPQKPPTPEETK	2357.1518	13.3604	3	0
		AIGSTSKPQEsPK	1409.6716	11.7118	3	0
199	P19338	KVVVsPTKK	1065.6113	10.1725	2	2
		LELQGPRGsPNAR	1474.7211	17.2988	3	1
		KEDsDEEEEDDsEEDEEDDEDEDEDEIEPAAmK	4295.3814	30.4918	3	1
		AAAAAAPAsEDEDDEDDEDDEDDEDDEDDsEEEAMETTPAK	4606.5201	36.1891	3	0
		KVVVsPTK	937.51463	10.0287	2	1
		VAVAtPAKK	964.52678	10.4654	2	1
		VVVsPTK	809.42015	10.1069	2	0
200	P20020	IEDsEPHIPLIDDTDAEDDADPTKR	2772.2436	47.3227	4	1
201	P20700	TTIPEEEEEEEAAGVVVEELFHQQGtPR	3491.558	73.6116	3	0
		LKLsPSPSSR	1151.5867	14.5367	2	1
202	Q03252	LSPsPSSR	910.40563	10.1216	2	0
		LKLsPsPSSR	1231.5535	18.162	2	1
203	P20810-6	KEGITGPPADSSKPIGPDDAIDALSSDFTcGSPtAAGK	3810.7731	57.4234	4	1
		EGITGPPADSSKPIGPDDAIDALSSDFTcGsPTAAGK	3682.6596	64.7129	3	0
204	P20929-2	LyRMGYEELKR	1537.7227	78.4811	4	2
205	P21127	DLLSDLQDIIsDSER	1685.7399	60.6182	2	0
206	P21333	RAPsVANVGSHcDLSLK	1890.9056	28.8703	3	1
207	P21796	LTFDSSFsPNTGKK	1608.7387	31.9403	2	1
208	P21817	KEEKPEEERSAEEsKPR	2137.9865	29.5983	3	2
209	P22059	MLAEsDESGDEESVSQTDKTELQNTLR	3172.3048	45.4386	3	1
210	P22626	GFGDGNGYGGPGGGNFGGsPGYGGGR	2575.0279	44.8969	3	0
211	P22694-2	TWTLCgtPEYLAPEIILSK	2272.1184	76.397	3	0
212	P23048	KymLSKSPEDIGPSDSASNDPLtSFSIR	3218.4144	70.5533	3	2

213	P23193	KKEPAITSQNsPEAR EPAITSQNsPEAR	1735.8442 1479.6568	14.1017 11.093	3 2	2 0
214	P23396-2	KPLPDHVSIVEPKDEILPTtPISEQK DEILPTtPISEQK	2990.5749 1550.7429	46.1511 35.1089	4 2	1 0
215	P23497-4	VIGQDHDFsEssEEEAPAEASSGALR GFENVIHDKLPLQEsEEEERER	2958.1175 2892.3161	43.5473 67.8325	3 4	0 2
216	P23588	TGSEssQTGTSTTSSR SQsSDTEQQSPTSGGGK SRTGsEssQTGTSTTSSR SLENELNKEEDcHsPTSKPPKPDQPLK ERHPsWRsEETQER	1733.6287 1760.704 2056.7248 3298.56 1986.797	4.8584 5.7246 4.8837 29.9413 35.177	2 2 3 4 3	0 0 1 1 2
217	P24534	YGPADVEDTTGSGATDSKDDDDIDLFGsDDEEESEEAKR YGPADVEDTTGSGATDSKDDDDIDLFGsDDEEESEEAK DDDDIDLFGsDDEEESEEAKR DIQRPDSEHGLsPDSENFDWK	4260.7009 4104.6262 2508.9607 2552.0885	46.8975 51.5488 43.4703 50.8164	3 3 3 3	2 1 1 0
218	P25205-2	sEDEsETEDEEEKSQEDQEQQKR SEDEsETEDEEEKSQEDQEQQKR DGDSYDPYDFSDtEEEMPQVHtPK	2844.0313 2607.9697 2962.086	10.5432 11.2159 55.1855	3 3 3	2 1 0
219	P25440-2	KADTTTPPTAILAPGsPAsPPGSLEPK	2862.3766	46.2901	3	1
220	P25788	ESLKEEDEsDDDNm	1751.5929	10.5042	2	1
221	P26358	SKsDGEAKPEPSPSPR	1748.7911	15.3957	3	1
222	P26368	GAKEEHGGLIRsPR	1586.7854	20.8445	3	2
223	P26599-3	TDSsPNQAR	1055.417	4.6904	2	0
224	P27540	FARsDDEQSSADKER	1820.7511	17.9533	3	2
225	P27708	IHRAsDPGLPAEEPKEK IHRAsDPGLPAEEPKEK	1953.9512 1696.8125	21.1421 20.4909	3 3	2 1
226	P27816	RAsPSKPASAPASR	1462.7231	9.8318	2	1
227	P27816	KKPcSETSQIEDTPSSKPTLLANGGHGVEGSDTTGsPTEFLEEK EtERASPIKMDLAPS	4726.2044 1852.9002	76.6497 34.1758	5 3	1 2

		LATNTsAPDLK	1210.5816	18.9734	2	0
228	P27824-2	QKsDAEEDGGTVsQEEEDRKPK	2622.0696	13.7912	3	2
		QKsDAEEDGGTVSQEEEDR	2188.8605	11.7171	3	1
		SDAEEDGGTVsQEEEDRKPK	2285.9487	13.5273	3	1
		AEEDEILNRsPR	1508.6786	20.1696	2	1
229	P28290	SQsLPTTLLSPVR	1478.7608	46.7256	2	0
230	P28715	NAPAAVDEGSIsPR	1463.6567	18.8962	2	0
231	P29353-6	HGsFVNKPTR	1222.5779	23.423	3	0
232	P29590	AVsPPHLDGPPsPRsPVIGSEVFLPNSNHVASGAGEAEER	4300.942	53.0314	4	1
		sSPEQPRPSTSK	1380.6198	9.2543	3	0
233	P29692-2	QVEPPAKKPATPAEDDEDIDLGsDNEEDKEAAQLR	4406.964	45.1745	4	2
		KPAtPAEDDEDIDLGsDNEEDKEAAQLREER	4151.7042	46.8255	4	2
		KPAtPAEDDEDIDLGsDNEEDKEAAQLR	3737.5119	49.4099	4	1
		ATAPQTQHVsPmR	1519.6767	9.9582	2	0
		LNVLEKSsPGHR	1416.7062	28.179	3	1
234	P29966	EAPAEGEAEEPGSPtAAESEAASAASSTSSPK	2995.2863	34.4833	3	0
		AEDGATPSPSNEtPKKK	1836.845	9.734	3	2
		AEDGATPSPSNEtPKK	1708.7424	9.7202	2	1
		AEDGATPSPSNEtPK	1580.6546	9.9339	2	0
		LSGFsFKK	993.4868	28.2394	2	1
		EAPAEGEAEEPGSPTAAESEAAsAASSTSSPKAEDGATPSPSNETPK	4476.9728	34.0826	4	1
235	P30050	IGPLGLsPK	961.51378	35.2316	2	0
236	P30427	SRsssVGSSSSYPISSAVPR	2237.8879	33.0595	3	1
		SssVGSSSSYPISSAVPR	1914.8031	34.2539	3	0
		TQLASWsDPTEETGPVAGILDTELEK	2968.3843	72.1567	3	0
		AQLEPVAsPAKKPK	1543.8307	21.4388	3	1
237	P30427-2	TsSEDNLYLAVLR	1560.7396	59.4812	2	0
		SRsssVGSSSSYPISSAVPR	2237.8932	33.492	3	1
238	P32004-2	DKEDTQVDSEARPMKDETGEYsDNEEK	3372.4001	46.3955	4	2

239	P35221-2	TPEELDDsDFETEDFDVR	2238.8716	54.4927	2	0
240	P35269	GNsRPGTPsAEGGSTSSTLR	2078.8616	15.5093	3	0
241	P35579	KGAGDGsDEEVDGKADGAEAKPAE	2383.0038	13.6834	3	2
		KGAGDGsDEEVDGK	1443.5683	9.5738	2	1
		GAGDGsDEEVDGKADGAEAKPAE	2254.9043	16.3862	3	1
242	P35580-4	QLHLEGASLELsDDDTESK	2166.9626	43.416	3	0
243	P35606	STAQQELDGKPAsPTPVIVASHTANKEEK	3113.5412	29.2698	4	1
		STAQQELDGKPAsPTPVIVASHTANK	2727.3461	35.1629	4	0
244	P35613	KPEDVLDDDDAGSAPLKSsGQHQNDK	2846.2631	37.9459	4	1
		RKPEDVLDDDDAGSAPLKSsGQHQNDK	3002.3747	74.9752	4	2
245	P35658-5	SPGSTPttPTSSQAPQK	1831.7575	10.7351	2	0
		ITPPAAKPGsPQAK	1442.7452	14.1224	3	0
246	P35659	EEsEEEEDEDDEEEEEEEKEK	2722.9409	15.2526	3	1
		KESESEDssDDEPLIKK	2095.8387	23.6007	3	2
247	P36507	RKPVLPA L TINPTIAEGPSPtSEGASEANLV DLQK	3693.921	78.5512	4	1
248	P36578	ILKsPEIQR	1163.6233	20.4028	2	1
249	P36871-2	AIGGIILTAsHNPGGPNNGDFGIK	2286.1492	50.867	3	0
250	P36915	REEQTDTsDGESVTHHIR	2176.9359	20.7543	4	1
		EEQTDTsDGESVTHHIR	2020.8233	26.2095	3	0
251	P38432	AFQLEEGEEtEPDcK	1861.7319	30.7525	2	0
		NSsEKLPTELSKEEPSTK	2083.994	33.6576	3	2
251	P40123	AQGGQTQsPTK	1182.5158	4.5416	2	0
253	P40189	SHIAQWsPHTPPR	1593.7417	25.6045	3	0
		QNcsQHESSPDISHFER	2137.8409	32.6833	3	0
254	P40222	VQDLSAGGQGS LTD SGPER RPEGPGAQAPSsPR	3341.5746	27.36	4	1
		RPEGPGAQAPsSPR	1486.6843	10.3819	3	0
		sSPGQPEAGPEGAQERPSQAAPAVEAEGPGSSQAPR	3564.624	27.4789	3	0
255	P40425	TAVSVtQGGHSR	1279.5854	12.6209	2	0
256	P40818	SYsSPDITQAIQEEEKR	2060.9348	42.771	3	1

257	P41236	IQEQE _s GEEDSDL _S PEER	2323.8619	23.9286	2	0
		YRIQEQE _s GEEDSDL _S PEER	2643.0199	33.9182	3	1
		IQEQE _s GEEDSDL _S PEEREK	2580.9986	23.0461	3	1
258	P42167	QNGSNDSDRY _s DNEEDSKIELK	2623.0929	22.9445	4	2
		SStPLPTI _S SSAENTR	1727.7985	25.8996	2	0
		GPPDFSSDEERE _P tPVLGSGAAAAGR	2650.203	37.4688	3	1
		HAsPILPITEFSDIPR	1872.9342	58.2633	3	0
		LREQGTE _S RssTPLPTI _S SSAENTR	2864.3075	26.5802	3	2
		NRPPLPAGtNSKGPPDFSSDEERE _P tPVLGSGAAAAGR	3962.8416	46.2237	5	2
		EQGtESRSStPLPTI _S SSAENTR	2595.1078	28.825	3	1
259	P42696	SVQEGENPDDGVRGsPPEDYR	2382.9882	26.0617	3	1
260	P43243	RDSFDDRGPsLNPVLDYDHGSR	2598.1481	42.4038	4	2
		SYsPDGKESP _{SD} KK	1604.6913	10.2149	3	2
		SYsPDGKESP _{SD} K	1476.5917	12.4346	2	1
261	P43307	VEMGTSSQNDVDM _S WIPQETLNQINKAsPR	3455.5935	61.6636	3	1
262	P43487	DTHEDHDTSTENTDEsNHDPQFEPIVSLPEQEIK	4013.7182	47.0877	4	0
263	P46060	ILD _P NtGEPAPVLSSPPPADV _S TFLAFPsPEK	3450.6445	76.5616	3	0
		KILD _P NTGEPAPVLSSPPPADV _S TFLAFPsPEK	3578.7411	72.69	4	1
264	P46087-4	EAAAGIQWSEE _t EDEEEKE _V tPESGPPK	3490.4176	45.1846	3	1
265	P46100	RPTETNPVTSNsDEEcNETVKEK	2744.1872	16.3522	3	1
		EVIEIEDAsPTKcPITTK	2111.0041	34.0894	3	1
		RPTETNPVTsNsDEEcNETVK	2567.0105	21.6923	3	0
		KKDELsDYAEK	1405.6373	34.2979	3	2
		HKLtVSDGE _s GEEKK	1803.7577	27.8102	3	2
266	P46379-3	APPQTHLPSGASSGTGSASATHGGGsPPGTR	2865.3004	18.2725	4	0
		RVGDPPQLPEEPMEVQGAERAsPEPQR	3176.4784	43.7717	4	2
		ASPEPQRENAsPAPGTTAEEAMSR	2564.1247	27.8132	3	1
267	P46937-9	QASTDAGtAGALTPQHVR	1860.8712	19.8464	3	0
		AHSsPASLQLGAVSPGTLPTGVVSGPAATPTAQHLR	3614.8554	55.8567	4	0

268	P47712	HIVSNNDSSSDDEsHEPK	2077.8063	10.8395	3	0
269	P48634	LKFsDEEDGRDsDEEGAEGHR	2537.9518	21.2735	3	2
		TAsETRsEGSEYEEIPKR	2228.9104	21.5273	3	2
		QRGSEtGSEtHESDLAPSDK	2290.8874	17.8285	3	1
		KGNsPNSEPPPTK	1432.6517	12.0983	2	1
		ERsDSGGSSSEPFD	1692.6571	21.0954	3	1
		RAAAKsPDLSNQNSDQANEWETASESSDFTSER	3837.63	51.8857	4	2
270	P49006	AAAAtPESQEPQAK	1407.6226	9.4808	2	0
		LSGLsFKR	987.5064	25.3171	2	1
271	P49023-3	FIHQQPQsSPVYGSSAK	2027.9256	19.6899	3	0
272	P49321-3	KPEEEsPRKDDAK	1608.7329	10.3553	3	2
273	P49327	ADEASELAcPtPKEDGLAQQTQLNLR	3063.4219	42.7381	3	1
		ADEASELAcPtPK	1468.607	19.6886	2	0
274	P49450	RRsPsPTPTPGPSR	1652.7356	14.1038	3	2
275	P49454	SVPVNNLPERsPTDSPR	1944.9254	25.4846	3	1
276	P49585	WPFGKTsPPcsPANLSR	2148.908	45.3643	3	1
277	P49736	RGLLyDSDEEDEERP	2129.9297	28.8425	3	1
		AIPELDAYEAEGLALDEDVEELTAsQR	3142.4275	73.9306	3	0
		GNDPLTSsPGR	1180.5032	13.8545	2	0
		GLLYDsDEEDEERP	1973.8224	29.9893	2	0
		GLLYDsDEEDEERPARK	2101.9206	36.7913	3	1
		RTDALTSsPGR	1240.5724	15.8805	2	1
278	P49736	RGLLYDsDEEDEERPARK	2258.0202	50.2013	4	2
279	P49756	LGASNsPGQPNSVK	1435.6633	12.2834	2	0
280	P49761	yRSPEPDYLSYR	1722.7679	34.7143	3	1
281	P49768	AAVQELssSILAGEDPEER	2080.9563	45.3072	3	0
282	P49790-3	AsDKDITVSK	1143.534	10.1701	2	1
283	P49792	NHETDGGsAHGDDDDGPHFEPVVPLPDKIEVK	3618.5921	51.8049	5	1
		LPPTFFcGVcsDTDEDNGNGEDFQSELQK	3386.3507	62.6885	3	0

		VGEDEDGsDEEVVHNEDIHFEPIVSLPEVEVK	3670.6391	62.8802	4	0
		SALSPSKsPAK	1152.5696	9.7736	2	1
		AVVsPPKFVFGSESVK	1757.8987	46.3559	3	1
		NRPDYVsEEEEDDEDFETAVK	2596.0367	45.2852	3	0
284	P49840	GEPNVSSyIcSR	1361.5644	24.1852	2	0
		TsSFAEPGGGGGGGGGGPGGSASGPGGTGGGK	2513.0392	21.0805	3	0
285	P49902	SIxEIKPPNLFLAPQEITHcHDEDDDEEEEEEE	4229.7926	70.841	4	0
286	P50402	QSVTsFPDADAFHHQVHDDDLLsSSEEeKDR	3781.6011	47.8183	5	1
287	P50570	EALNIIGDISTSTVSTPVPPPVDtWLQSASSHSPTPQR	4181.047	72.3778	4	0
288	P50613	AYtHQVVTR	1154.5396	10.732	2	0
289	P50914	AALLKAsPK	978.54143	17.0161	2	1
290	P51116	TDGsIsGDRQPVTVADYISR	2297.0015	44.907	3	1
291	P51151	VLATEDRsDHЛИQTDTVNLHR	2513.235	46.695	4	1
292	P51532	EVDYSDsLTEK	1365.5491	22.5122	2	0
		KRDSDAGsSTPTTSTR	1746.7663	17.5536	3	2
293	P51858-3	RAGDLLEDsPKRPK	1661.8429	23.1171	3	2
		AGDLLEDsPKRPK	1505.7406	18.0381	3	1
		GNAEGssDEEGKLVIDEPAKEK	2462.0574	27.0824	3	2
		RAGDLLEDsPK	1280.5932	19.0873	2	1
		GNAEGssDEEGKLVIDEPAK	2204.907	31.9504	3	1
		AGDLLEDsPK	1124.4921	21.1184	2	0
294	P51991	SSGsPYGGGYGSGGSGGYGSR	1990.7654	20.8831	2	0
295	P52292	NVSSFPDDAtSPLQENR	1956.8497	35.4422	2	0
296	P52483	QRSDDEsPSTSSGSSDADQRDPAAPEPEEQER	3669.473	23.6181	4	2
297	P52594-4	SLLGDSAPtLHLNKGtPSQSPVVGR	2691.3005	47.0057	3	1
298	P52948	YGLQDsDEEEEHPSK	1971.7585	18.911	2	0
		DSENLAAsPSEYPENGER	1973.783	29.1849	2	0
299	P53396	TAsFSESRADEVAPAKK	1873.8808	17.7289	3	2
300	P53396	TAsFSESR	964.37981	10.3506	2	0

301	P53602	RNsRDGDPLPSSLScK	1868.844	24.7099	3	2
302	P53985	KEsKEEETSIDVAGKPNEVTK	2398.1464	21.878	4	2
		ESKEEEtSIDVAGKPNEVTK	2270.0498	20.0437	3	1
303	P53999	ELVSSSSSGsDsDSEVDKK	2102.8167	11.4329	2	1
304	P54105	FEEESKEPVADEEEEDsDDDVEPITEFR	3394.3791	47.0053	3	1
305	P54259	TEQELPRPQsPsDLDSLDR	2400.0265	39.5209	3	0
		TAsPPGPPPYGK	1248.5649	18.6186	2	0
306	P54725	AVEYLLTGIPGSPEPEHGsVQESQVSEQPATEAAGENPLEFLR	4643.2223	73.2473	4	0
307	P55010	EAEEEssGGEEEDEDENIEVVYSK	2862.0438	43.034	2	0
308	P55081	MEREDssEEEEEEIDDEEIERR	2943.0857	32.4268	3	2
		mEREDssEEEEEEIDDEEIIER	2802.9922	34.0048	3	1
		IVEPEVVGEsDsEVEGDAWR	2361.9682	54.1859	3	0
		KIVEPEVVGEsDsEVEGDAWR	2490.0663	47.8704	3	1
		SLAALDALNtDDENDEEYEAWK	2721.1195	62.264	3	0
309	P55196-5	SSPNVANQPPsPGGK	1516.6832	12.1953	2	0
310	P55199	KLcQPQSTGSLLGDPAAsSPPGER	2533.1964	40.432	3	1
311	P55327-3	NSPTFKsFEEKVENLK	1976.95	51.8795	3	2
		sFEEKVENLK	1302.6097	31.9178	2	1
		KLEDVKNsPTFK	1485.7394	31.1686	3	2
312	P55884-2	TEPAAEAEAsGPSESPSPAAEELPGSHAEPVPAQGEAPGEQAR	4538.0631	40.7581	4	0
		SDsRAQAVSEDAGGNTEGR	1885.7666	10.6498	3	1
		ALENGDADEPsFsDPEDFVDDVsEEELLGDVLK	3835.519	85.0175	3	0
313	P56181-2	KVTSPSSSSSSsSDSESDDADVSEVTPr	3126.2937	25.8716	3	1
314	P56524	AQssPASATFPVSVQEPPTKPR	2362.1605	34.992	3	0
315	P57740	QPDIScILGTGGKsPR	1765.8418	37.4044	3	1
316	P58107	QVSAsELHTSGILGPETLR	2075.0291	43.6723	2	0
		RQVSAsELHTSGILGPETLR	2231.1317	40.9637	3	1
317	P60174	KQsLGELIGTLNAAK	1622.8619	55.3058	3	1
318	P61979-2	KIPTLEEGLQLPSPTAtSQLPLESDAVEcLNYQHYK	4263.1105	72.5961	4	1

		IIPTELLEGLQLPSPtATSQLPLESDAVEcLNYQHYK	4135.0304	74.3539	4	0
319	P62070-4	KFQEQQEcPPsPEPTRK	2037.9208	15.4603	3	2
		FQEQQEcPPsPEPTR	1781.7247	18.9436	2	0
		FQEQQEcPPsPEPTRK	1909.822	14.6745	2	1
		KFQEQQEcPPsPEPTR	1909.8244	22.9561	3	1
320	P62753	LSsLRAsTSKSESSQK	1855.8238	10.4184	2	2
321	P62995	RRsPsPYYSR	1428.5878	14.0943	3	2
		RsPsPYYSR	1272.4859	14.3066	2	1
322	P63208	GKtPEEIRK	1137.5686	18.1233	3	2
323	P67809	NYQQNYQNsESGEKNEGSESAPEGQAQQR	3337.3667	15.0627	3	1
324	P70288	IAcDEEFsDsEDEGEGGRR	2317.816	21.7603	2	1
		MLPHAPGVQM QAIPEDAVHEDsGDEDGEDPDKR	3665.5858	50.56	4	1
		IAcDEEFsDsEDEGEGGR	2161.6978	25.3454	2	0
325	P78317	RLPQDHADScVVssDDEELSR	2575.0288	34.3005	3	1
326	P78346-2	KPRPsEGDEDcLPASK	1865.8183	26.2795	3	0
		KPRPsEGDEDcLPASKK	1993.912	33.8401	4	1
327	P78347	SPGSNsKVPEIEVTVEGPNNNNPQTSAVR	3101.4737	39.0141	3	1
		ESTSSKsPPR	1155.508	5.6669	2	1
		ESTSSKsPPRK	1283.6038	12.009	3	2
328	P80723	KTEAPAAPAAQETKsDGAPASDSKPGSSEAAPSSK	3406.5834	14.3351	4	2
		AEGAATEEEGtPKSEPQAAAEPAEAK	2778.2096	15.7727	3	1
		ETPAATEAPSStPK	1466.6459	10.187	2	0
		KAEGAATEEEGtPKSEPQAAAEPAEAK	2906.3156	25.62	4	2
329	P82094-2	SVSEINsDDELSGK	1559.6561	23.5594	2	0
330	P83916	KADsDSEDKGEESKPK	1829.7856	20.0254	3	2
331	P84103	RRsPPPR	945.48198	18.9509	2	2
332	P85037	EGsPIPHDPEFGSK	1576.6784	24.8829	2	0
		IQFTSLYHKEEAPAsPLRPLYPQIsPLK	3383.7101	74.7448	4	1
333	P98174	SLsLDPGQSLEPHPEGPQR	2123.9941	40.366	3	0

334	P98175	HRHsPTGPPGFPR LASDRPsPPR	1522.7167 1290.5914	37.4259 11.1142	3	1 0
335	Q00341	VATLNSEEEdPPTYK	1859.7966	27.5331	2	0
336	Q00577	LtLSMSVAVEFR	1432.7033	29.8014	3	0
337	Q00613	VKEEPPsPPQSPR GHTDTEGRPPsPPPTsTPEK	1527.7243 2247.9331	20.4466 19.9116	3	1 0
338	Q00839	AKsPQPPVEEEDEHFDDTVVcLDTYNcDLHFK	3914.6852	57.5727	4	1
339	Q00839-2	AKsPQPPVEEEDEHFDDTVVcLDTYNcDLHFK	3914.6852	73.4341	5	1
340	Q01082	AQTLPTSVVTITSEsSPGKR RPPsPEPSTK TSSKEssPIPsPTSDRK TSSKEssPIPsPTSDR VSEEAESQQWDTSKGEQVSQNGLPAEQGsPR	2139.0816 1175.5475 2043.8112 1915.7168 3566.5664	36.4836 9.4157 10.7072 14.3239 35.7695	3	1 0 2 1 1
341	Q01105	RQsPLPPQKK RQsPLPPQK	1258.6688 1130.5763	10.042 12.0561	2	2 1
342	Q01105-2	ELNsNHDGADETSEKEQQEAIEHIDEVQNEIDR	3901.6947	67.548	4	1
343	Q01130	sRsRsPPPVSK sRsPPPVSK VDNLTYRtSPDTLR VDNLTYRtSPDTLRR	1437.5719 1114.4726 1730.813 1886.9227	9.0963 8.0571 31.6426 37.1073	3	2 1 1 2
344	Q01167	sAPASPNHAGVLSAHSSGAQTPESLR EGsPAPLEPEPGAAQPK	2696.2643 1754.8001	33.1786 23.7538	3	0 0
345	Q01433	QIsQDVKLEPDILLR	1846.9793	51.6403	3	1
346	Q01581	RPTPNDDTLDEGVGLVHSNIATEHIPsPAK	3260.5829	64.5101	4	0
347	Q01650	sADGSAPAGEGEGVTLQR	1781.777	21.1845	2	0
348	Q01664	FIQELSGSSsPK	1272.5942	26.3687	2	0
349	Q01831	SEAAPHTDAGGLssDEEEGTSSQAEAAR	3048.1935	23.8856	3	0
350	Q02880	KTsFDQDsDVDIFPSDFPTEPPSLPR KAsGsENEGDYNPGRK	3097.3355 1868.7281	70.4418 14.0526	3	1 2

		VVEAVNsDsDSEFGIPK	1952.8058	45.8494	2	0
351	Q03111	RsPEScSKPEK	1384.5974	13.654	3	1
		RPATADsPKPSAK	1405.6898	13.752	3	0
352	Q03393	RIsFSASHR	1140.5344	19.1438	3	1
353	Q03468	KVPVQEIDDDFPssGEEAEAASVGEGGGGGR	3353.3928	62.4051	3	1
		VPVQEIDDDFPssGEEAEAASVGEGGGGGR	3225.3233	67.284	3	0
354	Q03701	SQLDDHPEsDDEENFIDANDDEDMEK	3132.1673	43.9578	3	0
355	Q04323-2	KYGGSVGSQPPPVAPEPGPVPsSPSQEPPTKR	3291.6225	36.8114	4	2
		YGGSVGSQPPPVAPEPGPVPsPSQEPPTKR	3163.5289	35.0711	3	1
356	Q04637-9	sFSKEVEER	1190.5131	14.6185	2	1
		EAEEEsDHN	1139.3586	4.0822	2	0
		KAAsLTEDRDR	1341.6195	21.0069	3	2
		RSFsKEVEER	1346.6109	33.0583	3	2
357	Q04695	QFTSsSSIKGSSGLGGGSSR	1966.8938	23.7154	3	1
358	Q04721	GGsSDLSDEDEDAEDSSANIITDLVYQGASLQAQTDR	3952.6974	81.9137	3	0
359	Q04726	DAPTsPASVASSSSTPSSK	1843.7958	14.744	2	0
		ESSANNSVsPSESLR	1643.6998	15.5453	2	0
		ERESSIONSVsPSESLR	1928.8496	22.6959	3	1
360	Q05519	TKEcsVEKGTGDSLR	1746.7837	14.0308	3	2
		KPIETGsPK	1036.5119	9.386	2	0
		DYDEEEQGYDsEKEKK	2071.807	22.7738	3	2
		EcsVEKGTGDSLR	1517.639	17.1775	2	1
		LNHVAAGLVsPSLKSDTSSK	2091.0589	39.5229	3	1
361	Q05682	QSVDKVTsPTKV	1368.6822	19.547	2	2
362	Q05682-4	RGsIGENQIKDEK	1553.7355	14.4907	2	2
363	Q06210	VDsTTcLFPVEEK	1604.7018	42.1846	2	0
364	Q07021	ALVLDCHYPEDEVGQEDEAEsDIFSIR	3216.3885	65.3153	3	0
365	Q07157	KVQIPVSRPDPEPVsDNEEDsYDEEIHDPR	3651.5802	38.9235	4	1
		VQIPVSRPDPEPVsDNEEDsYDEEIHDPR	3523.4883	41.7863	3	0

		ATLLNVPDLSDIHSANAsERDDIsEIQLASDHSGR	4080.8349	74.3689	4	1
366	Q07666	AsPATQPPPLLPPSATGPDATVGGPAPTPLLPPSATASVK	3806.9889	61.4596	4	0
367	Q07866-4	ALSAsHTDLAH	1202.5237	13.3529	2	0
368	Q07866-9	AsSLNVNVGGK	1238.6172	35.0673	2	0
369	Q07955	VKVDGPRsPSYGR	1497.7304	26.1681	3	2
		VDGPRsPSYGR	1270.5621	14.5399	3	1
		sPSYGR	746.28826	8.9034	2	0
370	Q07960	SSsPELVTHLK	1277.6133	27.1775	2	0
371	Q08945	EGmNPSYDEYADsDEDQHDAYLER	2945.0945	35.0022	3	0
372	Q08AD1	LNQSSPDNVTDTK	1498.6487	12.7355	2	0
373	Q08J23	AGEPNsPDAEEANsPDVTAGcDPAGVHPPR	3174.2739	32.5644	3	0
		ESTQLsPADLTEGKPTDKLESFTGTGDTEIAHATEDLENNNGSK	4982.2848	66.1465	4	1
374	Q09161	KtSDANETEDHLESLIcK	2169.9475	41.7331	3	1
		RKTsDANETEDHLESLIcK	2326.049	44.1197	4	2
375	Q09472	TEIKEEEDQPSTSATQsSPAPGQSK	2712.1943	19.8377	3	1
376	Q09666	LPSGsGAAsPTGSAVDIR	1802.7856	31.6593	2	0
		LKsEDGVEGDLGETQSR	1899.8361	22.1506	2	1
		TVIRLPSGsGAAsPTGSAVDIR	2272.0917	43.8266	3	1
		VDVKsPK	852.4254	9.2407	2	1
		ASLGSLEGEAEAEASsPK	1812.8017	43.138	2	0
		FKAEAPLPsPK	1264.6358	23.6442	2	1
		HRSNsFSDER	1314.5274	15.224	3	1
		DIDISsPEFK	1230.5396	37.6961	2	0
		GGVTGsPEASISGSK	1413.6335	18.5441	2	0
		SNsFSDER	1021.3669	12.0559	2	0
377	Q0BUQ0	WNFAGLEASHGVSiHRSHGSTGNRQDPGK	3269.5294	45.344	4	2
378	Q0GBX5	TTRLVGNIEDLsGEVER	1967.9606	38.5715	4	1
379	Q0JRZ9	NLsNEELTK	1127.5027	18.1258	2	0
380	Q0ZGT2	EMLAsDDEEDVSSKVEK	1990.8215	31.6504	3	1

381	Q12769	LIRPEYAWIVQPVSGAVYDRPGAsPK	2949.5209	69.4957	4	0
382	Q12789	EDPQARPLEGSSSEDSPPEGQAPPsHSPR	3121.3539	27.1643	4	0
383	Q12797	SSGNSSSSGSGSGSTSAGSSsPGAR	2182.8611	5.2429	3	0
384	Q12846	AIEPKKEEADENYNsVNTR	2287.0032	23.698	3	1
385	Q12873-3	ELQGDGPPSsPTNDPTVK	1918.8484	20.5679	2	0
386	Q12874	TGEEREEEEQIsEsEsEDEENEHYNPK	3839.436	45.2286	3	1
387	Q12888-2	STPFIVPSsPTEQEGR	1811.8335	37.0606	2	0
		SDsPEIPFQAAAGPSDGLDASSPGNSFVGLR	3126.4325	65.9975	3	0
		RsDSPEIPFQAAAGPSDGLDASSPGNSFVGLR	3282.5101	59.6036	3	1
		NsPEDLGLSLTGDSCK	1772.7542	42.8216	2	0
		TSEIEPKNsPEDLGLSLTGDSCK	2557.1548	44.7326	3	1
388	Q12906	DSSKGEDSAEEtEAKPAVVAPAPVVEAVSTPSAAFPSDATAEQGPIL	4932.3922	56.6182	4	1
		TK	1826.8033	27.2885	3	2
		RPMEEDGEKsPSKK	1714.71	14.3413	3	1
389	Q12906-7	DSsKGEDSAEETEAKPAVVAPAPVVEAVSTPSAAFPSDATAENVK	4536.1603	51.5475	4	1
390	Q12986	EHsPSESEKEVVGADPR	1932.8377	28.7022	3	1
		NYSSsPPPcHLSR	1494.6237	21.0167	3	0
391	Q12996	RPNEDsDEDEEKGAVVPPVHDIYR	2846.2846	34.3872	4	1
		RPNEDsDEDEEK	1542.5667	11.2823	2	0
392	Q13085-4	IFDEVGMGcFSDsPPQsPTFPEAGHTSLYDEDKVPR	4115.736	65.9481	4	1
393	Q13098-7	NQIHKVsPPREGSQGELTPANSQSR	2797.3595	21.8918	4	2
		SPPREGsQGELTPANSQSR	2077.9363	17.781	3	1
		EGsQGELTPANSQSR	1640.7007	13.3251	2	0
394	Q13112	TQDPSSsPGTTPPQAR	1619.7116	10.4783	2	0
		GSsPGPRPVEGTPASR	1631.7581	14.8795	3	0
395	Q13136	RSsDGsLSHEEDLAK	1790.712	23.6917	3	1
396	Q13177	YLsFTPPEKDGFPSGTALNAK	2417.161	54.8211	3	1
397	Q13185	KSLsDSESDDSK	1377.5458	9.3884	2	1
		SLsDSESDDSK	1249.4517	9.1296	2	0

		SLsDSESDDSKSK	1464.5766	9.3675	2	1
		RKsLSDSESDDSK	1533.6484	18.4417	3	2
398	Q13200	DKAPVQPQQsPAAAPGGTDEKPSGK	2541.2082	11.3298	3	1
		APVQPQQsPAAAPGGTDEKPSGK	2298.0882	10.6201	3	0
399	Q13206	SNsEVEDVGPTSHNR	1707.7094	17.6312	2	0
400	Q13233	SPSPGNNSPSGRtVK	1450.6697	18.7615	3	1
401	Q13242	GsPHYFSPFRPY	1534.6635	48.1685	3	0
		STsYGYSR	1000.3821	13.1566	2	0
402	Q13243	SVsRsPVPEK	1245.5318	9.74	2	1
403	Q13247	ARsVsPPP	1098.4783	7.3266	2	1
		ARsVsPPPKR	1254.5773	9.4096	3	2
		SNsPLPVPPSK	1202.5843	19.3141	2	0
		sVsPPP	871.34178	6.7522	2	0
		LASPsGsTsSGLEVVAPEGTSAPGGPGTLDDSATIcR	3798.5998	59.7381	3	0
		STAPSAAASASASAAAsSPAGGGAEALELLEHcGVcR	3522.5905	57.7339	4	0
405	Q13283	YQDEVFGGFVTEPQEEsEEEVEEPEER	3296.3543	57.8455	3	0
		SSsPAPADIAQTVQEDLR	1964.913	56.7739	2	0
406	Q13286	RFsDsEGEETVPEPR	1894.741	25.8641	2	1
		RRFsDSEGEETVPEPR	1970.8742	25.6335	3	2
		FSDsEGEETVPEPR	1658.6648	27.9185	2	0
407	Q13409-2	EAEALLQSMGLTPESPIVPPPMSPsSK	2873.3805	70.9254	3	0
408	Q13425	GLGPPsPPAPR	1222.6093	28.3741	2	0
		GPAGEAGAsPPVR	1245.5649	14.2456	2	0
409	Q13427	KsPPKADEK	1079.5145	8.9666	3	2
		FRRsEtPPHWR	1628.6986	28.7085	3	2
		RSEtPPHWR	1245.5583	20.5708	3	1
		ADRQsPFSK	1230.5207	10.7391	2	1
		IRsSVEKENQK	1397.6841	16.1714	3	2
		sEtPPHWR	1169.4223	22.7034	2	0

		SELNEIKENQRsPVR	1878.9126	33.3189	3	2
		KADRDQsPFSK	1358.6138	29.4806	3	2
410	Q13428-4	TQPSSGVDSAVGTLPATsPQSTSVQAK	2681.284	34.1878	3	0
		KLsGDQPAAR	1122.5348	9.8742	2	1
		KLGAGEGGEASVsPEKTSTTSK	2201.0423	14.0135	3	2
		LGAGEGGEASVsPEKTSTTSK	2072.9437	13.7627	2	1
		LDSsPSVSSTLAAK	1442.6834	23.4616	2	0
		TVANLLSGKsPR	1322.6921	24.6011	2	1
		SLGNILQAKPTsSPAKGPPQK	2199.1708	27.3865	3	1
		AASAPAKEsPR	1164.5433	5.8896	3	1
		AALAPAKEsPR	1190.5991	10.209	3	1
		ASSVSTKEsPARK	1427.6929	9.3599	3	2
		ASSVSTKEsPAR	1299.5974	9.2108	3	1
		EAASGTtPQK	1069.4576	4.708	2	0
		KGAAPtPPGK	1003.5008	11.8881	2	1
		TSQVGAASAPAKEsPR	1636.7768	12.6123	3	1
		SPAGPAATPAQAQAAAsTPR	1829.8558	15.2188	2	0
		LDSsPSVSSTLAAKDDPDGK	2069.9342	27.6308	3	1
		DSEsPSQK	957.35869	3.5738	2	0
411	Q13428-7	KQEGPATQVDSAVGTLPATsPQSTSVQAK	2963.4602	34.0706	3	1
		LGAGEGGEASVsPEKTSTTSK	2072.9415	17.3644	2	1
		KLGAGEGGEASVsPEKTSTTSK	2201.0418	23.3279	3	2
		TSQVGAASAPAKEsPR	1636.7761	12.4767	3	1
		TVANLLSGKsPR	1322.6855	31.6138	3	1
		SLGNILQAKPTsSPAKGPPQK	2199.167	35.0774	3	1
		ASSVSTKEsPARK	1427.6944	12.5404	3	2
		AASAPAKEsPR	1164.5438	10.0585	2	1
		DSEsPSQK	957.35796	3.6124	2	0
		ASSVSTKEsPAR	1299.5987	10.7387	2	1

412	Q13435	SSLGQsAsETEEDTVSVSKK GFEEEHKDsDDDssDDEQEKKPEAPK SSLGQsAsETEEDTVSVSK	2228.9286 3231.1686 2100.8343	23.1834 14.4571 28.9515	3 4 2	1 2 0
413	Q13439-5	SSsKESLVR	1072.5051	14.7699	2	1
414	Q13442	SLDsDEsEDEEDDYQQKR SLDsDEsEDEEDDYQQK KSLDsDEsEDEEDDYQQK	2347.8195 2191.7198 2319.8047	20.1558 22.4832 21.4005	3 2 3	1 0 1
415	Q13443	HVsPVtPPREVPIYANR	2091.992	38.7419	3	1
416	Q13501	LTPVsPESSSTEK RFSFccsPEPEAEAAAGPGPcER sRLTPVsPESSSTEK EVDPSTGELQLQMPEsEGPSSLDPsQEGPTGLK	1570.6934 2862.1529 1893.7912 3606.6339	14.5852 44.0011 14.8965 56.4083	2 3 2 3	0 1 1 0
417	Q13523	KKsPIINESR LcDFGSASHVADNDITPYLVsR sKDAsPINRWsPTR KPIKsPSKDASSGK TRsPsPDDILER VEQEsssDDNLEDFDVEEEDEEALIEQR ARsPTDDKVK sRsPLLNDRR sRsPLLNDR KsKsPTLR RRsLsPKPR sLsPKPR sRsPVDLR	1251.65 2517.1329 1854.7384 1509.7737 1545.6388 3538.2956 1196.5713 1373.612 1217.5138 1076.4937 1256.6061 944.40215 1089.4532	12.6139 48.1468 23.7045 23.8103 31.8235 76.6126 14.7218 19.2754 16.1702 12.1096 23.3893 9.7116 14.4471	2 3 3 3 3 3 3 3 2 3 3 2 2	2 0 2 2 1 0 2 1 1 2 2 0
418	Q13541	RVVLGDGVQLPPGDYsTTPGGTLFsTTPGGTR VVLGDGVQLPPGDYsTTPGGTLFsTTPGGTR NSPVTKtPPR	3363.5881 3207.4922 1176.5843	57.8354 65.6435 12.3105	3 3 2	1 0 1
419	Q13547	IAcEEEFsDsEEESEGGRK	2317.8169	21.7927	3	1

		IAcEEEFsDsEEEGER	2189.7364	27.4246	2	0
		MLPHAPGVQMCAIPEDAPEEsGDEDEDPPDKR	3711.6103	53.7318	4	1
420	Q13573	GPPsPPAPVMHsPSRK	1801.7924	22.3747	3	1
		GPPsPPAPVMHSPSR	1593.7333	25.6564	3	0
421	Q13595	RRsPsPYYSR	1428.5871	22.8299	2	2
		sRsYtPEYR	1398.4567	17.2471	2	1
422	Q13595-4	RsPsPYYSR	1272.4854	14.3239	2	1
		YRRsPsPYYSR	1591.6474	26.0679	3	2
423	Q13596-3	LPPPFPGLEPESEGAAAGGsEPEAGDsDTEGEDIFTGAAVVSK	4273.8498	78.327	4	0
424	Q13610	EKLQEEGGGsDEEETGSPSEDGmQSAR	2935.1398	20.8856	3	1
		LQEEGGGSDEEETGsPSEDGMQSAR	2662.0191	24.147	3	0
425	Q13620	SATDGNTStTPPTSAK	1615.6885	10.6973	2	0
426	Q13769	ALFKPPEDSQDDEsDsDAEEEQTTKR	3127.2491	29.0343	3	1
		ALFKPPEDSQDDEsDsDAEEEQTTK	2971.1508	33.3843	3	0
427	Q13895	MPQDGsDDEDEEWPTLEK	2200.8306	45.4069	2	0
428	Q14126	AAsYTEEDENHTAK	1645.6395	12.8424	2	0
		DcLLVYSQEETEsLNAsIGccsFIEGELDDR	3849.4735	85.707	3	0
429	Q14137	IGDEYAEDssDEEDIR	2002.6946	32.5808	2	0
430	Q14157-5	RYPSSIIsSPQKDLTQAK	2073.0163	27.1292	3	2
		SPAVALSTAAPPPPsPLPSK	2040.016	25.4544	2	0
		RYPSSISSLsPQK	1416.6584	13.9516	2	1
		NPSDSAVHsPFTKR	1622.735	15.494	3	1
		STsAPQMSPGSSDNQSSSPQPAQQK	2612.0998	15.1206	3	0
		KAsLTSK	814.40959	10.9679	2	1
431	Q14160-3	MAESPcSPSGQQPPsPPsPDEL PANVK	2964.221	43.1224	3	0
		RAtPHPSELK	1215.5901	23.4954	3	1
		RSEAcPcQPDSGsPLPAEEEKR	2580.0978	30.2396	3	2
		LALDGETLGEEEQEDEQPPWASPsPTSR	3148.3861	58.0483	3	0
		RSEAcPcQPDSGsPLPAEEEK	2423.9718	26.2575	3	1

		ALsPAELR	936.45732	24.769	2	0
432	Q14166	sSPGQTPEEGAQALAEFAALHGPALR	2685.284	67.5623	3	0
		RPAERsSPGQTPEEGAQALAEFAALHGPALR	3294.6244	78.3754	4	1
433	Q14181	sPHQLLSPSSFSPSATPSQK	2163.0209	40.5855	3	0
434	Q14244-7	AAPAQVRPPsPGNIRPVK	1935.0395	34.8201	3	0
435	Q14247	tQTPPVsPAPQPTEER	1894.7994	17.55	2	0
		TQtPPVSPAPQPtEERLPSSPVYEDAASFK	3386.5411	51.0547	3	1
		AKtQTPPVsPAPQPTEER	2093.937	15.4247	3	1
		AKTQtPPVSPAPQPtEERLPSSPVYEDAASFK	3585.6879	45.7886	4	2
		LPSsPVYEDAASFK	1590.7121	42.6845	2	0
436	Q14247-2	LPsSPVYEDAASFK	1590.7114	41.4886	2	0
		TQtPPVSPAPQPtEERLPSSPVYEDAASFK	3386.5517	49.2024	3	1
		TQtPPVSPAPQPTEER	1814.8421	18.2137	2	0
		AKtQtPPVSPAPQPtEERLPSSPVYEDAASFK	3665.6322	46.8318	4	2
		AKtQTPPVsPAPQPTEER	2093.9372	15.4207	3	1
437	Q14258	AsAPSPNAQVAcDHcLK	1905.8034	22.2434	3	0
438	Q14498	DKsPVREPIDNLTPEER	2074.9988	29.1894	3	2
		YRsPYSGPK	1134.5015	12.7285	2	1
439	Q14527	KTAVQYIEssDsEEIETSELPQK	2851.1761	51.586	3	1
440	Q14596	SLtLDAPDHNPpcR	1743.7608	28.5331	3	0
441	Q14643	RDsVLAASR	1054.5062	16.6075	2	1
442	Q14684	TPTSSpAsSPLVAK	1502.6608	15.5076	2	0
443	Q14687	ERsPsPPTIQSK	1486.637	12.7896	2	1
		KGPPTQELDRDsEEEEEDDEDGEDEEEEVPK	3683.4587	36.2042	3	2
444	Q14694-2	NHSVNEEQEEQGEGsEDEWEQVGPR	3107.2335	36.2183	3	0
		TcNsPQNsTDsVSDIVPDSPFPAGSDTR	3361.3238	72.6509	3	0
445	Q14739	SAsASHQADIK	1194.5171	9.4513	2	0
446	Q14966	HLEAADKGHsPAQKPK	1793.8761	16.3763	4	1
447	Q14978-2	AAKNsEEEEEEK	1472.5811	8.9431	2	1

		GKGsPRPQAPK	1202.6077	10.0311	2	1
		AAESSSDSSDSDsEDDEAPSXPAGTTK	2838.1003	12.1157	3	0
		AAKNsEEEEEEKK	1600.6805	13.2929	3	2
		VADNsFDAK	1046.4253	12.5043	2	0
448	Q14980	TQPDGTSVPGEPAsPISQR	2003.9177	25.7668	2	0
		APVPSTcSSTFPEELsPPSHQAK	2534.1403	34.5112	3	0
		VSLEPHQGPGtPESK	1642.7574	19.3767	3	0
449	Q14C86-6	EVSSRsTPGLSVVSGISATSEDIPNKIEDLR	3500.6798	62.7864	4	1
		ELPPAAAIGATSLVAAPHSSSSPSKDSSRGETEER	3659.7492	48.8986	4	2
		ELPPAAAIGATSLVAAPHSSsSSPSKDSSR	2958.4391	45.5477	4	1
450	Q15019-2	IYHLPDAEsDEDEDFFKEQTR	2517.0666	37.9107	3	1
451	Q15059	SEsPPPLSDPK	1233.5403	17.1613	2	0
452	Q15061	LQAKEsPQR	1136.5489	9.1772	2	1
		LQAKEsPQRK	1264.6438	13.3464	3	2
453	Q15121-2	DIIRQPsEEEIIK	1649.8271	35.1861	2	1
454	Q15149	TQLAsWSDPTEETGPVAGILDTELEK	2968.3993	72.1915	3	0
		RTPHVQAVQGPLGsPPK	1848.9589	29.8947	3	1
		SsSVGSSSSYPISPASVR	1834.8342	29.2648	2	0
		sLQEEHVAVAQLR	1559.7604	30.3299	2	0
		SRSSSVGSssSYPISPASVR	2157.9272	30.6489	3	1
		TQLASWsDPTEETGPVAGILDTELEK	2968.3938	71.7911	3	0
		AQLEPVAsPAK	1190.5862	15.6996	2	0
		AQLEPVAsPAKKPK	1543.8308	21.5057	3	1
		ISEQNDADNASVLsVssNFEPFATDDLGNNTVIHLDQALAR	4513.9884	84.4067	4	0
455	Q15154	VTNDIsPESSPGVGR	1594.7158	19.1325	2	0
		QIcLVMLETLSQsPQGR	2039.9667	63.9294	3	0
456	Q15365	GVТИPYRPKPSSsPVIFAGGQDR	2509.2764	50.8734	3	0
457	Q15366-2	QIsLPDLSQEEPQLK	1804.8787	52.9617	2	0
458	Q15390	TPKDsPGIPPSAGAHQLFR	2056.0151	31.5924	3	1

460	Q15424-3	sVVsFDKVKEPR ETINNLDTSSSDFTILQEIEEPSLEPENEK SVVsFDKVK	1550.7138 3501.5888 1088.5423	28.4766 75.0722 30.2533	3 3 2	2 0 1
461	Q14151	TDcEPVGLEPAVEQSSAASELAEASSEELAEAPTEAPsPEAR SEPVKEESSELEQPFAQDTsSVPDRK	4391.933	69.5837	3	0
462	Q15459	FGESEEVEmEVEsDEEDDKQEK	2713.0448	39.1665	3	1
463	Q15477	ASsLEDLVLK	1154.5777	45.0035	2	0
464	Q15637-5	TGDLGIPPNPEDRsPsPEPIYNSEGKR TGDLGIPPNPEDRsPsPEPIYNSEGK	3082.3734 2926.2718	37.7517 42.6038	4 3	2 1
465	Q15642	APsDSSLGTPSDGRPELR	1921.8667	23.3564	3	0
466	Q15649	TVKPVENKDDDSIADFLNsDEEDRVSLQLNK	3857.7736	76.5586	4	2
467	Q15651	RKsPENTEGK	1225.5621	14.9948	3	2
468	Q15691	KPLTsSSAAPQRPISTQR	2005.038	15.2862	3	0
469	Q15773	LAIQGPEDsPSR	1349.6149	22.457	2	0
470	Q15942	sPGAPGPLTLK GPPASsPAPAPK	1117.5718 1156.5455	27.47 9.7191	2 2	0 0
471	Q16204	LDQPVsAPPsPR RSNsPDKFK	1423.6077 1158.533	18.8986 10.9512	2 2	0 2
472	Q16513	ASsLGEIDESSELR GREDVSNFDDEFTSEAPIlPPREPR TsTFCGTPEFLAPEVLTETSYTR	1572.6938 3054.4035 2687.2181	34.6297 52.8782 70.8719	2 4 3	0 2 0
473	Q16629	sRsGsIKGSR	1274.4715	8.0107	3	2
474	Q16637	RGTGQsDDsDIWDDTALIK	2252.9063	55.8439	2	1
475	Q16643-3	LSsPVLHR	988.50005	12.8359	2	0
476	Q16649	TSETDDGVVGKSsDGEDEQQVPK	2487.0478	21.5886	3	1
477	Q1JEI8	EMmIPKESHPHLLPQDsQAILKImAAMtTEDLAK	4009.8578	69.4282	4	2
478	Q1KMD3	REEDEPEERsGDETPGSEVPGDK sGDETPGSEVPGDKAAEEQGDDQDSEK sGDETPGSEVPGDK	2624.0731 2857.1241 1454.5731	19.3146 19.1912 12.6934	4 3 2	2 1 0

		SKsPLPPEEEAKDEEEDQTLVNLDTYTSSDLHFQVSK	4198.9479	63.1329	4	2
		EEDEPEERsGDETPGSEVPGDK	2467.9647	18.2637	3	1
479	Q29RF7	AAVGQEePGGLEAGNAK	1635.7402	17.973	2	0
480	Q32MZ4	IDGATQSsPAEPK	1380.6085	10.0962	2	0
		cTLPEHESPsQDISDAcEAESTER	2828.1176	34.9338	3	0
481	Q3B726	KHsEEAEFTPPLKcsPK	2144.93	28.9863	3	2
		KHsEEAEFTPPLK	1592.7431	47.2388	3	1
482	Q3UM45	RVEsEEsGDEEGKK	1738.6629	11.4732	3	2
483	Q49A26	KLsLSEGK	941.47569	18.5162	2	1
484	Q4G0J3-3	KRssSEDAESLAPR	1692.7015	15.805	3	2
		SRPTsEGsDIESTEPQK	2007.801	15.0888	2	0
		SsSEDAESLAPR	1328.54	20.3528	2	0
485	Q4KMP7	ALAAGADSPKTEEARPsPAPGPGTPTGTPTR	3038.4684	27.6106	4	1
486	Q4R6F6	NGDEcAYHHPIsPcK	1864.7201	15.3294	3	0
		DLVQPDKPAsPK	1374.6716	16.6883	2	0
487	Q52LW3	ATsFEESER	1135.4344	11.0568	2	0
488	Q53EL6	FVsEGDGGR	1003.3923	10.3784	2	0
		SGLTVPTsPK	1066.5232	21.3012	2	0
489	Q53GA4	TAPAAPAEDA VAAAAAAPSEPSEPSRPsPQPKPR	3372.6354	38.389	4	0
490	Q53GS9	EREPEAASSRGsPVR	1707.7882	10.6165	3	2
		EREVDEDsEPEREVR	1953.8269	15.7041	3	2
		EVDEDsEPEREVR	1668.6806	17.5288	3	1
491	Q56P03	YYDDIYFDsDsEDEDRAVQVTK	2833.105	52.8432	3	1
492	Q58WW2-3	DSALQDtDDsDDDPVLIPGAR	2374.9515	53.4009	3	0
493	Q5BKZ1	ISLSKsPTKTDPK	1481.7638	13.4176	2	2
494	Q5H9R7-5	IQQFDDGGsDEEDIWEEK	2219.8799	50.6669	2	0
495	Q5HYJ3	ISNLsPEEEQGLWK	1709.7925	44.6693	2	0
496	Q5JSH3	EYVSNDAAQsDDEEKLQSQPTDTDGGR	3035.2595	23.8453	3	1
		TKEYVSNDAAQsDDEEKLQSQPTDTDGGR	3264.3939	31.1232	4	2

		VGNEsPVQELK	1279.5992	20.879	2	0
497	Q5JSZ5	QQsIEDKEDKPPPR	1746.8124	18.3358	3	1
498	Q5JTD0	KDsLTQAQEQQGNLLN	1738.8071	32.2363	2	1
499	Q5JTH9	GDSIEEILADsEDEEDNEEEER	2632.0104	49.0896	3	0
500	Q5JTV8-3	VNFSEEGETEEDDQDSSHSSVTTVK DSHssEEDEASSQTDLISQTISK DSHssEEDEASSQTDLISQTISK LQQQHSEQPPLQPsPVMTR	2836.1394 2540.9703 2669.0705 2281.0871	26.5184 29.9111 25.9274 29.5932	3 3 3 3	0 0 1 0
501	Q5M775	KsVSSPTSSNTPTPTK sVSSPTSSNTPTPTK KSPsLESLSRPPSLGFGDTR	1698.8016 1570.7043 2211.0987	10.249 12.6238 55.0198	2 2 3	1 0 1
502	Q5PD43	GLSGAPTEMEVKMAELVTNLVPTMDmVRmVNSGTEATMsAIR	4727.2069	77.1595	5	2
503	Q5PGF0	RyGTVPHSGFGLGFER	1859.865	71.5762	3	1
504	Q5PRF9	AAFTTPDHAPLSPQSsVASSGSEQTEEQGSSR	3326.4723	36.5068	3	0
505	Q5QJE6	SLTDPSQEsHTEAIsDAETSSSDISFSGIATR ESYTEEIVsEAESHVSGISR	3486.4687 2289.009	51.4419 68.9651	3 3	0 0
506	Q5T0N5	HSSDINHLVtQGRESPEGSYTDDANQEVR RHsSDINHLVTQGR RHSsDINHLVTQGRESPEGSYTDDANQEVR	3321.4669 1699.8094 3557.5189	37.8717 31.7978 57.5518	4 4 4	1 1 2
507	Q5T1M5	RPsQEQSASASSGQPQAPLNR SsLsGDEEDELFK EVAPDGPLQESsTRLsLTSDPEEGDPLALGPESPGEPPQLK	2276.046 1615.5877 4625.1623	14.4074 48.2798 64.9471	2 2 4	0 0 1
508	Q5T200	LRsPSNDSAHR sLsPSHLTEDR STsPAGQHHsPISSR RsPERPTGDLR	1319.5908 1401.5438 1708.6906 1363.6524	9.9569 23.0871 11.9524 24.3377	3 2 3 3	1 0 0 1
509	Q5T4S7-2	AAPPBPPPPPPPLEsSPR HAsTSSPADK TGSTSKEDDYESDAATIVQK	1783.8938 1080.4369 2311.9823	28.1813 5.4267 34.6975	3 2 3	0 0 1

510	Q5T5U3	HNKsPTLScR TtSPPLSIPTTHLIHQAGSR	1279.5686 2291.1729	11.7961 48.9024	3 3	1 0
511	Q5T8P6	RLNHsPPQSSSR LNHsPPQSSSR	1445.6694 1289.5739	20.2253 11.2551	3 2	1 0
512	Q5TAQ9	VHDRsEEEEEEEEEQPR DQDssDDERALEDWVSSETSALPRPR ANRDQDsDDERALEDWVSSETSALPRPR VHDRsEEEEEEEEEQPRR	2752.044 3121.3055 3462.4738 2908.1479	23.0446 74.5088 68.4214 39.798	3 3 4 4	1 1 2 2
513	Q5TCZ1	EAEEGPTGASESQDsPR	1826.715	10.2478	2	0
514	Q5UIP0	RDsFDNcSLGESSK SNEsVDIQDQEEK	1681.6504 1600.6462	18.9886 14.7702	2 2	1 0
515	Q5VSL9	AAsPPASASDLIEQQQK AAsPPASASDLIEQQQKR	1820.8587 1976.9518	32.4533 33.3001	2 3	0 1
516	Q5VT52	IISPGSSTPSsTRSPPPGRDESYPR NTGVSPASRPSPGTPtSPSNLTGLK SFNYsPNSSTSEVSSTSASK DVEDMELsDVEDDGSK	2708.2802 2590.2638 2146.8909 1862.7059	21.843 32.6707 28.6583 42.7368	3 3 2 2	2 0 0 0
517	Q5VTL8	RRsQsIEQESQEK SQsIEQESQEK sGsQGRTDSVEK	1764.7341 1372.57 1410.5398	10.3893 9.8567 5.6893	2 2 2	2 0 1
518	Q5VTR2	ALVVPEPEPDSDsNQER KALVVPEPEPDSDsNQER SGSALLQSsSTEDPKDEPAELKDSEDLSSQSSASK	1961.8628 2089.9506 3915.7812	30.5818 30.3215 39.1779	2 3 4	0 1 1
519	Q5VUA4	RSsPPPPSGSSSR	1475.6685	11.7822	3	1
520	Q5VZ89-7	RSsLPLDHGSPAQNENPESEK	2258.0257	31.7166	3	1
521	Q5VZK9	TASRPDDIPDSPsPK	1749.7754	21.5857	3	0
522	Q5VZL5	RVTQHEsDNENEIQUIQNk	2262.026	31.5987	3	1
523	Q61191	AVTTVTQSTPVPGPSVPPPEELQVsPGPR	3004.5155	46.2054	3	0
524	Q62376	YDERPGPsPLPHR	1600.7307	18.794	3	0

		DDTSRYDERPGPsPLPHR	2174.9687	23.2234	4	1
525	Q63HN8-4	EAAEPLSEPKEDQEAAELsEPEEESER	3221.4104	45.0237	3	1
526	Q63ZY3-2	QADPQPQAWPPPDSPVRVDTVR	2536.2134	39.8018	3	1
527	Q641Q2	RTPsDDEEDNLFAPPK	1910.8255	34.4643	3	1
		ASALLFSsDEEDQWNIPASQTHLASDR	3155.4195	58.8384	3	0
		sRPTsFADELAAR	1580.6594	38.2419	2	0
528	Q66K74	AGGLGAEETPPTSVSESLPTLSDSDPVPLAPGAADsDEDTEGFGVPR	4675.1188	71.2703	4	0
529	Q66PJ3	sAGEEDGPVLTDEQK	1783.726	21.0743	2	0
530	Q676U5	sVSSFPVPQDNVDTHPGSGK	2134.9508	35.1152	3	0
531	Q68CZ2	KKSSsDGPPIPQQPAIPATNSPDHSDHTLSVSSDSGHSTASAR	4321.0139	36.6653	5	2
		KLsLGQYDNDAGGQLPFSK	2118.0058	47.831	3	1
532	Q68EM7	SPSPPtQHTGQPPGQPSAPSQSLAPSAPR	2687.2806	27.1468	3	0
		AESSSGGGTVPSSAGILEQGPSPGDGsPPKPK	3015.4019	34.8084	3	0
533	Q69YN4	VISHDRDsPPPPPPPPPPQPPQPSLK	2854.4491	28.8348	3	1
		HADGEKEDQFNGsPPRPQPR	2342.0404	22.8708	4	1
534	Q6FI81	KSSPSVKPAVDPAAAK	1632.8415	22.9174	3	1
535	Q6GQQ9	STPEsGDsDKESVGSSSTSNEGGR	2516.9348	11.621	3	1
536	Q6GYQ0-2	HFsQSEETGNEVFGALNEEQPLPR	2795.2551	52.6363	3	0
537	Q6IBW4-4	ESRsPQQSAALPR	1506.7068	18.3768	3	1
538	Q6IQ49	VVNTDHGsPEQLQIPVTDSGR	2329.0906	35.1846	3	0
539	Q6KB66	APGPGFssRsLTGcWSAGTISK	2463.9941	29.7889	3	1
540	Q6KC79-2	NNTAAETEDDEsDGEDRGGGTSGVR	2619.0168	10.711	3	1
		AITSLGGGsPK	1180.6072	35.1457	2	0
		NNTAAETEDDEsDGEDRGGGTSGVRR	2775.1097	19.5257	3	2
541	Q6NZI2	EGEELGEGERPEEDAAALELssDEAVEVEEVIEESR	4090.6774	76.3182	4	0
		ESEALPEKEGEELGEGERPEEDAAALELssDEAVEVEEVIEESR	4974.1642	74.6865	4	1
542	Q6NZY4	KSEAGHAsSPDSEVTSLcQK	2197.9473	22.7816	3	1
543	Q6P1N0	KQNsPVAPTAQPK	1445.7233	10.0099	2	1
544	Q6P2E9	TRsPDVISSASTALSQDIPEIASEALSR	2981.4646	76.5947	3	1

		DSQDASAEQsDHDDDEVASLASASGGFGTK	2962.207	43.2786	3	0
		GPGQVPTATSALSLELQEVEPLGLPQAsPSR	3209.6345	73.8885	3	0
545	Q6PD62	KGGEFDEFVNDDtDDDLPISK	2436.0304	50.5683	3	1
		RKGsGsEQEGEDEEGGER	2095.7642	9.8668	3	2
		GEEGsDDDETENGPKPK	1883.725	9.6798	3	0
		HPKGEEGsDDDETENGPKPK	2245.9318	28.4607	4	1
546	Q6PID6	KSEAPAEVTHFsPK	1607.7504	21.236	3	1
		SEAPAEVTHFsPK	1479.6605	27.2317	3	0
547	Q6PKG0	NALPPVLtTVNGQSPPEHSAPAK	2405.2004	35.3603	3	0
		KNTFTAWsDEEsDYEIDDRDVNK	2937.1675	46.1295	3	2
		GLSAsLPDLDSENWIEVK	2052.9625	69.2224	2	0
		QHYQKETEsAPGsPR	1874.7517	18.614	3	1
		TPRtPRtPQLK	1454.7005	19.6022	3	2
		sLPTTVPEsPNYR	1620.6851	35.9994	2	0
		NTFTAWsDEEsDYEIDDRDVNK	2809.0711	52.5002	3	1
		ESPRPLQLPGAEGPAIsDGEEGGEPGAGGGAAGAAGAGR	3607.6699	45.0979	3	0
548	Q6PL18	KPNIFYSGPAsPARPR	1837.9262	42.9601	3	0
549	Q6QNY0	VAGEAAEtDsEPEPEPEPTAAPR	2510.0048	25.0486	3	0
550	Q6R0H7	ISTAsGDGR	943.39153	8.6953	2	0
551	Q6SPF0	AAAAAAATAPPsPGPAQPGPR	1835.8862	15.1275	2	0
552	Q6T4R5	RVQQEIDsDESPVAR	1808.8249	26.8951	3	1
553	Q6UN15	DHsPTPsVFNSDEERYR	2195.8617	32.8209	3	1
		DHsPTPSVFNSDEER	1796.7211	23.9426	2	0
		ERDHsPTPSVFNSDEER	2081.8709	24.7124	3	1
		RHEsEEGDSHRR	1574.6553	31.273	4	2
		VTETEDDsDsDsDDDEDVDHVTIGDIK	3206.1236	49.661	3	0
554	Q6VMQ6-4	NKQDDDLNcEPLsPHNITPEPVSK	2827.2846	33.7507	3	1
		HEHPPNPPVsPGK	1472.67	30.6363	3	0
555	Q6VY07-2	TDLQGSAsPSKVEGVHTPR	2045.9765	31.1081	3	1

		TNSsDsERSPDLGHSTQIPR	2343.966	25.0825	3	1
556	Q6W2J9	KRPEPSSDYDLsPAKQEPKPFDR	2767.3295	38.6873	4	2
557	Q6Y7W6	TDRVGVVEASEETPQTSSSARPGtPSDHQSQEASQFER	4155.8473	28.9435	4	1
		WRPHsPDGPR	1284.5664	19.0698	3	0
		VGVEASEETPQTSSSARPGtPSDHQSQEASQFER	3783.6618	26.7798	4	0
558	Q6ZRS2	LQPPsPLGPEGsVEESEAEASGEEEEDGTPR	3426.4028	47.2347	3	0
559	Q6ZRV2	RLsLGQGDSTEAAATEER	1899.8415	29.6155	3	1
		KGsPTPGFSTR	1214.5622	19.3843	2	1
560	Q6ZS17-4	FSTYSQsPPDTPSLR	1762.7806	35.4145	2	0
561	Q70EL2	DPFIDIsLPIIEER	1736.859	44.9765	4	0
562	Q71RC2-4	SNVVsPTKNEDNGAPENSVEKPEHKPEAR	3239.51	21.3947	5	1
		DGLNQTTIPVsPPSTTKPSR	2176.0801	32.8461	3	0
		AsTASPcNNNINAATAVALQEPR	2450.1293	41.997	3	0
		EQYVPPRsPK	1280.608	10.842	2	1
		DLIEDSSVQKDGLNQTTIPVsPPSTTKPSR	3290.6422	47.2729	4	1
563	Q76FK4	LQDsssEEEDVTEETDHR	2345.7894	28.8071	3	0
		FLEtDsEEEQEEVNEKK	2242.8699	28.8162	3	1
		NsSPGEASLLEK	1311.591	25.6501	2	0
564	Q79FW5	LSAAAAtSYAVTEVTIATsLR	2185.0349	46.4309	3	0
565	Q7L1Q6-3	NAEEEsEsEAEEGD	1684.4856	9.3336	2	0
566	Q7L2J0	tLNAETPKSsPLPAK	1713.7925	15.7415	2	1
		DITDPLSLNTcTDEGHVVLAsPLK	2675.2807	57.7528	3	0
		cAPSAGsPAAAVGREsPGAAATSSSGPQAQQHR	3279.4059	23.8078	4	1
		RNscNVGGGGGGFKHPAFK	2026.9209	47.8971	4	2
567	Q7L4I2	EQSEVSVsPR	1197.5208	10.8905	2	0
		KKEQSEVSVsPR	1453.7107	27.8604	3	2
		KEQSEVsVsPR	1405.5817	13.0521	2	1
568	Q7RTP6	KTsQSEEEEAPR	1470.6147	12.2746	2	1
569	Q7SXP4	VKVDGPRsPSYGR	1497.7331	14.9639	3	2

		sPSYGR	746.28905	7.1302	2	0
570	Q7YR38	KVLsPTAAKPSPFEGK	1736.9002	33.9881	3	1
571	Q7YR39	LLEDsEEssEETVSR	1949.6738	28.5095	2	0
		QQTEKPEsEDEWERTER	2256.956	31.1698	3	1
572	Q7YR40	SQTTtERDSDtDVEEEELPVENR	2839.1383	32.0523	3	1
		SQPPGEDSDtDVDDDSRPPGRPAEVHLER	3253.4318	28.8437	4	0
		AHSEKDQPPFGDsDDsVEADKSSPGIHLER	3410.4423	38.1396	4	2
		ESEDSETQPFDTHLEAYGPcLsPPR	2942.2419	51.9226	3	0
		AIPGDQHPEsPVHTEPMGIQGR	2433.1115	27.5385	3	0
		LLLAEDsEEEVDFLSER	2073.9283	65.2987	2	0
573	Q7Z2K6	sPGGSGGASR	912.35851	4.9848	2	0
		KRsPGGSGGASR	1196.5571	16.1626	3	2
574	Q7Z2W4	scTPsPDQISHR	1544.5593	13.8583	2	0
		ScTPSPDQISHRAsLEDAPVDDLTR	2847.2719	48.3915	4	1
575	Q7Z309-3	RIDFTPVsPAPsPTR	1800.822	37.9376	2	1
576	Q7Z3K3	LSGEHsESSTPRPR	1619.7217	10.4333	3	0
		SLDSEPSVPSAAKPPsPEK	2002.942	28.6358	3	0
577	Q7Z417	NDsWGSFDLR	1276.5073	49.2441	2	0
		DYEIESQNPLAsPTNTLLGSAK	2428.1471	59.3018	3	0
		GADNDGsGSESGYTPPK	1722.6539	13.0821	2	0
578	Q7Z422	SKsPPKVIVIQDDSLPAGPPPQIR	2716.4679	45.7172	4	2
579	Q7Z460	RQSSGsATNVASTPDNR	1827.8062	10.3686	3	1
		SRsDIDVNAAASAK	1484.685	14.268	2	1
		NSSNTSVGsPSNTIGR	1657.7193	15.7344	2	0
580	Q7Z4S6-4	KLsSSDAPAQDTGSSAAAVETDASR	2502.1111	27.9857	3	1
581	Q7Z4V5-3	GEAERGsGGssGDELREDDEPVK	2615.9617	22.3447	3	2
582	Q7Z569	EcINAAPDsPSK	1368.559	12.764	2	0
583	Q7Z5K2-3	VEEESTGDPFGFDsDDESLPVSSK	2653.0873	54.1783	3	0
		RPESPSPsEIsPIKGSVR	1898.8841	22.4857	3	1

		YFGFDDLsEsEDDEDDEcQVER	2844.958	64.2787	3	0
		RPEsPSEISPIK	1419.6901	28.1053	2	0
584	Q7Z5L9	KPsPEPEGEVGPPK	1527.719	13.6385	2	0
		LEEPPELNQRQsPNPR	1855.8821	23.1483	3	1
		RPASVsSSAAVEHEQR	1790.8158	13.2794	3	0
		RKPsPEPEGEVGPPK	1683.8179	14.9865	3	1
585	Q7Z6Z7	ESQLAHIKDEPPPLSPAPLPAAtPSSLDPFFSR	3702.768	69.6193	4	1
		GSGTAsDDEFENLR	1577.6181	33.7536	2	0
		AGsSTPGDAPPAVAEVQGR	1846.8365	27.6195	2	0
		AEsPEEVAcR	1227.4749	14.1621	2	0
586	Q863I2	LHKTEDGGWEWsDDEFDEESEEGKAAISQLR	3673.581	64.932	4	2
		LHKTEDGGWEWsDDEFDEESEEGK	2934.152	48.1494	3	1
587	Q86TB9	RSTsPIIGSPPVR	1446.7514	28.2268	3	1
588	Q86TC9	TPEPSsPVKEPPPVLAKPK	2078.1026	22.2572	3	1
		TPVDEsDDEIQHDEIPTGK	2204.9432	28.7274	3	0
589	Q86TC9	EAEQAAAsEAAGGDTPGsSPSSLYYEPLGQPPR	3609.5028	52.7062	3	0
590	Q86U06	EKsPVREPVDNLSPPEER	2060.9602	32.4949	3	2
591	Q86U86	ATsPSSVSGDFDDGHHSVSTPGPSR	2651.1183	25.4745	3	0
591	Q86U90	LFRPPsPAPAAPGAR	1584.8099	30.7932	3	0
593	Q86UE4	LSSQIsAGEEKWNSVSPASAGK	2313.0912	39.378	3	1
		SQEPIPDDQKVsDDDKEK	2152.9341	22.3098	3	2
		LSSQIsAGEEK	1228.5438	14.7238	2	0
		SETSWEsPK	1130.4443	17.4388	2	0
594	Q86UP2	EIQNGNLHESDsESVPR	1990.8642	20.2198	3	0
		KVEPVPVTQPtPPSEAAASK	2241.1591	29.2903	3	2
595	Q86UQ0-3	LSLEQRNLYKEVmLENLR	2344.1825	63.8617	3	2
596	Q86UR5	RAsQsSLESSTGPPcIR	1992.8364	24.7971	3	1
597	Q86UU0	EAPGsPPLSPR	1187.5502	15.7216	2	0
		SVsVDSGEQR	1143.4778	11.0922	2	0

598	Q86V48	ELsPQHKR		1074.5131	15.9265	3	1
599	Q86VM9	LGVSVsPSR		981.47942	15.769	2	0
		DSGSDQDLDGAGVRAAsDLEDEESAAR		2745.1164	41.1271	3	1
		YEPSDKDRQsPPPAK		1794.8137	18.3369	3	2
		GPSQEEEDNHsDEEDRAsEPKsQDQDSEVNELSR		4112.5309	26.909	4	2
600	Q86VQ1	DRQsPLHGNHITISHTQATGSR		2493.1921	28.094	5	1
601	Q86VR2	SPssDLDTDAEGDDFELLDQSELSQLDPASSR		3599.4675	78.5162	3	0
602	Q86WB0	SQDATFSPGSEQAEKsPGPIVSR		2455.1307	28.4538	3	1
		tRSWDSSSPVDRPEPEAAsPTTR		2689.1523	27.7769	3	1
		DtSATSQSVNGSPQA EQPSLESTSK		2616.1558	23.1439	3	0
		LcSSssSDTSSR		1433.4682	7.2512	2	0
		SQDATFsPGSEQAEK		1661.6741	18.0008	2	0
		SMGTGDTPGLEVPSsPLRK		2008.9598	39.2896	3	1
603	Q86WC4	SsTSFANIQENSN		1478.5898	27.2643	2	0
604	Q86WR7	APsPPVEHPR		1166.5402	10.6189	3	0
		AQVLATIIGHAGAFPAAGDAGEGAPGGGSsPER		3093.4408	47.5991	4	0
605	Q86X51	SLSGADENPScGtGSERLAFQSRSGSPDPEVPsR		3781.5861	75.5783	5	2
606	Q86X53	EEDGADAsEEDLTR		1616.5939	15.2948	2	0
		ARQE EGADAsEEDPTPAGEEDVKDAR		2852.2	20.0312	3	2
607	Q86X95	NLTANDPSQEVAsEGEEDPEVEFLK		2990.3071	57.3009	3	0
608	Q86XP3	RANFDEENAYFEDEEE DSSNV DLPYIPAENS PtR		4042.6966	62.6681	3	1
		ANFDEENAYFEDEEE DSSNV DLPYIPAENS PtR		3886.6087	67.8911	3	0
		QQFHsKPVDsDSDDDPLEAFMAEVEDQAAR		3537.446	84.5875	3	0
		YMAENPTAGVVQEEEEDNLEYDsDGNPIAPT KK		3733.6311	52.2535	3	1
609	Q86Y91-4	ASsPcHSPR		1078.4163	5.831	2	0
610	Q86YP4-3	RPPsPDVIVLsDNEQPSSPR		2350.0627	38.9838	3	0
611	Q8A2N8	EIPDFPIPGILFyDVTTLFK		2405.2106	35.8768	3	0
612	Q8BGE6	FFDsEDEDFEILSL		1785.7256	84.5977	2	0
613	Q8BGY3	KDLLFKAQQQtELEQK		2012.0478	54.141	3	2

614	Q8C0N2	NSAsVGIQR	1124.5517	21.3814	2	0
615	Q8HXH6	VSALEEDMDDVEssEEEEEEDEKLER	3230.217	48.982	3	1
616	Q8IU81	NVAEALGHsPKDPGGGGPVR	2051.9758	21.6948	3	1
		AGGAsPAASSTAQPPTQHR	1871.8456	10.1883	3	0
		KAsPEPEGEAAGK	1350.5984	11.1408	2	1
617	Q8IUD2	SVGKVEPSsQSPGRSPR	1834.8913	19.6682	3	2
618	Q8IVF2	DAHDVSPtSTDTEAQLTVER	2251.9887	29.1529	3	0
619	Q8IVH2	RDSsSHEETPGSHPLYGHGEcK	2547.0507	56.1718	4	1
620	Q8IVT2	NALFPEVFSPtPDENSDQNSR	2444.0528	57.4677	3	0
		ALsSDSILSPAPDAR	1579.7493	37.5874	2	0
		HLSEsSGKPLSTK	1450.7003	12.9205	3	0
		SQsSDLLER	1114.4813	20.5191	2	0
		RALSSDsILSPAPDAR	1735.8409	37.1173	3	1
621	Q8IWA0	VQDTsNTGLGEDIIHQLSK	2135.0097	53.3971	3	0
622	Q8IWS0	TAHNSEADLEESFNEHELEPsPK	2777.1634	40.9763	3	0
		KTAHNSEADLEESFNEHELEPsSPK	2905.2729	65.1487	4	1
623	Q8IWS0-2	TAHNSEAADLEESFNEHELEPsSPK	2848.2076	44.2535	3	0
		KTAHNSEAADLEESFNEHELEPsSPK	2976.3122	72.5767	4	1
		DRsPHRsSPSDTRPK	1882.8053	10.7135	4	2
624	Q8IWW6	AtTPPNQGRPDsPVYANLQELK	2556.1672	43.171	3	0
625	Q8IWX8	SRsPTPPssAGLGSNSAPPiPDSR	2575.0796	35.743	3	1
626	Q8IWZ3-6	TGGGGGAsGsDEDEVSEVESFILDQEDLDNPVLK	3625.5307	84.4644	3	0
627	Q8IWZ8	AVQQHQHGyDSDEEVDSLGTWEHQLR	3273.4135	51.9098	4	0
628	Q8IXJ6	EHASIDAQSGAGVPNPSTSAsPK	2288.0266	27.9448	3	0
629	Q8IXJ9	RsRPDLR	979.49004	53.8447	2	1
630	Q8IXQ3	RDSGDNsAPSGQEREDHGLETDPLPPPVLPGPGEELPGAR	4477.1105	50.4985	4	2
631	Q8IXT5	RPLEEDFRRsPTEDFR	2129.9926	38.9613	4	2
		RPPEEDFRHsPEEDFR	2122.9123	33.7798	4	1
		sPTEDFR	931.359	13.4874	2	0

		RPPEEDFRHsPEEDFRQsPQEHR	3212.3451	83.9028	5	2
632	Q8IY67-2	HKMsPPPSGFGER	1506.6618	35.4787	3	1
633	Q8IY81	DDIYVsDVEDDGDDTsLDsDLDPEELAGVR	3509.3001	79.1558	3	0
		ALDIlsSGEDEGDEEDSTAGTTK	2716.0484	43.0543	2	0
634	Q8IYB3	RAsPsPPPKR	1252.5616	8.3738	3	2
		KPPAPPsPVQsQsPSTNWSPAVPVKK	2951.3723	37.6709	3	1
		KPPAPPSPVQsQsPSTNWSPAVPVK	2743.2987	41.3118	3	0
		KVELsEsEEDKGGK	1694.6997	10.7888	3	2
		KEtEsEAEDNLDDLEK	2024.7776	36.2017	2	1
		KEKtPELPEPSVK	1561.792	21.8556	3	2
		TRHsPTPQQSNR	1488.676	9.7971	3	1
		tAsPPPPPKR	1207.5294	9.3896	3	1
		tAsPPPPPK	1051.428	8.8997	2	0
		VSHsPPPK	928.43279	5.6656	2	0
		VPKPEPIPEPKEPsPEK	1977.9996	23.2096	3	1
		RRsPsPAPPR	1377.6235	9.7315	3	2
		RRsPSLSSK	1097.5524	11.4018	3	2
		APQTSSsPPPVR	1303.6059	10.0937	2	0
		HRPsPPAtPPPK	1441.6378	14.5864	3	0
		EKtPELPEPSVK	1433.6979	23.161	3	1
		KAAsPsPQSVR	1287.5528	9.4405	2	1
		sPsPAPPR	1065.4188	8.5488	2	0
		RVsHsPPPK	1164.4984	8.8724	3	1
		VSVsPGR	781.36193	9.5227	2	0
		KSRVsVsPGR	1232.5596	10.3239	3	2
		RLsPsAsPPR	1307.5014	11.4105	2	1
		RYsPsPPPK	1188.4886	10.3495	2	1
		APQTssSPPPVR	1539.6777	9.9034	2	1
		SVsGsPEPAAK	1189.4573	5.1482	2	0

		AAsPsPQSVR	1159.4566	9.294	2	0
		RsPsPAPPR	1221.5212	9.1797	2	1
		RRtPtPPR	1237.5682	9.8617	2	2
		RRtPsPPR	1223.5483	9.9964	3	2
		REsPSPAKPR	1301.6401	16.1937	3	1
		RVsHsPPPQR	1448.6592	14.0814	3	2
		VPKPEPIPEPKEPsPEKNSK	2307.1708	34.0242	4	2
		RYsPsPPKR	1344.5888	13.1675	3	2
		RQsPSPSTRPIR	1461.7381	23.0501	3	1
		RAsPsPPPK	1096.4607	7.7206	2	1
		RssPVR	861.34038	5.3062	2	1
635	Q8IYB7	RPQTQGHGPEKEEEEsDGEPEPDSTS	2964.2102	32.0394	3	1
636	Q8IZ73	VELsPGPPKPAGR	1384.7006	20.9153	3	0
637	Q8IZL8	GsPDGSLQTGKPSAPK	1606.7573	11.1364	2	0
		LRsPRGsPDGSLQTGKPSAPK	2296.0913	25.5994	3	2
		AGSNEDPILAPsGTPPPTIPPDETFGGR	2870.3481	51.5509	3	0
638	Q8IZP0	HNsTTSSTSSGGYR	1521.6016	12.6458	2	0
		TNPPTQKPPsPPMSGR	1771.8263	20.5918	3	0
639	Q8N1F8	RAsISEPSEDTDEPR	1736.7535	15.8329	2	1
640	Q8N1G4	KYTLENKEEGsLSDTEADAVSGQLPDPTTNPSAGK	3729.7348	54.1394	4	2
641	Q8N201	sSPEQPIGQGR	1235.5452	11.8887	2	0
642	Q8N2F6-2	SsKSAEDLTDGSYDDVLNAEQLQK	2693.1888	48.9415	3	1
643	Q8N3D4	KGsDALRPPVPQGEDEVPK	2099.0271	37.4967	3	1
644	Q8N3E9	ALsDREEEEDDEEEEEVEAAAQR	3016.198	43.2935	3	1
645	Q8N3V7	DRAsPAAAEVVPEWAScLK	2266.0272	54.7733	3	1
		AAsPAKSSLDLVPNLPK	1884.9983	43.5549	3	0
		APAPQPPSLPDRsPRPQR	2047.0409	21.386	3	1
646	Q8N3V7-2	SAGAENPRFsPPRAPPPPPPPPPPR	2954.4953	40.4865	4	1
		DRAsPAAAEVVPEWAScLK	2266.0206	59.0947	3	1

		AAsPAKPSSLVLVPNLPK	1884.9955	46.9346	3	0
		sVsPLRPETEARPPSR	1938.8869	27.1792	3	0
647	Q8N3X1-2	RPIQLsPPGPR	1410.7705	36.3041	3	0
		ALEEGDGGSVSGsSPR	1527.6397	11.9605	2	0
		ATGGLcLLGAYAdSDDDDNDVSEK	2581.0484	51.5222	3	0
648	Q8N556-2	EAYSGeSGPVDSEcPPPPSsPVHK	2621.0817	21.5547	3	0
649	Q8N5C8	TLVHsSSDGHIDPQHAAGK	2036.9242	33.2562	4	0
650	Q8N5G2	NASGVVNnsSPR	1167.5193	10.8523	2	0
651	Q8N5I9	ASPScSsPTR	1129.4379	7.5751	2	0
652	Q8N684-3	DSSDSADGRAtPSENLPVSSAR	2298.9977	23.5404	3	1
653	Q8N6N3	LLPEGEETLsDDEKDEHTSK	2481.0697	24.4963	4	1
654	Q8N7C3-2	RLsPQLQHNITEDAYcETHLEPTR	2988.3756	44.7122	4	1
655	Q8N8A6	VNDAEPGsPEAPQGK	1575.6722	10.4698	2	0
		RVNDAEPGsPEAPQGK	1731.7789	10.5921	3	1
656	Q8N9T8	YVDEENsDGETSNHR	1831.6777	13.0795	2	0
		AFVEDsEDEDGAGEEGGSSLLQK	2319.9701	40.3401	3	0
657	Q8NB78	AAATGNAsPGKLEHSK	1618.7622	19.9639	3	1
658	Q8NBN3	WVEENVPSVTDVALPALLDsDEER	2850.3351	71.9329	3	0
659	Q8NC51	SKsEEAHAEDSVmDHFR	2207.8918	29.4801	5	1
660	Q8NC51-3	SKsEEAHAEDSVMDHHFR	2191.89	82.0666	4	1
661	Q8NCF5	KKTEFLDDNSPLSPPsPR	2221.1061	51.6935	3	2
662	Q8ND56	sPVSTRPLPSASQK	1534.7701	13.6149	2	0
663	Q8NDT2	DRtPPHLLYSDRDR	1820.8583	53.5991	4	2
664	Q8NDX5-7	ISQRDPsPESNK	1437.6414	9.5652	2	1
		MDRtPPPPLsPAAITVGR	2136.9996	42.9242	3	1
665	Q8NE01	TTTAAGSSHRSRGPVPVEGsPGRNPGV	2555.2068	21.6672	3	1
666	Q8NE71	LSVPTsDEEDEVPAKPR	2045.958	31.8534	3	0
		KLsVPtsDEEDEVPAKPR	2333.9862	32.8753	3	1
		KAEQGsEEEGEREEEEEGGESK	2561.9648	10.7084	3	1

		KAEQGsEEEGERGEGEEEGGESKADDPYAHLSK	3659.4892	27.365	4	2
		AEQGsEEEGERGEGEEEGGESK	2433.8602	13.6191	2	0
667	Q8NEF9	AVTIANSPsKPSEK	1508.74	10.564	2	0
		AVTIANsPSKPSEKDSVVSLESQK	2581.2926	34.2425	4	1
668	Q8NEY8	DNTFFREsPVGR	1504.6677	30.8806	3	1
		DTsPSSGS AVSSSK	1376.5622	8.9224	2	0
		ERP VQSLKtSRDtSPSSGS AVSSSK	2738.2543	25.6006	4	2
669	Q8NFC6	SVSDPVEDKKEQE sDEEEEEEEDEPSGATTR	3718.4787	31.5974	4	2
670	Q8NFJ5	AHAWPsPYKDYEVK	1770.8029	37.8274	3	1
671	Q8NHQ9	KREEGsDIEDEDMEELLNDTR	2603.1042	75.1589	3	2
672	Q8NI27	KIDTHPsPSHSSTVK	1700.8088	14.1029	3	1
		IDTHPsPSHSSTVK	1572.7146	10.4539	3	0
673	Q8TAD8	QERLsPEVAPPAHR	1666.8113	18.8974	3	1
		RPDHsGGSPSPPTSEPAR	1911.8501	11.1179	3	0
674	Q8TAP8	APVPEPGLDLSLSPRPDsPQPR	2405.2005	46.8966	3	0
675	Q8TAQ2	KRSPsPsPTPEAK	1541.6819	9.5456	2	2
		TLTDEVNsPDSDRR	1684.7265	20.2328	2	1
676	Q8TB72	QAsPTEVVER	1195.5347	15.8855	2	0
		GKAsPFEEDQNR	1457.6106	17.4787	2	1
677	Q8TBB5	sEDEDsLEEAGSPAPGPcPR	2179.8477	25.826	2	0
		QVL TAPGsAGQPRsEDEDsLEEAGSPAPGPcPR	3522.5021	37.4372	3	1
678	Q8TBZ3-7	SNsLPHSAVSNAGSK	1535.6968	11.1848	2	0
679	Q8TC07	NDsPTQIPVSSDVcR	1754.7466	27.8046	2	0
680	Q8TCJ2	ENPPVEDssDEDDKR	1891.6674	10.2222	2	1
		ENPPVEDssDEDDKR NQGNLYDK	2824.1036	20.0162	3	2
681	Q8TDB6	AAsPPLKG SVSSEASELDKK	2081.0226	36.9811	3	2
682	Q8TDD1-2	QKIDDRDsDEEGASDR	1915.7756	10.6535	3	2
		KLGPGRPLPTFPTSEcTsDVEPDTR	2837.3282	51.0874	3	1
		LGPGRLPLTFPTSEcTsDVEPDTR	2709.2366	46.7501	3	0

683	Q8TDM6	VGPCSSPPAAR IDYLLPGPGPAHSQPSSKR	1178.5076 2110.0611	10.646 32.6897	2	0 1
684	Q8TEA8	SAsSGAEGDVSSEREP	1644.6528	14.4285	2	1
685	Q8TEK3	ARsTPsPVLQPR	1468.6722	17.1638	3	1
686	Q8TEM1	KAsPPSGLWSPAYASH	1735.7955	37.7188	3	1
687	Q8TEW0	RSsDPALIGLSTSVDSDNSNFSSEEPSR	2805.2768	48.0987	3	1
688	Q8TF01	SKFDSDEEEEDtENVEAASSGK QRsPIALPVKQEPPQIDAVK	2482.9733 2294.2436	29.0128 45.0104	3	1 2
689	Q8W4M7	VtLEGANRNLNK	1408.6973	34.1095	3	1
690	Q8WUA2	INHTVILDDPFDDPPDPLLIPDRsPEPTREQLDSGR INHTVILDDPFDDPPDPLLIPDRsPEPTR	4062.9691 3277.6029	65.9252 77.0208	4	2 1
691	Q8WUB8	NKGtSDSSSGNVSEGESPDSQEDSFQGR YLPLNTALYEPLDPELPALDsDGDsDDGEDGRGDEK	3065.2351 4148.7546	21.2961 74.7719	3	1 1
692	Q8WUZ0-2	GTEPSPGGTPQPsRPVsPAGPPEGVPPEAQPPR VENSPQVDGsPPGLEGLGGIGEK	3419.5473 2429.1815	34.4946 65.0132	4	0 0
693	Q8WVC0	KLtSDEEGEPESGKR KLTsDEEGEPESGK KYVIlsDEEEEDDD SESARGsDsEDEVLR	1612.7294 1456.6263 1665.6144 1796.6753	11.3385 10.5154 25.0147 19.8977	3	2 1 1 1
694	Q8WVM8	VNLEESSGVEnSAGARPk	2020.9405	25.1461	3	0
695	Q8WWI1	RGEsLDNLDSPr VTTEIQLPsQSPVEEQSPASLSSLR SHsPSASQSGSQLR EVAATEEDVTRLPSPtSPFSSLSDQAATSK SAsVNKEPVSLPGIMR	1438.6369 2763.3537 1508.6552 3329.5539 1764.8712	20.9644 53.4617 10.2932 51.8151 43.7553	2	1 0 0 1 1
696	Q8WWM7-3	RPPGGTSPNGGLGPLATsAAPPGPAAASPcLGPVAAAGSGLR TLsSPSNRPSGETSVPPPAVGR LQPSsSPENSLDPFPPR	4104.0768 2370.1642 1947.8948	55.0485 26.6233 46.0201	4	0 0 0
697	Q8WWQ0	VLsDsEDEEKDADVPGTSTR	2309.9185	27.3967	2	1

		KVLsDsEDEEKDADVPGTSTR	2438.009	26.705	3	2
		TAFYNEDDsEEEQR	1812.6635	24.2715	2	0
		RTAFYNEDDsEEEQR	1968.7687	28.2452	3	1
698	Q8WWW8-2	KFsLDYLALDFNSASPAPMQQK	2551.1951	51.0372	3	1
699	Q8WWY3	SSGtAssVAFTPLQGLEIVNPQAAEK	2762.2925	71.8421	3	0
		SsGTAsSVAFTPLQGLEIVNPQAAEKK	2890.3859	64.4609	3	1
700	Q8WX92	KPsPAQAAETPALELPLPSVPAPAPL	2642.4054	72.1761	3	0
701	Q8WX93	sRsRDsGDENEPIQER	2114.7742	11.4702	3	2
		sPSGHPHVR	1053.4657	10.2113	3	0
		SRDsGDENEPIQER	1711.6979	10.9078	2	1
		IAsDEEIQGTK	1270.5647	15.0509	2	0
702	Q8WXI9	GRLTPsPDIIVLsDNEASSPR	2384.0964	48.8973	3	1
703	Q8WY36	TADGRVsPAGGTLDDKPK	1864.8882	14.0483	3	1
704	Q8WYP5-2	STPLASPSPSPGRsPQR	1801.8609	14.3388	3	1
		SLPSSSQLKGsPQAISR	1822.9092	22.9831	3	1
705	Q921K9	VDSSTNSSPSPQQSESLsPAHTSDFR	2828.2249	27.6355	3	0
706	Q92466	SRsPLELEPEAK	1435.694	21.1795	3	1
707	Q92504	EKQssEEEEKETR	1768.6728	9.2431	3	2
708	Q92508	sGSEEAVTDPGER	1413.559	11.1736	2	0
709	Q92522	AGGSAALsPSKK	1153.5633	9.5298	2	1
		AGGSAALsPSK	1025.4704	9.4464	2	0
710	Q92530	ANVSsPHREFPPATAR	1816.8649	16.5825	3	1
711	Q92538	AASSSsPGsPVASSPSR	1691.6746	10.0036	2	0
		ADAPDAGAQSDsELPSYHQNDVSLDR	2838.2043	36.1069	3	0
		GYTsDSEVYTDHGRPDK	1948.8149	21.3822	3	0
		TPGHPPPPEIPSELGAcDFEKPEsPR	2921.3378	51.3052	4	0
712	Q92560	SANPTRPsSPTSHISK	1845.8933	23	3	0
		SRVPVRPPQQYsDDEDDYEDDEDDVQNTNSALR	4076.7094	49.903	4	1
713	Q92597	TAsGSSVTSLDGTR	1418.6193	18.2862	2	0

		SHtSEGAHLDITPNSGAAGNSAGPK	2456.0985	22.6754	3	0
		SRsHTsEGAHLDITPNSGAAGNSAGPK	2779.1984	32.7975	4	1
		sRTAsGSSVTSLDGTR	1741.7214	20.2041	3	1
714	Q92598-4	IEsPKLER	1051.5218	13.4563	3	1
715	Q92613	NSSTETDQQPHsPDSSSVHSIR	2563.0794	22.1148	3	0
716	Q92614	SLAPDRsDDEHDPLDNTSRPR	2473.0883	24.7491	4	1
		YSHSYLsDsDTEAK	1762.632	23.8942	2	0
717	Q92615	EPSVPAScAVsATYERsPSAHLPPDK	3125.3613	38.6	3	1
718	Q92685	SGsAAQAEGLcK	1258.5193	10.79	2	0
719	Q92688	KREtDDEGEDD	1388.4904	9.1309	2	2
720	Q92733	QITQEEDDsDEEVAPENFFSLPEK	2876.226	63.4897	3	0
		IAAPELHKGDsDsEEDEPTK	2327.9364	20.1483	3	1
721	Q92766-2	AATTATPAATTsPK	1368.6425	9.6773	2	0
		IHEKDPPNSATATAPPsPLK	2053.9997	21.4636	3	1
722	Q92882	TLsNAEDYLDDEDsD	1861.6058	56.4413	2	0
723	Q92890-1	FVAFSGEGQsLR	1377.6307	39.3072	2	0
724	Q92922	KHsPsPPPPTPTESR	1774.762	10.404	3	1
		RKHsPsPPPPTPTESR	1930.8521	14.1451	3	2
		NEEPVRsPERR	1448.6684	17.9145	3	2
725	Q92974	LQDSSDPDTGSEEEGSSRLsPPHsPR	2927.1888	21.8343	3	1
		QELGsPEER	1124.4677	10.5946	2	0
726	Q93084-5	sAAEMVLsDDNFAsIVAAVEGRAIYSNmK	3444.4402	60.295	3	1
727	Q95604	GGScSQAASSNSAQGsDEsLIAcKA	2602.9861	26.5925	3	1
728	Q969G5	APEPLGPADQSELGPEQLEAEVGESSDEEPVESR	3737.5869	62.1623	3	0
729	Q96A49	TQEDEEEIsTSPGVSEFVSDAFDAcNLNQEDLR	3811.6054	74.7809	3	0
		EQDLPLAEAVRPKtPPVVIK	2280.2431	43.7861	4	1
730	Q96AQ6	ALQAPHsPSKTDGK	1516.7257	16.6481	3	1
731	Q96AT1	IQPQPPDEDGDHsDKEDEQPQVVVLK	3022.3864	31.8924	4	1
		RIQPQPPDEDGDHsDKEDEQPQVVVLK	3178.4938	33.1204	4	2

732	Q96AY2-2	LLSsEsEDEEEFIPLAQR	2251.9559	64.8889	2	0
733	Q96AY4	sQPSPVTVKPKPPAR	1668.8902	24.1701	3	0
734	Q96B23	RDSsESQLASTESDKPTTGR	2231.9927	14.4894	3	1
735	Q96B36-3	AATAARPPAPPPAPQPPsPTPsPPRPTLAR	3124.5747	34.5339	3	0
		TEARSsDEENGPPSSPDLDLDR	2238.9248	22.091	3	1
		SsDEENGPPsSPDLDLDR	1861.6617	20.3102	2	0
736	Q96BZ8	HQNnLPELEAAEAGAPGSGPVDLFR	2642.2379	60.9291	3	0
737	Q96C19	RADLNQGIGEPQsPSR	1804.8308	24.6273	3	1
		RADLNQGIGEPQsPSRR	1960.9482	30.9037	3	2
738	Q96C57	EAAVSASDILQESAIHSPGtVEK	2419.1545	43.6496	3	0
739	Q96CP2	ASQEPPsPKPGTEVIPAAPR	2012.0008	25.5679	3	0
740	Q96D46	DSAIPVEsDtDDEGAPR	1933.7244	27.6684	2	0
741	Q96E09	SNsAPLIHGLSDTSPVFQAEAPSAR	2632.2625	51.3201	3	0
		RIDFIPVsPAPsPTR	1812.8564	47.2309	3	1
742	Q96EB6	RDGPGLERsPGEPPGAAPER	2084.9632	18.8601	3	2
		sPGEPPGAAPER	1204.5031	11.0025	2	0
743	Q96EV2	DIKEEsDEEEEDEESGR	2219.8104	12.7809	2	1
		TNsGGGDGPHISSK	1393.5783	12.4098	2	0
744	Q96EV8	DISEGGEsPVVQsDEEEVQVDTALATSHTDR	3460.459	51.7429	3	0
745	Q96F63	TPTHQPPKPGsPGRPAcPLSNLLLQSYEER	3407.6776	76.0387	4	0
746	Q96F86	SQDVAVsPQQQQcSK	1769.7581	10.4197	2	0
747	Q96FS4	SGsDAGEARPPTPASPR	1732.7776	16.6908	3	0
748	Q96G46	QENcGAQQVPAGPGTsTPPsSPVR	2582.0885	23.8629	3	0
749	Q96G74	AsPPPQGPLPGPPGALHR	1825.9262	30.769	3	0
750	Q96GF1	EKtPPRPQGQRPEPENR	2096.0221	11.8307	4	1
751	Q96GX9	DISGPsPSKK	1095.5119	9.4967	2	1
752	Q96HH9-3	SVcGHLENtSVGNSPNPSSAENSFR	2727.1562	33.8303	3	0
		ADRPSSLPLDFNDEFsDLDGVVQQR	2900.3311	69.3276	3	0
753	Q96HR8	NDQEPPPEALDFsDDEKEK	2282.9531	33.2666	3	1

		NDQEPPEALDFsDDEKEKEAK	2611.1246	35.4586	3	2
754	Q96I25	RPDPDsDEDEDYERER	2102.8092	15.5805	3	1
		RPDPDsDEDEDYER	1817.657	14.3588	3	0
		AAIPPPVYEEQDRPRsPTGPSNSFLANMGTVAHK	3771.8058	61.1354	4	1
755	Q96JC9	TsPLKDNPsPEPQLDDIKR	2310.0622	29.5178	3	2
756	Q96JM3	KPsPSESPEPWKPFPAVSPEPR	2526.223	43.0471	3	0
		KTsPASLDFPESQK	1614.7536	24.5619	2	1
		KTAPTLsPEHWK	1474.7209	26.7533	3	1
		KPGPSGPSEsPK	1247.57	9.4783	2	0
		LAPVPsPEPQKAPAVsPESVK	2314.1316	32.3587	3	0
		KPGPPLsPEIRsPAGsPELR	2325.0547	37.3411	3	1
		RPAPAVSPGsWKPGPPGsPRPWK	2569.2394	49.5595	4	0
		GQEsslDQEVDVlVESIDFSK	2373.9183	48.0781	3	0
		TTsPEPR	867.36321	7.948	2	0
757	Q96JN0-3	EDNPPEPSKEITSHEEGGDVsPR	2675.1117	31.8563	3	1
758	Q96JP5	RSsPSARPPDVPGQQPQAAK	2154.054	15.6155	3	1
		sSPSARPPDVPGQQPQAAK	1997.9509	19.9347	3	0
		SPsPVQGK	879.40007	7.0721	2	0
759	Q96K21	LPDsDDDEDEETAIQR	1927.7488	26.9842	2	0
760	Q96K76	ELEQHIQtSDPENFQSEER	2396.0068	30.4475	3	0
761	Q96KC8	EDAEVAAEEEQEGDSGEQETGAtDARPR	3113.2687	28.0678	3	0
762	Q96KR1	RDsDGVDGF EAEGK	1561.6213	20.7805	2	1
		RRDsDGVDGF EAEGK	1717.7254	23.2059	3	2
763	Q96N67	sPSGSAFGSQENLR	1516.6556	25.7594	2	0
		SRsLsNSNPDISGTPTSPDDEVR	2591.0876	29.9867	3	1
764	Q96NB3	EEENADsDDEGELQDLLSQDWR	2673.0652	73.3424	3	0
		ELQKKEEENADsDDEGELQDLLSQDWR	3299.4486	77.3649	4	2
765	Q96NY9	TSGGDHAPDsPSGENSPAPQGR	2200.9004	13.2756	3	0
766	Q96PC5	LTDPhRAPSDTGsLSPPWDQDRR	2684.2392	36.6641	4	2

767	Q96PK6	QPtPPFFGR	1126.5131	54.0182	2	0
768	Q96QD8	FSISPDEDSSsYssNSDFNYSYPTK	3064.0962	66.8466	3	0
769	Q96QR8	DSLGDFIEHYAQLGPSsPEQLAAGAEEGGGPR	3335.5166	74.5622	3	0
770	Q96RE7	VSSPScDSQGLHAAEAPSSEPQsPVAQTsGWPAcSTPLPLVSR	4651.0524	58.6039	4	0
771	Q96RK0	FAELPEFRPEEVLPSPtLQSLAtSPR	3071.4778	72.5782	3	0
772	Q96RU3	TVsDNsLSNSRGEGKPDLK	2163.9345	21.3202	3	1
		TVsDNSLSNSR	1259.5259	12.7215	2	0
773	Q96S55	AKGPsPPGAK	989.48363	9.4907	2	1
774	Q96S66	ESSTESSQSAsPVSGQDTSGNTEGsPAAEK	3033.2959	12.8874	3	0
		FQTGNKsPEVLR	1455.7011	24.889	3	1
775	Q96S82	DMPGGFLFEGLsDDEDDFHPNTR	2691.0811	72.5236	3	0
776	Q96SB4-3	GSAPHSESDLPEQEEEILGsDDDEQEDPNDYcK	3814.4762	45.8709	3	0
		RPNKQEEsEsPVERPLKENPPNK	2862.3307	37.5379	4	2
777	Q96ST2	TIAAsDsEEEAGKELSDKK	2096.8689	20.5172	3	2
		TIAAsDsEEEAGKELSDK	1968.7835	24.2306	2	1
		EAEDsDsDDNIKR	1653.5721	9.5602	2	1
		AAVLsDsEDEEKASAK	1809.7194	14.2435	2	1
		HQAsDsENEELPKPR	1880.7264	10.1577	3	0
		AAVLsDsEDEEKASAKK	1937.8236	12.8657	3	2
		KAAVLsDsEDEEKASAK	1937.8162	12.9904	2	2
		ISDSEsEDPPRHQAsDsENEELPKPR	3189.2457	25.2941	3	1
		HQAsDsENEELPKPR	1896.7604	21.4375	3	0
		EKTIAAsDsEEEAGKELSDK	2225.9157	26.282	3	2
		VVsDADDsDsDAVSDK	1864.5895	11.0578	2	0
		IsDsESEDPPR	1391.4838	11.7354	2	0
		MDsDEDEKEGEEEEK	1749.6113	12.1228	2	1
		MDsDEDEKEGEEEKVAK	2047.8105	19.9285	3	2
		mNsTGGQTPR	1144.4513	7.1941	2	0
778	Q96T23	GRsTDEYsEADEEEEEEGKPSR	2818.036	24.785	3	1

		TFLDKDAQRRLsPIPEEVPK	2263.1528	52.2725	3	2
		LHRIEtDEEEScDNAHGDANQPAR	2844.1815	39.0158	4	1
779	Q96T37	SRSPLDKDtyPPSASVVGASVGGR	2700.236	34.6183	4	2
		HcAPsPDRsPELSSR	1942.7583	13.7156	3	1
		HLDRsPESDRPR	1544.6995	18.2249	4	1
		DRtPPLLRYR	1210.6037	28.0751	3	1
		LLLERPsPIRDR	1544.8405	39.6841	3	1
		SLsPGGAALGYR	1228.5789	32.7647	2	0
780	Q96T58	HGsFHEDEDPIGSPR	1759.7129	24.8009	3	0
		SQsPVHLR	1003.4783	10.9439	2	0
		ESGVVAVsPEKsESPQKEDGLSSQLK	2875.322	31.8244	3	2
		RPQsPGAsPSQAERLPSDSE	2412.043	24.1115	3	1
781	Q96T60	TPESQPDtPPGTPLVSQDEKR	2359.0876	27.9034	3	1
782	Q96T88-2	ERDSELsDTDSGccLGQSESDK	2554.9656	21.4648	3	1
783	Q96TA1	QVVSVVQDEEVGLPFEASPEsPPPAsPDGVTEIR	3721.7172	72.3142	4	0
		AAPEASsPPAsPLQHLLPGK	2128.0027	46.9863	3	0
		GLLAQGLRPEsPPPAGPLLNGAPAGEsPQPK	3176.5558	52.6401	3	0
784	Q96TC7	SQsLPNSLDYTQTSDPGR	2045.8998	35.7823	2	0
		KDsLDLEEAASGASSALEAGGSSGLEVLPLLQQADELHR	4288.0329	79.6993	4	1
785	Q99442	EELEQQtDGDCeEDEEEENDGETPK	3034.0906	22.0691	3	0
786	Q99567	EDVEVAEsPLR	1323.584	23.6092	2	0
787	Q99575	VQAYEEPSVAsSPNGK	1742.7691	22.0171	2	0
788	Q99590	TEELIESPKLESsEGEIQTVD	2682.2849	54.7405	3	1
		FHsPsTTWSPNKDTPQE	2246.9339	25.016	3	1
		AETASQSQRsPISDNSGcDAPGNNSNPSLSVPSSAESEK	3928.7001	31.9542	4	1
789	Q99613	QPLLLsEDEEDTKR	1752.8207	28.7654	2	1
790	Q99685	GAYLLMELAKsQDK	1646.7916	40.9279	3	1
791	Q99733-2	EFITGDVEPTDAESEWHsENEEEK	3016.2096	43.9544	3	0
792	Q99959	RLEIsPDSSPER	1465.6816	27.7577	3	1

793	Q99PM9	QAsESSSRPH	1165.4683	5.3955	2	0
794	Q9BPX3	TLHcEGTEINsDDEQESKEVEETATAK	3130.3234	32.7262	4	1
		TLHcEGTEINsDDEQESK	2171.8546	14.6148	3	0
795	Q9BQA1	KEtPPPLVPPAAR	1452.7657	29.1911	3	1
796	Q9BQG0-2	EIPSATQsPISK	1337.6385	15.843	2	0
		NQKPSQVNGAPGsPTEPAGQK	2172.0155	15.234	3	0
797	Q9BRD0	NSKYEYDPDIspPpR	1760.7687	31.7625	3	1
		HDsPDPsPpR	1264.4426	10.0728	2	0
		ARHDtPDPsPLR	1521.6292	21.6161	3	1
798	Q9BRJ6	ELDEEGsDPPLPGR	1590.6785	28.1673	2	0
799	Q9BRZ2	EEGAQTLEEDRAQtPHEDGGPQPHR	2864.2348	33.6617	4	1
800	Q9BTA9	QGPVSQSATQQPVTAQKQQGHEPVsPR	2937.3926	23.6492	3	1
		SSSQRSPSPGPNHTSNssNASNATVVPQNSSAR	3470.4884	18.5403	4	1
801	Q9BTC0	KPSKYPLcSADAAsTTPPGsPPPPPLPEPPVLK	3749.8502	54.0626	4	1
		RNsVERPAEPVAGAATPSLVEQQK	2614.3234	29.8001	4	1
		SSsPAGETEGDREPQARPGEGTAPLPPPGQK	3180.4815	21.5672	3	1
		QEAIPDLEDsPPVsDSEEQQESAR	2816.1313	42.9958	3	0
802	Q9BTE3	VsPSTSYTSPSR	1261.5458	13.806	2	0
803	Q9BTK6	DLFSLDSEDPSAsPPLR	2022.915	60.4373	2	0
804	Q9BTL3	RPPEsPPIVEEWNSR	1872.8697	44.2995	3	0
805	Q9BTU6	VAAAAGSGPsPPGsPGHDRER	2132.9015	11.5248	3	1
		VAAAAGSGPsPPGsPGHDR	1847.7582	10.9301	2	0
		SSsESYTQSFQSR	1573.6131	24.2652	2	0
806	Q9BU76	RPAEAtSSPtSPERPR	1898.8211	10.4171	2	0
807	Q9BUA3	AEQPsPPNsDSGQDAHPDPDANPDAAR	2916.1111	20.4254	3	0
		VTQQEKTPPPRsPLEAGSDGcEEPk	2914.3424	27.6648	4	1
808	Q9BUH8	DRRPsVDAPVTDVGFRL	1979.9782	54.9374	3	1
809	Q9BUI4	RRsSDEDAAGEPK	1497.6355	20.798	3	2
810	Q9BUL9	QPGYQPPNPHPGPSsPPAAPASK	2359.0885	26.3374	3	0

811	Q9BUQ8	DAsPSKEER		1098.4487	5.4515	2	1
		DRDAsPSKEER		1369.5776	9.4955	3	2
812	Q9BUR4	VFPEPTEsGDEGEELGLPLLSTR		2552.1954	71.8621	3	0
813	Q9BUT9	RAPSTSPSFEGtQETYTVVAHEENVR		2873.288	34.2029	4	1
814	Q9BVC5	KSPSGPVKsPPLsPVGTTPVK		2220.126	31.1962	3	2
815	Q9BVG9	DAGGPRPEsPVPAGR		1542.7126	10.9487	2	0
816	Q9BJJ6	LAESLLALSQQEELADLPKDYLsEsEDEGDNDGER		4151.8041	75.9883	3	1
		EAATQEDPEQLPELEAHGVsEsEGERPVAEEEILLR		4275.9235	59.7013	4	0
817	Q9BW71	KQAREEsEESEAEPVQR		2081.9207	24.2452	3	2
		RLsGssEDEEDSGKGEPTAK		2318.8555	12.1678	3	2
		SLKEsEQEsEEEILAQKK		2264.9976	30.428	3	2
		EEsEESEAEPVQR		1598.6241	13.4683	2	0
818	Q9BW85	LLEDsDsEDEAAPSPLQPALRPNPTAILDEAPPK		3884.8446	62.03	4	0
		RLLEDsDsEDEAAPSPLQPALRPNPTAILDEAPPK		4040.9445	65.0104	4	1
		EANPTPLPGASSLSQLGAYLDsDDsNGsN		3218.2529	83.1189	3	0
819	Q9BWH2	IRKsNQIPTEVR		1520.8009	33.7234	3	2
		sNQIPTEVR		1123.5231	19.931	2	0
820	Q9BWU0	NWEDEDFYDsDDDTFLDR		2376.8616	66.1235	2	0
821	Q9BX95	RNsLTGEEQLAR		1510.7055	26.8901	2	1
822	Q9BXL6	TAsDQEgDEELNR		1710.5915	12.4149	2	0
823	Q9BXP5	HELsPPQKR		1171.5653	11.1588	3	1
		TQLWAsEPGTPLPTSLPSQNPILK		2752.4218	65.7764	3	0
824	Q9BXY0	ALEQQEAESDssDTEEKDDDDDEEDVGKR		3559.3059	18.9924	3	2
825	Q9BY44	SDKsPDLAPTPAPQSTPR		1944.9126	18.8313	3	1
826	Q9BY89	KEEsDEEETASK		1461.5656	9.1585	2	1
		KEEsDEEETASKAER		1817.7405	20.3702	3	2
827	Q9BYE7	LEGGRQDsEDEER		1728.6775	12.7628	3	1
828	Q9BYG3	VsGTLDTPEKTVDSQGPTPVcTPTFLER		3112.4802	50.0424	3	1
829	Q9BZZ5	ASEDTTSGsPPKK		1384.6022	5.6059	2	1

		RASEDTTSGsPPKK	1540.704	13.9602	3	2
830	Q9C086	HHQEEDAGPTQPsPAKPQLK	2275.0653	47.925	4	0
831	Q9C0B5	LSRGDsLKEPTSIAESSR	2012.9742	23.5167	3	2
		LLRQsPPLPGREEPGLGDSGIQSTPGSGHAPR	3472.7206	46.7648	4	2
		GDsLKEPTSIAESSR	1656.7586	27.2305	3	1
832	Q9C0C2	NRsAEEGELAESK	1499.6419	11.9243	2	1
		LDsPPPsPITEASEAAEAAEAGNLAVSSR	2997.3389	74.2258	3	0
		TEAQDLCRAsPEPPGPESSSR	2351.0037	21.0505	3	1
		ASRPVPssDEEVVVEEPQSR	2160.8987	23.9526	2	1
		VVGKPAQLGTQRsQEADVQDWEFR	2824.3659	50.3972	4	1
		VPssDEEVVVEEPQSR	1846.7143	26.3311	2	0
		AsPEPPGPESSSR	1377.5721	12.0636	2	0
		HNGSLsPGLEARDPLEAR	1998.9432	49.221	3	1
833	Q9C0C9	LIHGEdsDsEGEEEGRGSSGcSEAGGAGHEEGR	3504.3119	23.4641	4	1
		LIHGEdsDsEGEEEGR	1918.6772	13.8929	2	0
834	Q9DC33-2	DSNAPKsPLTGYVR	1584.7503	29.0376	3	1
835	Q9GZP8	LsPHKVQGR	1101.562	10.2078	3	1
836	Q9GZR7	SPGKAEEsDALPDDTVIESEALPSDIAAEAR	3334.5234	57.4158	3	1
837	Q9GZV5	SHSSPAsLQLGTGAGAAGSPAQQHAHLR	2774.3251	46.8775	4	0
838	Q9GZY8-2	NDsLVTPSPQQAR	1492.6777	18.8463	2	0
839	Q9H0B6	ASsLNFLNK	1073.5097	33.2943	2	0
840	Q9H0D6	NsPGSQVASNPR	1293.5623	9.7103	2	0
		RKAEDsDsEPEPEDNVR	2132.822	13.5427	3	2
		AEDsDsEPEPEDNVR	1848.6262	14.7478	2	0
		KAEDsDsEPEPEDNVR	1976.7201	11.8831	2	1
841	Q9H0G5	KTQQLHPVLQKPsVFGNDSDDDETSVSESLQR	3779.7672	46.1801	4	1
		VEENPDADsDFDAKssADDEIEETR	3024.0805	38.5341	3	1
842	Q9H1B7	KAsPEPPDSAEGALK	1576.7304	15.4952	2	1
		RNSssPVsPASVPGQR	1865.7442	15.6591	2	1

843	Q9H1C4	YLEEDNsDEsDAEGEHGDGAEEEAPPAGPRPGPEPAGLGR	4263.7204	38.9934	4	0
844	Q9H1E3	NSQEDsEDsEDKDVK	1884.647	9.105	2	1
		LKATVTPsPVKGK	1405.7865	13.7701	3	2
		KVVDYSQFQEsDDADEDYGR	2445.9839	35.7202	2	1
		TPSPKEEDEEPEsPPEKK	2132.9368	10.6473	3	2
		VVDYSQFQEsDDADEDYGR	2317.8895	38.9813	2	0
		ATVTPsPVKGK	1164.6062	10.0913	3	1
		DDSHsAEDsEDEKEDHK	2132.7026	9.2247	3	1
		DDSHSAEDsEDEKEDHKNVR	2421.9433	13.1682	4	2
		SGKNSQEDsEDSEDKDVK	2076.8289	14.4096	3	2
		KDDSHSAEDsEDEKEDHK	2180.8351	44.7962	4	2
		EEDEEPEsPPEKK	1622.6541	12.2944	2	1
		ATVTPsPVK	979.49248	12.0371	2	0
845	Q9H2G4	RLSssESPQRDPooooooooPLL	2677.3101	39.8561	3	2
846	Q9H2H9	RsLTNSHLEK	1264.6079	13.3679	3	1
		sLTNsHLEK	1188.4742	10.8582	2	0
		sLTNsHLEKK	1316.5718	13.5132	2	1
847	Q9JM15	sLTNSHLEK	1108.5079	15.2726	2	0
		RSLtNSHLEK	1264.606	26.1199	3	1
848	Q9H2Y7	LsFASETPLEKEPHSPADQPEQQAESTLTSATE	3791.7396	46.4964	4	1
		AAHVPENsDTEQDVLTVKPVR	2385.1357	32.1355	3	0
849	Q9H307	RGFsDSGGGPPAK	1312.5759	10.9499	2	1
		QEsdPEDDDVKKPALQSSVVATSK	2653.235	23.8616	3	1
		ESRQEsdPEDDDVKKPALQSSVVATSK	3025.4242	24.1031	4	2
		sIsESSR	925.31023	5.0599	2	0
		GFsDSGGGPPAK	1156.4672	13.1603	2	0
850	Q9H330	DAPSLRsSPGPAPR	1487.7045	17.8871	3	1
		sSPGPAPR	848.36864	7.5251	2	0
851	Q9H3N1	KVEEEQEADEEDVsEEEAEsk	2517.9888	20.3036	2	1

		VEEEQEADEEDVsEEEAEK	2389.9024	23.0638	2	0
852	Q9H3P2	EASRPPEEPSAPsPTLPAQFK	2316.108	37.7301	3	0
853	Q9H3Q1	AGPDPLSLPSHALEDEGWAAAAPSPGsAR	2907.3519	56.402	3	0
		QLVSsSVHSK	1151.5516	13.1216	2	0
854	Q9H3Z4	SLsTSGESLYHVLGLDK	1885.9035	62.2996	3	0
		SLStSGESLYHVLGLDKNATSDDIKK	2858.4018	54.1884	4	2
855	Q9H4A3-7	KEKPELSEPSHLNGPSsDPEAAFLSR	2902.3866	45.835	4	1
		DVDDGSGsPHsPHQLSSK	2009.774	13.4219	3	0
856	Q9H4G0	HQAsINELKR	1275.6255	15.6328	3	1
		SLDGAEFSRPASVsENHDAGPDGDKRDEDGESGGQR	3824.6245	47.3049	5	2
857	Q9H4L4	NHLsPQQGGATPQVPSPccR	2270.9864	25.636	3	0
858	Q9H4L5	LHsSNPNLSTLDFGEEK	1967.8897	38.8819	3	0
859	Q9H4L7-2	KLSsssEPYEEDEFNDDQSIKK	2815.0774	36.7523	3	2
860	Q9H501	ALAEEAsEEELPsDVDLNDPYFAEEVK	3169.3271	69.5354	3	0
		GNIEtSsEDEDdTADLFPEEsGFEHAWR	3423.2549	76.2676	3	0
861	Q9H694	SNsREHLGGGSESDNWR	1967.7995	21.1433	3	1
862	Q9H6F5	LQQGAGLESPQQPEPGAAAsPQRQQDLHLESPQR	3714.7953	32.8234	4	1
		LQQGAGLEsPQQPEPGAAAsPQR	2463.0734	25.5011	3	0
		QQDLHLESPQRQPEySPEsPR	2681.159	30.3929	3	1
		RALVEFESNPEETREPGePPSVQR	2791.3307	37.4271	4	2
		KGsSSQAPASK	1127.5124	5.0852	2	1
		LGGLRPEsPESLTSVSR	1864.9218	35.892	2	0
		RLGGLRPEsPESLTSVSR	2021.0348	36.4217	3	1
		AGLGsPERPPKTsPGsPR	1950.8906	15.5015	3	1
		ALVEFESNPEETREPGePPSVQR	2635.2239	39.0358	3	1
		QPEYSPEsPR	1269.5209	13.0635	2	0
		AGLGsPERPPK	1188.5827	11.5971	2	0
		LQQGAGLESPQQPEPGAAAsPQRQQDLHLEsPQRQPEySPESP	4965.2742	41.566	5	2
863	Q9H6S0	KSSADtEFSDEcTTAER	2013.7859	23.7705	3	1

864	Q9H6S3-3	HSPTSEPTPPGDALPPVsPHTHR NSQKHSPTsEPTPPGDALPPVSSPHTHR	2581.203 3038.4376	27.7012 54.2139	4 5	0 1
865	Q9H6T3	ILDELDKDDSTHESLsQEsEsEEDGIHVDSQK	3854.5368	42.9166	4	1
866	Q9H6X2	EVPPPPAEEsEEEDDDGLPK	2258.938	31.9226	2	0
867	Q9H6Y2	TcEERPAEDGsDEEDPDSMEAPTR	2803.0391	24.8274	3	0
868	Q9H6Z4	VLsPPKLNEVSSDANR SAGGssPEGGEDsDREDGNYcPPVKR ERTSsLTQFPPSQSEER	1805.894 2963.0603 2058.9223	32.8574 20.3476 37.7966	3 3 3	1 2 1
869	Q9H788	TLsSSAQEDIIR	1399.6585	31.9075	2	0
870	Q9H7L9	RPAAsPsSPEHLPATPAESPAQR	2443.0832	23.1034	3	0
871	Q9H7N4	QRsPsPAPAPAPAAAAGPPTR sAsPPPATSSSSSR FDIYDPFHPTDEAySPPPapeQK DRESRsPFLKPDER	2127.9836 1565.5927 2741.1956 1811.8574	15.603 5.1868 59.3209 24.7377	3 2 3 4	1 0 0 2
872	Q9H8G2	sTDSSSVSGSLQQETK	1720.7352	20.7405	2	0
873	Q9H9J4	HQQDsDLsAAcsDADLHR DSALAEAPEGLsPAPPAR	2265.7829 1828.8549	26.0603 36.0033	3 2	0 0
874	Q9H9L4	ILDEDsWsDGEQEPIVDQTWR	2779.1363	67.443	3	0
875	Q9HAF1-3	EPGsGTEsDTSPDFHNQENEPSQEDPEDLDGSVQGVKPQK	4470.8214	38.9315	4	0
876	Q9HBL0	AQFSVAGVHTVPGsPQAR HPGAHQGNLASGLHSNAIASPGSPsLGR EATSDPSRtPEEEPLNLEGLVAHR SQsFSEAEPQLPPAPVR VATTPGsPSLGR	1888.9215 2770.3122 2727.2782 1919.8951 1222.5842	31.5747 56.5016 53.2873 41.3619 16.1933	3 4 4 2 2	0 0 1 0 0
877	Q9HC35	AsPSPQPSSQPLQIHR	1809.8772	26.031	3	0
878	Q9HC52	RQDsDLVQcGVTSPSSAEATGK VDDKPSsPGDSSKK	2373.0522 1526.6768	25.098 12.2685	3 3	1 1
879	Q9HCG8	RNsFSENEK LtQVsPRGINAIFER	1190.4889 1860.8701	13.9419 70.0239	2 3	1 1

880	Q9HCN4-5	GTLDEEDEEADsDTDDIDHR	2356.859	28.949	3	0
881	Q9HDC5	ENPEEKVPEKPPtPKEsPHFYR	2795.2704	30.7715	4	2
		ENPEEKVPEKPPtPK	1798.8688	26.8728	3	1
882	Q9JHS9	LDQIPAANLDADDPLtDEEDEDFEEEsDDDDTAALLAELEK	4694.9311	83.9979	3	0
883	Q9JM15	SGLELTELQNmtVPEDDNVSNDSNDFtEVENGQINSK	4258.779	74.0137	4	0
884	Q9NP74	SEHQNSSPtcQEDEEDVR	2226.8344	10.9289	3	0
885	Q9NQ55-3	LQDISELLATGAGLsEsEAEPDGDHNITELPQAVAGR	3963.7941	73.172	4	0
		VGGsDEEASGIPSR	1440.6078	15.16	2	0
		ARVGGsDEEASGIPSR	1667.744	21.4731	3	1
886	Q9NQG5	TFQQIQEEEDDYPGSySPQDPSAGPLLTEELIK	3919.7263	71.8152	3	0
887	Q9NQS7	TDsQSVRHSPtAPSSPSPQVLAQK	2597.2915	32.5715	3	1
888	Q9NQW6	ARQPLSEASNQQPLsGGEEK	2206.027	25.3253	3	1
		TQsLPVTEK	1082.5223	15.2375	2	0
889	Q9NQX5	APGsPAAPR	903.41142	9.2107	2	0
890	Q9NQZ2	TSAAAaAVTDLsDDsDFDEKAK	2476.9645	36.2941	3	1
		TSAAAaAVTDLsDDsDFDEK	2277.8218	42.4025	2	0
		AGPTLTDENDDGLPPSPGDTsYQDQVDDFHEAR	3972.6837	57.6553	3	0
891	Q9NR19-2	SWsPPPEVSR	1221.5378	29.9237	2	0
892	Q9NR30	NEEPsEEEIDAPKPK	1791.7769	15.6791	2	0
		KKEEPSQNDIsPK	1579.7406	12.9966	3	2
		VTKNEEPsEEEIDAPKPK	2119.9922	16.296	3	1
893	Q9NRF8	LSSSDRYsDAsDDSFSEPR	2280.8392	30.5411	3	1
894	Q9NRG0	EEKREEDEENDNDNEsDHDEADS	2829.9794	20.5354	3	2
		REEDEENDNDNEsDHDEADS	2443.8052	12.7381	2	1
895	Q9NRG9	FsPVLGR	855.41545	26.9468	2	0
896	Q9NRL2	KRQsPEPSPVTLGR	1631.8312	21.5872	3	2
897	Q9NS91	NDLQDTEIsPR	1367.596	22.2924	2	0
898	Q9NSU2-1	ASsPSEHGPR	1104.4494	8.9232	2	0
899	Q9NTI5	AEsPESSAIESTQSTPQK	1956.8525	20.0698	2	0

		GHTAsESDEQQWPEEKR	2093.8689	31.9864	3	1
900	Q9NTJ3	REEGPPPPSPDGAsSDAEPEPPSGR	2595.1155	21.2748	3	1
		TEsPATAAETASEELDNR	1971.8251	43.7331	3	0
		RREEGPPPsPDGAssDAEPEPPSGR	2911.1462	22.8308	3	2
		EEGPPPPSPDGAsSDAEPEPPSGR	2439.0146	22.5481	3	0
901	Q9NUQ3	NLVSPAYcTQE _s REEIPGGEAR	2543.1445	34.7572	3	1
902	Q9NV58	HNsGSSSVDDGSATR	1556.5948	11.6684	2	0
903	Q9NVD7	SPTPKsPPSR	1133.538	9.5577	3	1
		SPSVPKsPTPKsPPSR	1808.8436	11.4155	3	2
904	Q9NVM6	QAQAQEsEEEEESR	1729.6602	10.58	2	0
905	Q9NVU0	EREAANEAGDssQDEAEDDVK	2424.878	15.5303	3	1
906	Q9NWB6	ASsPPDRIDIFGR	1510.7086	40.4079	3	1
907	Q9NWH9	DGQDAIAQsPEKESK	1682.7332	10.482	2	1
908	Q9NWT1	ESLPPAAEPsPVSK	1488.7024	22.2622	2	0
909	Q9NWW5-2	HGsVSADEAAR	1179.4793	12.5554	2	0
910	Q9NWZ5	ADADPSPTsPPTAR	1462.6243	14.8361	2	0
911	Q9NX40	RsSPPGHYYQK	1399.6237	13.6298	3	1
912	Q9NX63	SQRYsGAYGASVSDEELK	2026.8916	30.0232	3	1
913	Q9NXG2	FTDKDQQPsGsEGEDDDAEAAALKK	2741.0945	23.2509	3	2
914	Q9NXV6	GISsSNEGVEEPSK	1499.6292	15.2119	2	0
915	Q9NY27	EANLQQNEEKNHSDSSTSESEVSSVsPLK	3240.4315	25.399	4	1
916	Q9NY61	YLVDGTPKNAGsEEIssEDDELVEEK	3093.2431	47.198	3	0
917	Q9NYF8	NTPSQHSHSIQHsPER	1921.8405	13.5689	4	0
		QKFNDsEGDDTEETEDYR	2257.8512	21.127	3	1
		LKDLDYsPPLHK	1652.8132	44.073	3	1
		IDIsPSTLR	1081.5357	34.5715	2	0
		ySPSQNSPIHHIPSRR	1955.9334	27.389	4	1
		RIDIsPSTLRK	1365.7324	27.2301	3	2
		DLFDYsPPLHK	1411.638	46.146	2	0

		AEGEWEDQEALDYFsDKESGK	2513.0152	49.3138	3	1
		ETQsPEQVKSEK	1469.6596	9.4194	3	1
		FNDsEGDDTEETEDYR	2001.6911	23.5579	2	0
		KAEGEPQEEsPLK	1521.6885	11.4491	2	1
		KAEGEPQEEsPLKS	1736.8124	11.6962	2	2
		STFREEsPLRIK	1542.7773	27.8147	3	2
		ETQsPEQVK	1125.4859	6.6662	2	0
		RIDIsPSTLR	1237.6398	30.8654	2	1
		KETQsPEQVK	1253.5822	11.4411	2	1
		KETQsPEQVKSEK	1597.7521	14.964	3	2
		YsPsQNSPIHHIPSR	1879.7955	26.444	3	0
		GRAEGEWEDQEALDYFSDKEsGK	2726.1469	59.7091	3	2
		QKsPEIHR	1074.5123	18.4565	3	1
		EKSTFREEsPLR	1558.7384	34.144	3	2
		AEGEPQEEsPLKS	1608.7171	15.1354	2	1
918	Q9NYV4	HSsIsPVRLPLNSSLGAELSR	2380.1627	51.7871	3	1
		HLLTDLPLPPELPGGDLsPPDSPEPK	2811.41	66.3202	3	0
		SssPFLSKR	1168.4832	16.6879	2	1
		ESKGsPVFLPR	1296.6426	24.6481	2	1
		sVsPYSR	955.33617	10.0309	2	0
919	Q9NZ63	VGDTEKPEPERsPPNR	1887.8681	10.4795	3	1
		RRGDsEsEEDEQDSEEVR	2311.8446	12.8534	3	2
		RGDsEsEEDEQDSEEVR	2155.7444	13.4382	2	1
920	Q9NZT2	KVEEGsPGDPDHEASTQGR	2204.9183	10.7209	3	1
		SQGDEAGGHGEDRPEPLsPK	2142.9199	15.0763	3	0
921	Q9P0K8	HPPDDDLSQDSPEQEASKsPR	2415.0205	30.0643	3	1
922	Q9P1Y6	EAsPAPLAQGEPEGREDLPTR	2171.0215	32.323	3	1
923	Q9P206-2	DQsPPPsPPPSYHPPPPTK	2279.998	23.9955	3	0
924	Q9P246-2	HTscSSAGNDSKPVQEAPSVAR	2365.0429	23.2991	3	0

925	Q9P275-2	AVsPAPQSSSR		1166.5247	9.0864	2	0
926	Q9P2E9	NTDVAQsPEAPKQEAPAK		1960.9145	13.7731	3	1
		SHVEDGDIAGAPASSPEAPPAEQDPVQLK		2992.3778	40.3184	3	0
927	Q9P2I0	EADIDssDEsDIEEDIDQPSAHK		2784.9893	47.5027	2	0
928	Q9P2K8	HERPAGPGtPPPDSGPLAK		1960.938	35.8165	3	0
929	Q9P2P6	QVGEAAAGRGSLEWLDDGDLAsR		2637.243	17.5712	3	1
930	Q9P2R6	NYAEsDHsEDEDNDNNsATAEESTKK		3060.102	15.1443	3	1
931	Q9UBB9	KGAAEEAELEDsDDEEKPVKQDDFPK		2999.3212	44.6672	4	2
		GAAEEAELEDsDDEEKPVKQDDFPK		2871.2327	36.5655	3	1
932	Q9UBC2-2	STPSHGSVSSLNSTGSLsPK		2009.9229	25.4005	3	0
933	Q9UBF8-2	sVENLPEcGITHEQR		1848.8023	29.3177	3	0
		tASNPKVENEDEPVR		1764.7872	16.0104	2	1
934	Q9UBM7	AKsLDGVTNDR		1255.5771	11.8732	2	1
935	Q9UDY2-7	RAASsDQLRDNsPPPAFKPEPPK		2665.2348	28.2444	4	2
		KVQVAALQAsPPLDQDDR		2031.0066	32.3828	3	1
		DNsPPPAFKPEPPK		1600.7463	22.0778	3	0
		DSQQTLINIPSLNDsDsEIEDISEIESNR		3421.4857	78.8104	3	0
		SRsWEDsPER		1408.4963	13.8757	2	1
		ERPsSREDTPSR		1496.6544	10.1256	3	1
		GRsIDQDYER		1318.5478	19.75	2	1
		SSEPVQHEESIRKPsPEPR		2269.068	32.6405	4	1
		sIDQDYER		1105.4241	15.7718	2	0
936	Q9UFC0	AcASPAsAQVEGSPVAGSDGSQPAVK		2437.0863	24.1802	3	0
		ANsPEKPPEAGAAHKPR		1836.8853	11.6183	4	0
		RPDDVPLSLsPSKR		1646.837	27.7832	3	1
937	Q9UGP4	QLsLSSSR		957.44243	16.0654	2	0
938	Q9UGU0	LNAAsPAAR		879.40953	9.3151	2	0
		AGsSPAQGAQNEPPR		1546.6692	10.801	2	0
939	Q9UHB6-4	LRsPPEALVQGR		1402.7219	23.1408	3	1

		KIsENSYSLDDLEIGPGQLSSSTFDSEK	3126.4127	60.7757	3	1
		SEVQQPVHPKPLsPDSR	1980.96	18.346	3	0
		ETPHsPGVEDAPIAK	1627.7419	18.0493	2	0
		KIsENSYSLDDLEIGPGQLSSSTFDSEKNESR	3612.6496	55.395	4	2
		ASsLSESSPPK	1169.5127	11.5802	2	0
		SKEGHSLEmENENLVENGADsDEDDNSFLK	3448.4337	57.8696	4	1
		TVsPPIR	849.42552	16.0849	2	0
940	Q9UHB7	sSSPGKPQAVSSLNSSHRSR	1992.9232	13.2508	3	0
		NSYNNSQAPsPGLGSK	1700.7342	19.2314	2	0
941	Q9UHD8	HVDLSQRsPK	1333.6314	11.7134	3	1
		sFEVEEVETPNSTPPR	1897.8362	39.2262	2	0
942	Q9UHI6	SYLEGsSDNQLKDSESTPVDDR	2522.0791	31.0276	3	1
943	Q9UHR4	LLEENETEAVTVPTPsPTPVR	2359.1451	43.0104	3	0
944	Q9UHR5	NVLSSLAVYAEDsEPEsDGEAGIEAVGSAAEEK	3483.4676	76.2685	3	0
945	Q9UI08-2	SNsVEKPVSSILSR	1582.7864	36.5857	3	0
946	Q9UIF9	QPsSPSHNTNLR	1417.6274	12.4593	2	0
947	Q9UIG0	LAEDEGDsEPEAVGQSR	1868.7574	17.8949	2	0
		KFPDR LAEDEGDsEPEAVGQSR	2512.1144	43.7614	3	2
948	Q9UIS9-12	RRPGAQPLPPPPSQsPEPTEPHPR	2802.3944	29.2146	4	1
949	Q9UK58	AEEKsPISINVK	1394.6974	20.325	3	1
950	Q9UK59	RLsDEHEPEQR	1475.6319	22.3728	3	1
951	Q9UK61	LIPItGGNARSPEDQLGK	1945.985	36.9407	3	1
952	Q9UK76-2	RNSsEASSGDFLDLK	1705.7543	36.4798	3	1
953	Q9UKG1	TSSsGsLGSESTNLAAALSDLSLVAPDTPIQFDIISPVcEDQPGQAK	4863.2404	84.413	4	0
		VNQSALEAVTPsPSFQQR	2038.9781	40.2882	2	0
954	Q9UKJ3	SSAPADSERGPkPEPPGSGsPAPPR	2508.1651	23.8116	3	1
		SQsPHYFR	1101.4551	24.1032	3	0
		KPsVSEEVQATPNK	1593.7569	16.995	2	0
955	Q9UKL0	EREEsEDELEEANGNNPIDIEVDQNK	3095.3031	45.2185	3	1

956	Q9UKM9	TRDDGDEEGLLtHSEEELHSQDtDADDGALQ GRLsPVPVPR	3687.4215 1157.6232	42.0907 27.9719	3	1
957	Q9UKS6	DGTAPPPQSPGSPGTGQDEEWsDEESPRK DGTAPPPQSPGSPGTGQDEEWsDEESPR	3118.2986 2990.1766	27.6608 32.8665	3	1
958	Q9UKV3	TAQVPsPPR SSSISEEKGDsDDEKPR AAKLsEGsQPAEEEEDQETPSR ASLVALPEQtASEEEtPPPLLTK SKsPsPPRLTEDR KSSSiSEEKGDsDDEKPR TAQVPsPPRGK sLsPGVSR	1032.4907 1945.8092 2548.0334 2581.2308 1629.7108 2153.8632 1217.6072 962.37779	14.5926 10.3018 19.894 61.8955 15.145 16.213 15.3725 12.5314	2	0
959	Q9UKV5	SDSIRPALNSPVERPsSDQEEGETSAQTER	3352.5045	36.6423	4	0
960	Q9ULF5	QNtEESTIGR	1214.5086	12.1232	2	0
961	Q9ULM3	ASsPIKQSHEPVPDTSVEK	2116.0027	26.0022	3	1
962	Q9ULU4-19	DKAsPEPEKDFSEK	1686.7331	24.1137	3	2
963	Q9ULX3	KDDsDDDGGGWITPSNIK	1999.8403	36.99	2	1
964	Q9UN86-2	NLEELEEKsTTPPPAEPVSLPQEPPKPR StTPPPAEPVSLPQEPPKPR YEDEVFGDsEPELDEEsEDEVEEEQER	3189.5807 2205.1128 3550.2795	41.2223 32.6657 54.8723	4	1
965	Q9UNE7	LGAGGGsPEKSPSAQELK	1792.856	15.5202	2	1
966	Q9UNL2-2	KLsEADNR	1012.4484	9.5251	2	1
967	Q9UNS1	QLLDsDEEQEEDEGR	1871.7272	24.6316	2	0
968	Q9UNX4	GsSPGIQDTLEAEDGAFETDEAPEDR	2816.1581	54.1078	3	0
969	Q9UNZ2-5	KKsPNELVDDLK	1612.8054	51.107	3	2
970	Q9UPN9	LKsDERPVHIK tFAPLPEFEQEEDDGEVTEDsDEDFIQPR	1401.7271 3544.4198	19.7447 74.6942	4	1
971	Q9UPQ0-3	SINHQIEsPSER GSsDGRGSDSESDLPHR	1476.6533 1838.7348	13.7069 21.9922	2	0

972	Q9UPT8	AAKPGPAEAPSPTASP sGDASPPATAPYDPR	3011.3873	29.9438	3	0
973	Q9UPU5	TLLSESSSQ sSKSPSLSSK	2019.9591	24.6337	3	1
		K TLLSESSSQSSKsPsLSSK	2228.029	38.1676	3	2
		SVDQGGGGsPR	1096.443	7.2117	2	0
974	Q9UQ35	QSHSEsPSLQSK	1394.5986	10	3	0
		RGEGDAPFSEP GTSTQRPsPETATK	2951.2503	24.8641	3	1
		QGSITSPQANEQS VtPQRR	2164.0201	14.6583	3	1
		THTTALAGR sPsPASGR	1826.8031	11.1576	3	1
		sVsPcSNVESR	1381.491	11.7446	2	0
		VSGRTsPPLLDR	1377.6916	20.0998	3	1
		TVARtPLGQR	1178.6085	10.5252	2	1
		V KPEtPPRQSHSGSIsPYPK	2352.0877	20.0237	3	1
		ScFEssPDPELK	1555.5543	31.447	2	0
		RVPsPTPAPK	1129.5812	10.2637	2	1
		RSsRssPELTR	1515.5801	10.1232	3	2
		RsRsVsPcSNVESR	1860.6941	10.5004	2	2
		RRPsPQPSPR	1257.6252	10.3844	3	1
		SGtPPRQGSItSPQANEQS VtPQRR	2919.2616	19.9812	3	2
		sRsPsSPELN NK	1555.5645	9.57	2	1
		sRsPATAKR	1133.4892	5.3292	3	2
		sRsRsPLAIR	1382.5796	17.5348	3	2
		sRsRtPLLPR	1422.609	18.7902	3	2
		sRssSPVTELASR	1616.6174	27.59	2	1
		SSsPVTELAsRSPIRQDR	2145.9851	27.7555	3	2
		SssPVTELASR	1293.5208	27.095	2	0
		SSGHSSSELsPDAVEK	1696.7171	14.9051	3	0
		sRTPPsAPSQSR	1430.5869	9.7351	3	1
		sRsVsPcSNVESR	1704.5876	11.3161	3	1
		sLsGSSPcPK	1179.4205	10.0359	2	0

sLtRsPPAIR	1337.5468	20.6444	2	1
sLsYsPVER	1277.4335	29.7311	2	0
AQtPPGPSLSGSKsPcPQEK	2212.9422	18.0857	3	1
AQtPPGPSLSGSK	1306.6091	14.1365	2	0
HGGSPQPLAttPLSQEPVNPPSEASPtR	3092.3382	40.0455	3	0
HAsssPESPKPAPAPGSHR	2136.8337	10.2748	3	0
GEGDAPFSEPGtTSTQRPSSPETATK	2715.1884	23.8466	3	0
ELSNsPLRENsFGsPLEFR	2418.9902	60.1553	3	1
QSHSGsISPYPK	1367.6028	13.4911	2	0
sRsPLAIR	1059.4803	16.9136	2	1
SRtSPVSR	969.45372	9.1446	2	1
sRtPLLPR	1099.5091	20.4498	3	1
SGAGSsPETK	1000.3979	4.2126	2	0
sRsPATAK	977.38518	3.9655	2	1
SGssPGLR	920.33068	6.2622	2	0
sRsRtPPAIR	1380.5618	10.6486	2	2
SATRPsPsPER	1344.5369	9.2976	3	0
sRTsPVTR	1063.4366	5.6197	2	1
SEcDSsPEPK	1215.4282	5.601	2	0
DKFsPFPVQDRPESSLVFK	2303.13	51.8454	3	1
TsPPLLDR	978.46758	20.1072	2	0
sRsRTsPVTR	1386.537	6.4284	3	2
VKAQtPPGPSLSGSKsPcPQEK	2440.1093	21.8999	4	2
VKAQtPPGPSLSGSK	1533.775	19.9326	3	1
SRSGssQELDVKPSASPQER	2304.9957	21.9847	3	1
sRtPPVTR	1073.4562	10.1812	3	1
SGtPPRQGSItSPQANEQSVPQR	2683.1995	23.7531	3	1
sGssPEVDSK	1232.346	4.7601	2	0
ENSFGsPLEFR	1362.5821	45.9985	2	0

		SRA sPATH R	1062.4873	14.3227	3	1
		THTTALAGRPsPsPASGRR	1982.9069	23.1239	4	2
		HScSGSsPPR	1151.4345	11.517	2	0
		MGQAPSQSLLPPAQDQPRsPVPSAFSDQSR	3259.5304	46.1315	3	1
		SGsSQELDVKPSASPQER	1981.8962	21.8939	3	0
		sPVPSAFSDQSR	1357.5809	25.141	2	0
		mTSERAPsPSSR	1401.5891	11.583	3	1
		cRsPGMLEPLGSSR	1626.7201	36.1475	3	1
		TPAAAAAMNLAsPR	1421.6658	30.9191	2	0
		SAtRPSPSPERSstGPEPPAPTPLAER	3125.3979	39.9625	4	1
		SGMsPEQSR	1058.4026	10.0732	2	0
		MALPPQEDATA sPPRQK	1916.9044	26.1623	3	1
		ELSNsPLR	995.45384	14.5355	2	0
		sRsRtPPVTR	1396.559	10.1494	3	2
		SSRssPELTR	1279.5121	11.6826	3	1
		sRtPPAIR	1057.4617	13.1104	3	1
		DGLPRtPSRR	1234.6094	22.9644	3	2
		MALPPQEDATA sPPR	1660.7485	28.0441	2	0
		NHsGsRTPPVALNSSR	1839.7992	14.9027	3	1
		AQSGsDssPEPK	1429.4354	5.4477	2	0
975	Q9UQ84	KPLsPVRDNIQLTPEAEEDIFNKPEcGR	3332.6054	67.0471	4	1
976	Q9UQN3	ATIsDEEIER	1242.5285	20.0424	2	0
977	Q9W705	EGNVVFVSENVtQYLR	1933.9191	38.6605	3	0
978	Q9Y232	TAVDGFAQSEsPEKLDPVEQQQEDTVAPEVAEKPVGALLGPAGER	4698.2824	59.3844	4	1
		TNRTsPNNAR	1210.5379	5.5102	2	1
979	Q9Y294	FHINWEDNTEKLEDAESSNPNLQsLLSTDALPSASK	4080.8786	82.3725	4	1
980	Q9Y2D5-4	DALGDSLQVPVsPSSTTSSR	2083.9681	41.2616	2	0
		VKPPPSPTeGPSLQPDLAPEEAAGTQRPK	3175.5976	42.0616	4	0
981	Q9Y2D8	ERVDDSTGTVisDVEEDAGELSR	2559.1157	60.5207	3	1

982	Q9Y2K6	AVPIAVADEGEsEsEDDDLKPR sSSPcRTPEPDNDAHLR	2502.0512	39.3299	3	0
983	Q9Y2K7	TPQRGDEEGLGEEEEEEEEEEDsAEGGAAR RYEDDGIsDDEIEGKR sSPGAGPSDHHSASRDER	3773.4305	31.1163	3	1
984	Q9Y2U5	DRsSPPPGYIPDELHQVAR	2214.0492	45.6762	3	1
985	Q9Y2U8	ENYSDsEEEDDDDVASSR	2141.7381	18.9211	2	0
986	Q9Y2V2	ERsPsPLRGNVVPSPPLPTR	2219.091	35.945	3	2
987	Q9Y2W1	NKKsPEIHR IDIsPSTFR ASAVSELsPR ERsPALKsPLQSVVVR RIDIsPSTFR ERsPALK NREEEWDPPEYtPK TDSEKPFRGsQsPKR GSFsDTGLGDGK SYsPAHNR RIDIsPSTFRK	1188.5927	13.723	3	2
988	Q9Y2X3	HIKEEPLSEEPCsTsTAIASPEKK HIKEEPLsEEEPCsTsTAIASPEK	2790.3107	32.423	4	2
989	Q9Y2X7-3	SQSDLDDQHDYDSVAsDEDTDQEPLR HGsGADSDYENTQSGDPLLGLEK	2742.1781	32.3651	3	1
990	Q9Y314	AAsQDHVR	3060.2043	34.9161	3	0
991	Q9Y385	RLStSPDVIQGHQPR	2527.0777	49.1515	3	0
992	Q9Y388	EVQAEQPSsSSPR	963.41033	9.6989	2	0
993	Q9Y3F4-2	IGFPETTEEELEIAsENsDcIFPSAPDVK	1770.871	33.9907	3	1
994	Q9Y3T9	1481.6313 QFKDLFDLNssEEDDTEGFSER LAELOVDEFLAsGFDsEsESESENSPQAETR	3513.4863	78.3715	3	0
			2768.0832	67.6927	4	1
			3614.4347	83.1042	4	0

		DLFDLNssSEEDDTEGFSER	2364.8592	71.9124	2	0
		EAARsPDKGPGSPSASR	1749.7941	9.8925	2	1
995	Q9Y446-2	LsSGFDDIDLPSAVK	1643.7686	52.2024	2	0
996	Q9Y487	KDsEEEVSLLGSQDIEEGNHQVEDGcR	3139.3317	49.76	4	1
997	Q9Y4A5	SQsLPGADSLLAKPIDK	1819.9308	39.9319	3	0
998	Q9Y4C8	SKPASDYLNFDsDsGQEeEEGAGEDLEEEASLEPK	4128.5874	68.5189	3	0
999	Q9Y4H2	KSSEGGVGVGPGGGDEPPTsPR	2103.94	23.5317	3	1
		SKsQSSGSSATHPISVPGAR	2020.9546	27.839	3	1
		RHNsASVENVSLR	1548.7394	42.8229	3	1
1000	Q9Y4W2	AQQQEEQGsVNDVKEEEKEEK	2541.1065	22.1698	3	2
1001	Q9Y520-7	QRGsETDTDSEIHESASDKDSLK	2702.1522	20.0062	4	2
		sVEDVRPHHTDANNQSAcFEAPDQK	2932.246	26.1234	4	0
		sVSHGSNHTQKPDEQR	1886.8247	23.4942	4	0
1002	Q9Y580	SFsSPENFQR	1278.5198	30.8523	2	0
1003	Q9Y5J1	KTssDDEsEEDEDLLQR	2350.7955	35.5876	2	1
		VQEHEDsGDsEVENEAK	2061.7374	13.7292	2	0
		RKtSsDDEsEEDEDLLQR	2506.9019	32.2062	3	2
1004	Q9Y5Q9	GKLsAEENPDDSEVPSSSGINSTK	2528.1075	28.1065	3	1
1005	Q9Y5S2	HSTPSNNSNPSGPPsPNSPHR	2220.9512	10.7147	3	0
1006	Q9Y608	RGsGDTSSLIDPDTSLSLR	2186.0136	46.6372	3	1
1007	Q9Y613	sLEGGGcPAR	1083.4321	11.5758	2	0
1008	Q9Y618	LEPVsPPsPPHTDPELELVPPR	2563.2118	54.4662	3	0
		SLTGKLEPVsPPsPPHTDPELELVPPR	3049.4872	53.6782	3	1
		EGtPPPPPSR	1211.5466	11.6304	2	0
1009	Q9Y679	LRPQSAQSSFPPsPGPSPDVQLATLAQR	3012.5165	57.9701	3	0
1010	Q9Y6D5	ELEKPIQSKPQsPVIQAAAVsPK	2605.3141	33.6261	3	0
1011	Q9Y6E2	FVEWLQNAAEEsEsEGEEN	2414.8682	67.694	2	0
1012	Q9Y6G9	KPVTVSPTTPtSPTEGEAS	1965.9118	20.6119	2	0
		DFQEYVEPGEDFPAsPQRR	2347.0223	45.0844	3	1

1013	Q9Y6M7-7	KHsDPHLLE	1311.6299	25.2091	3	1
		sFADIGK	817.35118	21.166	2	0
1014	Q9Y6Q9	AVsLDSPVSVGSSPPVK	1705.8556	38.9781	2	0
		KDSNELsDsAGEEDSADLKR	2325.9215	23.779	3	2

Lowercase m: oxidation on methionine. Lowercase c: carbamidomethyl on cysteine.

Table S4. Detailed information of the phosphopeptides captured by Fe₃O₄@SiO₂@TpPa-Ti⁴⁺ from rat brain lysates.

Phosphorylation sites are indicated by lowercase s, t and y at serine, threonine and tyrosine, respectively.

No.	Pepitde sequence	Protein	[M+H] ⁺	RT	Charg	Missed
			[min]	e	Cleavages	
1	RPADIRsPEQVK	F1LRZ7	1475.7379	49.0942	3	1
2	SPVEAKsPAEVKsPVTVK	F1LRZ7	2012.96591	35.572	3	2
3	SPVEAKsPAEAKsPASVK	F1LRZ7	1942.88989	27.2577	3	2
4	SPGEAKsPAEAKsPAEVK	F1LRZ7	1942.86207	25.903	2	2
5	SPAVALKsPAEVKsPAEVK	F1LRZ7	1954.934	33.4959	3	2
6	SPATVKsPVEAKsPAEVK	F1LRZ7	1984.93507	30.7687	3	2
7	SPATVKsPGEAKsPAEAK	F1LRZ7	1914.86014	25.6391	3	2
8	SPASVKsPGEAKsPAEAK	F1LRZ7	1900.84197	25.3151	3	2
9	SPAGAKsPAEAKsPVVAK	F1LRZ7	1854.87194	26.733	3	2
10	SPAGAKsPAEAK	F1LRZ7	1193.55419	19.894	2	1
11	sPAEVKsPVTVKsPAEAK	F1LRZ7	2064.8984	27.4575	3	2
12	SPVEVKSPAsVKsPSEAK	F1LRZ7	1986.91846	33.8021	3	2
13	SPVEVKsPAsVKSPSEAK	F1LRZ7	1986.91846	33.8021	3	2
14	SPVVAKsPAEAKsPAEAKPPAEAK	F1LRZ7	2520.21275	39.6168	4	2
15	SPVTVKsPAEAKsPVEVK	F1LRZ7	2012.96481	37.087	3	2
16	SPVtVKSPAEAKsPVEVK	F1LRZ7	2012.97014	37.7123	2	2
17	SPAEVKsPVEAKsPAEAK	F1LRZ7	1984.89844	27.3141	3	2
18	TLDVKsPEAK	F1LRZ7	1167.5657	29.5937	2	1
19	sPAEVKsPVTVK	F1LRZ7	1401.64194	26.7568	2	1
20	SPAEVKsPATVKsPVEAK	F1LRZ7	1984.94697	30.0132	3	2
21	SPAEAKsPVEVKsPEK	F1LRZ7	1842.82599	27.1862	3	2
22	SPAEAKsPVEVKsPASVK	F1LRZ7	1970.92495	33.5938	3	2
23	sPAEAKsPVEVK	F1LRZ7	1401.60471	22.4404	2	1
24	SPAEAKsPAEVKsPVEAK	F1LRZ7	1984.90302	29.1702	3	2
25	SPAEAKsPAEVKsPAVAK	F1LRZ7	1926.8951	29.1614	3	2
26	SPAEAKsPAEVKsPATVK	F1LRZ7	1956.90477	28.045	3	2
27	sPAEAKsPAEVK	F1LRZ7	1373.57508	20.0347	2	1
28	SPAEAKsPAEVK	F1LRZ7	1293.60265	24.2687	2	1
29	SPAEAKsPAEAKsPAEVK	F1LRZ7	1956.86906	26.0029	3	2
30	SPAEAKsPAEAKsPAEAK	F1LRZ7	1928.8384	21.5893	3	2
31	SPAEAKsPAEAKPPAEAKsPAEAK	F1LRZ7	2522.15594	35.6415	3	2
32	SPAEAKsPAEAKPPAEAK	F1LRZ7	1858.8997	34.1807	3	1
33	SPAEAKPPAEAKsPAEAKsPAEAK	F1LRZ7	2522.15594	35.6415	3	2
34	AKsPVKEEKPPAEVK	F1LRZ7	1829.98171	83.0775	3	2
35	AKsPVKEGAK	F1LRZ7	1094.55793	26.7342	3	2
36	KEEVKsPVEEVK	F1LRZ7	1480.73192	48.0251	2	2
37	SPAEVKsPVTVKsPAEAK	F1LRZ7	1984.94185	33.5035	2	2

38	sPVKEEKsPAEAK	F1LRZ7	1630.71433	20.9978	3	2
39	SPATVKsPGEAK	F1LRZ7	1251.59257	22.9236	2	1
40	SPAEEKsPAEAK	F1LRZ7	1265.5851	20.2501	2	1
41	SPASVKSPsEAKsPAGAK	F1LRZ7	1858.82262	24.6724	3	2
42	SPASVKsPsEAKSPAGAK	F1LRZ7	1858.82884	23.9161	3	2
43	sAPcGSLAFSGDR	A0A0G2K5C6	1404.56869	43.4818	2	0
44	KVAELEEEQsQQGsSSYSDWVK	A0A0G2K5C6	2546.04257	68.6747	3	1
45	KVAELEEEQSQQGsSYSDWVK	A0A0G2K5C6	2546.04257	68.6747	3	1
46	SPFEIIIsPPAsPPEMTGQR	A0A0G2K5C6	2200.94378	78.5163	2	0
47	SSLLLDTVTsIPsSR	A0A0G2K5C6	1735.79483	73.2352	2	0
48	TEATQGLDYVPSAGTIsPTsSLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4838.09212	81.8586	4	2
49	TEATQGLDYVPSAGtISPtSSLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4838.09212	81.8586	4	2
50	TEATQGLDYVPSAGTISPTssLEEDKGFKsPPcEDFSVTGESEK	A0A0G2K5C6	4838.09017	82.6153	4	2
51	TEATQGLDYVPSAGTISPTssLEEDKGFKsPPcEDFSVTGESEK	A0A0G2K5C6	4918.05296	79.0567	4	2
52	TEATQGLDYVPsAGTIsPTsSLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4918.06272	80.6568	4	2
53	TEATQGLDYVPSAGTIsPTssLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4918.02757	79.8909	4	2
54	TEATQGLDYVPSAGtISPtSSLEEDK	A0A0G2K5C6	2856.21423	65.4374	3	0
55	TEATQGLDYVPSAGTIsPTsSLEEDK	A0A0G2K5C6	2856.21423	65.4374	3	0
56	TEATQGLDYVPSAGTISPTssLEEDK	A0A0G2K5C6	2856.21423	65.4374	3	0
57	TEATQGLDYVPSAGTIsPTsSLEEDKGFK	A0A0G2K5C6	3188.4162	73.0181	3	1
58	TEATQGLDYVPSAGtISPtSSLEEDKGFK	A0A0G2K5C6	3188.4162	73.0181	3	1
59	TEATQGLDYVPSAGTISPTssLEEDKGFK	A0A0G2K5C6	3188.4162	73.0181	3	1
60	TEATQGLDYVPsAGTIsPTSSLEEDKGFK	A0A0G2K5C6	3188.41209	70.9788	4	1
61	TEATQGLDyVPSAGTISPtSSLEEDKGFK	A0A0G2K5C6	3188.4173	73.8658	3	1
62	TEAtQGLDYVPSAGtISPSSLEEDKGFK	A0A0G2K5C6	3188.4173	73.8658	3	1
63	TEATQGLDYVPSAGTIsPTssLEEDKGFK	A0A0G2K5C6	3268.37532	72.9275	3	1
64	TEATQGLDYVPsAGTIsPTsSLEEDKGFK	A0A0G2K5C6	3268.38558	72.1644	3	1
65	cLsPDDSTVK	A0A0G2K5C6	1201.47898	26.8202	2	0
66	EEAAGcNTsAEKETsSPASPQNLQSDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
67	EEAAGcNTSAEKeSSPASPQNLQSDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
68	EEAAGcNtSAEKeSSPASPQNLQSDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
69	EEAAGcNTSAEKETSSPAsPQNLQsDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
70	EEAAGcNTSAEKETSSPAsPQNLQSDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
71	EEAAGcNTSAEKETSSPASPQNLQsDTPAFsYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
72	EEAAGcNTSAEKETssPASPQNLQSDTPAFSYASLAGPAVPPR	A0A0G2K5C6	4550.94473	79.3769	3	1
73	EEAAGcNTSAEKETSSPASPQNLQSDtPAFsYASLAGPAVPPR	A0A0G2K5C6	4550.99141	80.0475	4	1
74	FtDQLSPEDAESLVSLSVVsPDTTKQEATPR	A0A0G2K5C6	3594.61832	83.0318	3	1
75	FTDQsLsPEDAESLVSLSVVSPDTTK	A0A0G2K5C6	2912.28288	89.212	3	0
76	FtDQLSPEDAESLVSLSVVsPDTTK	A0A0G2K5C6	2912.2854	85.5947	2	0
77	FTDQsLSPEDAESLVSLSVVSPDTTK	A0A0G2K5C6	2832.31991	87.5222	3	0
78	FTDQLSpEDAESLVSLSVVSPDTTK	A0A0G2K5C6	2832.31991	87.5222	3	0
79	HTQEALKAsPK	A0A0G2K5C6	1289.61948	41.3882	3	1
80	ELALssPEDLTQDFEELKR	A0A0G2K5C6	2380.05199	81.9149	3	1
81	EKEVVPDsPGDKGSTNR	A0A0G2K5C6	1894.86212	39.5845	3	2

82	EtPTRGEVGGQKEPVPAWEGK	A0A0G2K5C6	2516.19055	67.5691	3	2
83	ETsPTRGEVGGQKEPVPAWEGK	A0A0G2K5C6	2516.18981	66.8752	4	2
84	ETSPtRGEVGGQKEPVPAWEGK	A0A0G2K5C6	2516.18981	66.8752	4	2
85	ETsPTRGEVGGQK	A0A0G2K5C6	1522.69103	24.1692	3	1
86	mAsPPPsGPPSAAHTPFHQSPEVDKSEPR	A0A0G2K5C6	3214.37837	56.5185	4	1
87	SPFEIISPPAsPPEMTGQRVPsAPGQESPVPDTESTAPMR	A0A0G2K5C6	4334.91014	81.5853	4	1
88	SPFEIIsPPAsPPEMTGQRVPsAPGQESPVPDTESTAPMR	A0A0G2K5C6	4334.91014	81.5853	4	1
89	MAsPPPsGPPSAAHTPFHQSPEVDKSEPR	A0A0G2K5C6	3198.40061	59.5641	4	1
90	ELSSEPRtPPAQK	A0A0G2K5C6	1519.71557	26.9315	3	1
91	TDHGAEIVYKsPVVsGDTsPR	P19332-8	2375.0307	50.5445	3	1
92	TDHGAEIVYKSPVVsGDTsPR	P19332-8	2375.03491	57.0916	3	1
93	TDHGAEIVYKsPVVsGDTsPR	P19332-8	2454.99001	48.7046	3	1
94	SRtPsLPtPPTREPK	P19332-8	1903.81212	40.4083	3	2
95	SRtPSLPtPPTREPK	P19332-8	1823.84695	47.5248	3	2
96	SPVVsGDTsPR	P19332-8	1261.48147	22.7021	2	0
97	SPVVGDTsPR	P19332-8	1181.51929	23.7826	2	0
98	SPVVsGDTsPR	P19332-8	1181.51929	23.7826	2	0
99	SPVVGDTsPR	P19332-8	1181.51783	23.0241	2	0
100	SGYssPGsPGTPGSR	P19332-8	1633.53092	25.5965	2	0
101	SGYssPGSPGTPGSR	P19332-8	1553.56435	25.7951	2	0
102	SGYSsPGsPGTPGSR	P19332-8	1553.56374	24.2711	2	0
103	SGYsSPGSPGTPGSR	P19332-8	1473.59522	26.9913	2	0
104	SGYSSPGsPGTPGSR	P19332-8	1473.59741	26.2301	2	0
105	SGYSSPGsPGTPGSR	P19332-8	1473.59888	25.4732	2	0
106	AKTDHGAEIVYKsPVVsGDTsPR	P19332-8	2654.14094	57.0255	3	2
107	AKTDHGAEIVYKsPVVsGDTsPR	P19332-8	2574.17009	67.291	3	2
108	AKTDHGAEIVyKSPVVSGDtSPR	P19332-8	2574.17215	68.5207	4	2
109	AKTDHGAEIVYKSPVVsGDTsPR	P19332-8	2574.17046	76.3892	3	2
110	TTPSPKtPPGSGEPPK	P19332-8	1657.77691	26.791	3	1
111	TtPSPKtPPGSGEPPK	P19332-8	1737.74776	23.8242	3	1
112	TTPSPKtPPGSGEPPKSGER	P19332-8	2086.98454	34.1178	4	2
113	TPPsPKTPPGSGEPPKSGER	P19332-8	2086.98382	38.9863	3	2
114	TtPSPKtPPGSGEPPKSGER	P19332-8	2166.94387	27.6052	3	2
115	VAVVRtPPKSPSAsK	P19332-8	1683.82235	29.3328	3	2
116	ESPPQPPADDGSEEPGSetSDAKStPtAEDVTAPLVEER	P19332-8	4262.72537	60.7017	3	1
117	ESPPQPPADDGSEEPGSEtsDAKsTPTAEDVTAPLVEER	P19332-8	4262.72537	60.7017	3	1
118	ESPPQPPADDGSEEPGSetSDAKStPTAEDVTAPLVEER	P19332-8	4262.72537	60.7017	3	1
119	ESPPQPPADDGSEEPGsETsDAKsTPTAEDVTAPLVEER	P19332-8	4262.72537	60.7017	3	1
120	ESPPQPPADDGsEEPGsETsDAKStPTAEDVTAPLVEER	P19332-8	4262.72469	60.9608	4	1
121	ESPPQPPADDGSEEPGSETsDAKsTPTAEDVTAPLVEER	P19332-8	4182.76971	60.7004	4	1
122	ESPPQPPADDGSEEPGSetSDAKsTPTAEDVTAPLVEER	P19332-8	4182.76971	60.7004	4	1
123	ESPPQPPADDGSEEPGsETsDAKStPTAEDVTAPLVEER	P19332-8	4182.76971	60.7004	4	1
124	ESPPQPPADDGSEEPGsETsDAKStPTAEDVTAPLVEER	P19332-8	4182.76971	60.7004	4	1
125	ESPPQPPADDGSEEPGSetSDAKStPtAEDVTAPLVEER	P19332-8	4182.76971	60.7004	4	1

126	ESPPQPPADDGsEEPGsETSDAKSTPTAEDVTAPLVEER	P19332-8	4182.75507	61.4777	4	1
127	EsPPQPPADDGsEEPGETSDAKSTPTAEDVTAPLVEER	P19332-8	4182.74208	61.4573	3	1
128	SRtPSLPTPPTREPK	P19332-8	1743.88123	62.8008	3	2
129	SRTPsLPTPPTREPK	P19332-8	1743.88123	62.8008	3	2
130	sRTPSLPTPPTREPK	P19332-8	1743.88123	62.8008	3	2
131	SRTPSLPtPPTREPK	P19332-8	1743.8827	65.1609	3	2
132	IPAKttPSPKtPPGSGEPPK	P19332-8	2226.98078	26.253	3	2
133	QGFSDKEsPVSDLTSDLYQDKQEEK	P15205	2953.30596	87.9832	3	2
134	QGFsDKESPVSSDLTSDLYQDKQEEK	P15205	2953.30596	87.9832	3	2
135	TLEVVSQSQTGSAGHTPYyQSPTDEK	P15205	3045.37457	61.3861	3	0
136	TLEVVSQSQTGSAGHTPYYQsPTDEK	P15205	3045.37457	61.3861	3	0
137	TLEVVSQSQTGSAGHTPyYQSPTDEK	P15205	3045.37457	61.3861	3	0
138	SAGFIPIKEDFsPEKK	P15205	1872.91732	88.2158	3	2
139	TLEVVSQSQTGsAGHTPYYQsPTDEK	P15205	3125.34926	57.1098	3	0
140	TLEVVSQSQTGsAGHTPYYQsPTDEK	P15205	3125.34926	57.1098	3	0
141	tLEVVSQSQTGsAGHTPYYQsPTDEK	P15205	3205.30656	56.4342	3	0
142	TLEVVSQSQTGsAGHTPYYQsPTDEK	P15205	3205.30656	56.4342	3	0
143	KLGGDGsPTQVDVSQFGSFKEDTK	P15205	2607.19422	83.3141	3	2
144	LSPA KSPSLsPsPPsPIEKTPLGER	P15205	2812.30486	58.024	3	2
145	LSPA KSPSLsPsPSPSIEK	P15205	2078.99201	46.759	3	1
146	LSPA KSPSLsPsPPSIEK	P15205	2078.99201	46.759	3	1
147	LSPA KSPSLSPsPPsPIEK	P15205	2078.99201	46.759	3	1
148	KLGGDGsPTQVDVSQFGSFK	P15205	2133.98749	75.6972	3	1
149	SPSLsPsPPsPIEKTPLGER	P15205	2315.99409	59.2488	3	1
150	SPSLSPsPPsPIEKTPLGER	P15205	2236.03387	61.0091	3	1
151	SPSLsPsPPSIEKTPLGER	P15205	2236.03588	56.4034	3	1
152	SPSLSPSPsPIEKTPLGER	P15205	2156.06156	63.1769	3	1
153	SPSLSPSPsPIEK	P15205	1502.72115	43.5127	2	0
154	SDIsPLtPR	P15205	1145.46209	35.6742	2	0
155	VQSLEGEKLsPK	P15205	1394.69644	42.238	3	1
156	ETEVSKGSAESPDEGIttEGEGEcEQTPEELEPVEK	P15205	4247.66319	56.8061	4	1
157	ETEVsKGsAEsPDEGITTTEGEGEcEQTPEELEPVEK	P15205	4247.66319	56.8061	4	1
158	EtEVSKGSAEsPDEGIttTEGEGEcEQTPEELEPVEK	P15205	4247.66319	56.8061	4	1
159	EtEVSKGsAEsPDEGITTTEGEGEcEQTPEELEPVEK	P15205	4247.66319	56.8061	4	1
160	EtEVSKGSAESPDEGIttTEGEGEcEQTPEELEPVEK	P15205	4247.66497	56.4609	3	1
161	ETEVSKGSAESPDEGITTtEGEGEcEQtPEELEPVEK	P15205	4167.70804	53.9662	3	1
162	ETEVSKGsAEsPDEGITTTEGEGEcEQTPEELEPVEK	P15205	4167.70108	55.4835	3	1
163	ETEVSKGSAESPDEGIttEGEGEcEQTPEELEPVEK	P15205	4167.69356	55.467	4	1
164	ETEVsKGsAESPD EGITTTEGEGEcEQTPEELEPVEK	P15205	4167.69356	55.467	4	1
165	ETEVSKGSAESPDEGIttTEGEGEcEQTPEELEPVEK	P15205	4167.69356	55.467	4	1
166	ETEVSKGsAESPD EGITTTEGEGEcEQTPEELEPVEK	P15205	4087.72291	58.7404	3	1
167	ETEVsKGSAESPDEGITTTEGEGEcEQTPEELEPVEK	P15205	4087.72291	58.7404	3	1
168	EtEVSKGSAESPDEGITTTEGEGEcEQTPEELEPVEK	P15205	4087.72291	58.7404	3	1
169	ESsPTYsPGFSDSTSGAK	P15205	1964.7158	36.9474	2	0

170	EssPTYSPGFSDSTSGAK	P15205	1964.7158	36.9474	2	0
171	ESsPTYSPGFSDSTSGAK	P15205	1884.74899	38.5946	2	0
172	EsSPTYSPGFSDSTSGAK	P15205	1884.74899	38.5946	2	0
173	QGfsDKEsPVSDLTSDLYQDKQEEK	P15205	3033.25868	78.7525	3	2
174	SPSLSPsPPsPIEK	P15205	1582.68773	43.9565	2	0
175	EVPSKEEQsPVKAEVAAEK	P15205	2063.98636	43.9832	3	2
176	LSPAKSPSLSPsPPsPIEKTPLGER	P15205	2732.34024	63.3039	3	2
177	SDIsPLTPR	P15205	1065.4982	38.9011	2	0
178	LSPAKSPSLsPsPPsPIEK	P15205	2158.95444	43.9656	3	1
179	LSPAKsPsLsPSPPSsPIEK	P15205	2158.9592	45.4883	3	1
180	DVSDERLsPAKsPSLSPSPPSsPIEK	P15205	2780.28671	56.7525	3	2
181	KSEVQAHSsPSR	F1MAQ5	1305.59249	30.8445	3	1
182	KSEVQAHSsPsR	F1MAQ5	1305.59294	32.3528	3	1
183	DGsPDAPATPEKEEVPFSEYK	F1MAQ5	2373.02496	61.3848	3	1
184	DGSPDAPAtPEKEEVPFSEYK	F1MAQ5	2373.02771	59.8501	3	1
185	DQPAALPLAAEETVNLPSPPPsPAsEQTAALEEASK	F1MAQ5	3883.79715	83.3232	3	0
186	DQPAALPLAAEETVNLPSPPPsPASEQTAALEEASK	F1MAQ5	3883.79715	83.3232	3	0
187	EA sPPSSADKSGLSR	F1MAQ5	1568.69068	27.455	2	1
188	ASQPSPPAHEAGYStLAQSYTSDHPSELPEEPssPQER	F1MAQ5	4224.76673	67.4165	4	0
189	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPssPQER	F1MAQ5	4144.81127	76.5978	4	0
190	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPsSPQER	F1MAQ5	4144.8111	76.5298	3	0
191	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1MAQ5	4144.82005	75.8315	4	0
192	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1MAQ5	4144.82005	75.8315	4	0
193	AsQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1MAQ5	4144.82005	75.8315	4	0
194	ASQPSPPAHEAGYsTLAQSYTSDHPSELPEEPSSPQER	F1MAQ5	4144.82005	75.8315	4	0
195	ASQPSPPAHEAGYsTLAQSYTSDHPSELPEEPSSPQER	F1MAQ5	4144.82005	75.8315	4	0
196	VTDGITKsPEKR	F1MAQ5	1410.70176	39.0908	3	2
197	KETsPETSLIQDEVALK	F1MAQ5	1967.95945	78.6193	2	1
198	KEtSPETSLIQDEVALK	F1MAQ5	1967.96341	78.6079	3	1
199	KDDQsPLDIK	F1MAQ5	1238.56573	43.8155	2	1
200	VKEDEFTAEKEAsPPSSADK	F1MAQ5	2115.9562	54.1261	3	2
201	EtSPETSLIQDEVALK	F1MAQ5	1839.86684	72.2344	2	0
202	ETsPETSLIQDEVALK	F1MAQ5	1839.86684	72.2344	2	0
203	VAIIRtPPKSPATPK	F1MAQ5	1655.92956	59.9973	3	2
204	DGsPDAPATPEKEEVPFsEYK	F1MAQ5	2452.98471	56.5452	2	1
205	EA sPPSSADK	F1MAQ5	1068.42264	18.9932	2	0
206	GNAQESLDTVsPK	F1MAQ5	1425.61871	30.7921	2	0
207	QADVPAAVTDAAtTPAAEDA AK	P07936	2235.018	47.9333	3	0
208	QADVPAAVTDAAtTPAAEDA AK	P07936	2235.018	47.9333	3	0
209	QADVPAAVtDAAATT PAAEDA AK	P07936	2235.00355	46.7792	2	0
210	EGDGSATTDAAPATsPKAEEPSKAGDAPSEEK	P07936	3181.37621	35.9865	4	2
211	EGDGSATTDAAPAtSPKAEEPSKAGDAPSEEK	P07936	3181.35969	35.3263	3	2
212	EGDGSATTDAAPAtSPKAEEPSK	P07936	2296.97783	27.1025	2	1
213	EGDGSATTDAAPATsPKAEEPSK	P07936	2296.97783	27.1025	2	1

214	EGDGsATTDAAPATsPK	P07936	1735.64383	20.7441	2	0
215	ATTDNsPsSKAEDGPAKEEPK	P07936	2318.93787	26.1051	3	2
216	ATTDNSPssKAEDGPAKEEPK	P07936	2318.93787	26.1051	3	2
217	AtTDNSPSSKAEDGPAKEEPK	P07936	2318.94289	26.0598	2	2
218	AttDNSPSSKAEDGPAKEEPK	P07936	2318.94289	26.0598	2	2
219	ATTDNsPSSKAEDGPAKEEPK	P07936	2238.97783	33.6749	3	2
220	ATTDNSPsSKAEDGPAKEEPK	P07936	2238.978	33.3428	4	2
221	AtTDNSPSSKAEDGPAKEEPK	P07936	2238.98059	32.697	2	2
222	ATtDNSPSSKAEDGPAKEEPK	P07936	2238.98059	32.697	2	2
223	ATTDNSPSSKAEDGPAKEEPK	P07936	2238.978	33.3428	4	2
224	KEGDGSATTDAAPATsPKAEEPSK	P07936	2425.09204	34.2855	3	2
225	KEGDGSATTDAAPAtSPKAEEPSK	P07936	2425.09204	34.2855	3	2
226	ATTDNsPSSK	P07936	1087.4303	15.6857	2	0
227	EGDGsATTDAAPATsPKAEEPSK	P07936	2376.94233	26.0611	2	1
228	ATQGLDYVPSAGTIsPTsSLEEDKGFK	Q63330	2958.31462	69.7082	3	1
229	AQPSDSAPEKGNKsPsPPPDGsPAATPEIR	F1LMX1	3225.36207	34.0837	3	2
230	AQPSDSAPEKGNKsPsPPPDGSPAATPEIR	F1LMX1	3145.38627	40.6616	4	2
231	AQPSDsAPEKGNKSPSPPPDGSPAATPEIR	F1LMX1	3065.40737	51.3993	4	2
232	AQPSDSAPEKGNKSPsPPPDGSPAATPEIR	F1LMX1	3065.40737	51.3993	4	2
233	AQPSDSAPEKGNKsPSPPPDGSPAATPEIR	F1LMX1	3065.40737	51.3993	4	2
234	AQPsDSAPEKGNKSPSPPPDGSPAATPEIR	F1LMX1	3065.40737	51.3993	4	2
235	GNKsPsPPPDGsPAATPEIR	F1LMX1	2214.89162	33.4444	3	1
236	GNKsPsPPPDGSPAATPEIR	F1LMX1	2134.92663	34.0253	3	1
237	GNKSPsPPPDGsPAATPEIR	F1LMX1	2134.92663	34.0253	3	1
238	GNKSPsPPPDGSPAATPEIR	F1LMX1	2054.94883	41.3126	3	1
239	GNKsPSPPPDGSPAATPEIR	F1LMX1	2054.94883	41.3126	3	1
240	sPsPPPDGSPAATPEIR	F1LMX1	1835.76381	35.152	3	0
241	SPsPPPDGsPAATPEIR	F1LMX1	1835.76394	35.1381	2	0
242	SyIETETESR	A0A0G2KBB9	1294.52415	29.8532	2	0
243	sYIETETESR	A0A0G2KBB9	1294.52415	29.8532	2	0
244	SKsESDASSLDAK	A0A0G2KBB9	1404.58725	26.6369	2	1
245	VQPPSPLPSSIDSNsPEEAQFQPIVPK	A0A0G2KBB9	3135.43982	79.5292	3	0
246	VQPPSPLPSSIDsNsSPEEAQFQPIVPK	A0A0G2KBB9	3135.43982	79.5292	3	0
247	VQPPSPLPssIDSNSPEEAQFQPIVPK	A0A0G2KBB9	3135.44683	79.7332	4	0
248	VQPPSPLPsIDsNSPEEAQFQPIVPK	A0A0G2KBB9	3135.44683	79.7332	4	0
249	VQPPSPLSSIDsNsPEEAQFQPIVPK	A0A0G2KBB9	3215.39932	83.6576	3	0
250	VQPPSPLPsIDsNSPEEAQFQPIVPK	A0A0G2KBB9	3215.42202	82.8941	3	0
251	VQPPSPLPsIDsNsSPEEAQFQPIVPK	A0A0G2KBB9	3215.40669	84.0536	4	0
252	VQPPsPLPssIDSNSPEEAQFQPIVPK	A0A0G2KBB9	3215.40669	84.0536	4	0
253	ARsYIETETESR	A0A0G2KBB9	1521.6546	38.3705	2	1
254	KGssEESVDEDRGLAPEPLPTAK	A0A0G2KBB9	2572.12829	56.5604	3	2
255	KGssEEsVDEDRGLAPEPLPTAK	A0A0G2KBB9	2572.12479	56.024	4	2
256	KGsSEESVDEDRGLAPEPLPTAK	A0A0G2KBB9	2492.17539	68.7512	3	2
257	KGssEESVDEDR	A0A0G2KBB9	1497.51181	20.7174	2	1

258	KASSssEsEPELTQLSK	A0A0G2KBB9	2047.78406	45.9006	2	1
259	KASssESEPELTQLSK	A0A0G2KBB9	2047.78118	45.8222	3	1
260	KAsssSESEPELTQLSK	A0A0G2KBB9	2047.78118	45.8222	3	1
261	KASSSsEsEPELTQLSK	A0A0G2KBB9	1967.82004	45.2129	3	1
262	SVYSDRDDESPDssPEEQK	A0A0G2KBB9	2329.83326	27.5409	2	1
263	SVYSDRDDEsPDssPEEQK	A0A0G2KBB9	2409.798	26.8369	2	1
264	sPVEEVKPKPEAK	P12839	1517.75744	39.2359	3	0
265	SPVPKsPVVEVKPKPEAK	P12839	2026.06873	74.9001	4	1
266	AKsPVPKsPVVEVKPKPEAK	P12839	2305.16639	67.4471	4	2
267	KAEsPVKEK	P12839	1095.54295	27.9137	3	2
268	EKAEEEGGsEEEVGDKsPQESK	P12839	2537.97696	26.0799	3	2
269	EGssEKDEGEQEEEGetAEGEGEAAEAKEEK	P12839	3644.34054	47.1177	3	2
270	EGssEKDEGEQEEEGETAEGEGEAAEAKEEK	P12839	3644.34054	47.1177	3	2
271	EGsSEKDEGEQEEEGETAEGEGEAAEAK	P12839	3178.18647	39.5437	3	1
272	EGssEKDEGEQEEEGETAEGEGEAAEAK	P12839	3178.18647	39.5437	3	1
273	EGSSEKDEGEQEEEGetAEGEGEAAEAK	P12839	3178.18647	39.5437	3	1
274	EGssEKDEGEQEEEGetAEGEGEAAEAK	P12839	3258.1489	35.1406	3	1
275	VSGsPSSGFR	P12839	1060.4445	27.6194	2	0
276	TPsPPEEAsPLPSPTASPNTLAPASPAPVRPR	O08838	3406.68477	75.3885	4	0
277	tPSPPEEAsPLPSPTASPNTLAPASPAPVRPR	O08838	3406.68403	73.8734	4	0
278	TPSPPEEAsPLPSPTASPNTLAPASPAPVRPR	O08838	3406.69844	73.108	4	0
279	tPSPPEEAsPLPSPtASPNTLAPASPAPVRPR	O08838	3486.64116	63.1206	3	0
280	TPsPPEEAsPLPSPTASPNTLAPASPAPVRPR	O08838	3486.64116	63.1206	3	0
281	TPSPPEEAsPLPsPTASPNTLAPASPAPVRPR	O08838	3486.66123	63.8621	4	0
282	IDVESTELASSESPQAAELEAGAPQEK	O08838	2866.28666	59.2772	3	0
283	IDVESTELASSESPQAAELEAGAPQEK	O08838	2866.28666	59.2772	3	0
284	TPSPPEEAsPLPsPTAsPNHTLAPASPAPVRPR	O08838	3566.62084	58.4988	4	0
285	AALPAGEGESPEGAKIDVESTELASSEsPQAAELEAGAPQEK	O08838	4310.91555	67.5244	4	1
286	AALPAGEGESPEGAKIDVESTELAssESPQAAELEAGAPQEK	O08838	4310.91555	67.5244	4	1
287	AALPAGEGEsPEGAKIDVEsTELASSESPQAAELEAGAPQEK	O08838	4310.94826	66.7688	4	1
288	AALPAGEGESPEGAKIDVESTELASSEsPQAAELEAGAPQEK	O08838	4310.94826	66.7688	4	1
289	AALPAGEGESPEGAKIDVEsTELAsSESPQAAELEAGAPQEK	O08838	4310.94826	66.7688	4	1
290	AALPAGEGEsPEGAK	O08838	1463.63978	27.5864	2	0
291	TPPSNLsPIEDAsPTEELR	O88778	2212.95217	60.8615	3	0
292	SKtPPSNLsPIEDAsPTEELR	O88778	2508.04036	58.8458	3	1
293	SKTPPSNLsPIEDAsPTEELR	O88778	2428.07995	61.0717	3	1
294	SKTPPsNLsPIEDASPTEELR	O88778	2428.08123	61.8296	3	1
295	SKtPPSNLsPIEDAsPTEELR	O88778	2428.08123	61.8296	3	1
296	SKTPPSNLsPIEDASPTEELR	O88778	2348.10013	69.8169	3	1
297	SKTPPSNLsPIEDAsPTEELR	O88778	2348.10013	69.8169	3	1
298	SLsDPKPLsPTAEESAKER	O88778	2201.96915	45.3098	3	1
299	ERSKtPPSNLsPIEDAsPTEELR	O88778	2793.19398	60.3889	3	2
300	GYSYFTGSSPLSPsTPsESPTFSPSK	O88778	2952.22051	74.7262	3	0
301	HSDSGSDSKHEASASsAAAAAAAR	O88778	2337.97275	60.1048	4	1

302	HSDSGsDSKHEASASSSSAAAAAAR	088778	2337.97275	60.1048	4	1
303	HSDSGSDSKHEASASSsAAAAAAR	088778	2337.97275	60.1048	4	1
304	HSDSGSDsKHEASASSSSAAAAAAR	088778	2337.97275	60.1048	4	1
305	HSDSGSDSKHEAsASSSSAAAAAAR	088778	2337.97275	60.1048	4	1
306	HSDSGSDSKHEASAsSSAAAAAAR	088778	2337.97275	60.1048	4	1
307	QKGsEENLDETR	D3ZZ99	1485.61986	27.7298	2	1
308	SPPDQSAVPNtPPStPVKLEGLPQEPTSR	A0A0G2JSM7	3243.50194	58.4215	3	1
309	EKsPPDQsAVPNTPPsTPVKLEGLPQEPTSR	A0A0G2JSM7	3580.61985	56.9462	4	2
310	EKSPPDQSAVPNtPPStPVKLEGLPQEPTSR	A0A0G2JSM7	3500.63479	63.592	3	2
311	EKsPPDQsAVPNTPPSTPVKLEGLPQEPTSR	A0A0G2JSM7	3500.63919	64.7928	3	2
312	EKSPPDQsAVPNTPPsTPVKLEGLPQEPTSR	A0A0G2JSM7	3500.64265	64.2456	4	2
313	EKSPPDQsAVPNTPPSTPVKLEGLPQEPTSR	A0A0G2JSM7	3420.67498	76.5272	4	2
314	EKSPPDQSAVPNtPPSTPVKLEGLPQEPTSR	A0A0G2JSM7	3420.67498	76.5272	4	2
315	EKSPPDQsAVPNTPPsTPVK	D3ZZ99	2235.99853	34.8245	3	1
316	EKsPPDQsAVPNTPPSTPVK	D3ZZ99	2236.00127	34.0558	3	1
317	KQKGsEENLDETR	D3ZZ99	1613.72124	44.1847	3	2
318	KSHSsPsLNPDAsPVTAK	D4A2Q3	2062.82767	33.6774	3	1
319	KSHSSPsLNPDAsPVTAK	D4A2Q3	1982.86543	42.2236	3	1
320	KSHssPSLNPDASPVTAK	D4A2Q3	1982.85609	42.9772	3	1
321	KsHsSPSLNPDASPVTAK	D4A2Q3	1982.85609	42.9772	3	1
322	KSHsSPSLNPDASPVTAK	D4A2Q3	1902.89879	59.8233	3	1
323	KsHSSPSLNPDASPVTAK	D4A2Q3	1902.90227	60.6085	3	1
324	KSHSsPSLNPDASPVTAK	D4A2Q3	1902.89879	59.8233	3	1
325	KSHSSPsLNPDASPVTAK	D4A2Q3	1902.89879	59.8233	3	1
326	SHSSPsLNPDAsPVTAK	D4A2Q3	1934.73489	33.4971	2	0
327	SHSSPsLNPDAsPVTAK	D4A2Q3	1854.77491	34.0266	2	0
328	SHssPSLNPDASPVTAK	D4A2Q3	1854.77271	34.794	2	0
329	SHSSPsLNPDASPVTAK	D4A2Q3	1774.80478	43.5711	3	0
330	SHsSPSLNPDASPVTAK	D4A2Q3	1774.80478	43.5711	3	0
331	SHSsPSLNPDASPVTAK	D4A2Q3	1774.80478	43.5711	3	0
332	sHSSPSLNPDASPVTAK	D4A2Q3	1774.80185	42.8135	3	0
333	REsPSPAPKPR	B2RYB3	1301.64016	33.4202	3	1
334	RESPsPAPKPR	B2RYB3	1301.64016	33.4202	3	1
335	RsPsPAPPPPPPPPR	B2RYB3	1803.83776	29.8342	3	1
336	RRsPsPAPPPPPPPPR	B2RYB3	1959.94248	48.7441	3	2
337	KVELsEsEEDKGSK	B2RYB3	1724.70316	29.3656	3	2
338	TRHsPTPQQSNR	B2RYB3	1488.66952	31.8176	3	1
339	tRHsPTPQQSNR	B2RYB3	1488.66733	31.0564	3	1
340	HRPSsPAtPPP	B2RYB3	1431.61576	23.9768	3	0
341	KEtEsEAEDDNLLDDLER	B2RYB3	2167.80153	49.1338	3	1
342	KPPAPPSPVQsQsPsTNWSPAAPAK	B2RYB3	2767.18297	47.3808	3	0
343	EKsPELPEPSVR	B2RYB3	1447.68407	47.9666	3	1
344	tAsPPPPPK	B2RYB3	1051.42547	19.7736	2	0
345	RRsPsPPPAR	B2RYB3	1280.56557	23.077	3	2

346	SVsGsPEPTAK	B2RYB3	1219.46285	19.021	2	0
347	SDAAPAAsDSKPSSAEPAPSSK	A0A0G2K1L8	2137.91986	25.2184	3	0
348	SDAAPAASDsKPSSAEPAPSSK	A0A0G2K1L8	2137.91986	25.2184	3	0
349	AEPEKsEGAAEEQPEPAPAPEQEAAAPGPAGPAAGGEAPK	A0A0G2K1L8	3645.6161	41.7643	4	1
350	KSLDsDEsEDED-DDDYQQK	A0A0N8ET21	2305.7944	29.7284	3	1
351	SLDsDESEDEDDDYQQK	A0A0N8ET21	2097.72467	30.4866	2	0
352	SLDsDEsEDED-DDDYQQK	A0A0N8ET21	2177.69562	30.3747	3	0
353	SLDsDESEDEDDDYQQKR	A0A0N8ET21	2253.82803	34.1	3	1
354	SLDsDEsEDED-DDDYQQKR	A0A0N8ET21	2333.79224	29.6625	2	1
355	TREQESsGEEDNDLSPEER	P50411	2286.90691	34.8118	3	1
356	TREQEsSGEEDNDLSPEER	P50411	2286.90691	34.8118	3	1
357	TREQEsSGEEDNDLSPEER	P50411	2366.85578	31.1478	3	1
358	TREQESsGEEDNDLsPEER	P50411	2366.86622	27.853	3	1
359	TREQESsGEEDNDLsPEEREK	P50411	2624.01903	33.542	3	2
360	TREQEsSGEEDNDLsPEEREK	P50411	2624.01207	34.302	3	2
361	EQEsSGEEDNDLSPEER	P50411	2109.72001	30.0499	2	0
362	TSAsPPLEKsGDEGSDEAASGED	A0A0G2K7X3	2524.91185	29.595	3	1
363	NSQEDsEDsEEKDVK	A0A0G2K7X3	1898.65583	20.6491	2	1
364	NSQEDSEDsEEKDVK	A0A0G2K7X3	1818.68926	24.2699	2	1
365	TSAsPPLEK	A0A0G2K7X3	1009.45897	23.5615	2	0
366	SGKNSQEDsEDsEEKDVK	A0A0G2K7X3	2170.79988	23.8815	3	2
367	RSSsELsPEIVEK	A0A0G2K2M9	1620.68621	42.4886	2	1
368	NHsGsRTPPVALSSSR	A0A0G2K2M9	1812.77806	37.4482	3	1
369	SSsPVTELTERSsPVQDK	A0A0G2K2M9	2089.96533	44.2796	3	2
370	SSRRSssELsPEIVEK	A0A0G2K2M9	2030.81849	41.6011	3	2
371	sLsGSSPcPK	A0A0G2K2M9	1179.41639	21.3981	2	0
372	SSsVsSPELKDGGLPR	A0A0G2K2M9	1718.73638	45.9207	2	1
373	SSSVssSPELKDGGLPR	A0A0G2K2M9	1718.73686	46.3146	3	1
374	AQSGtDssPEHKIPAPR	A0A0G2K2M9	2017.78286	33.6761	3	1
375	SSsPVTELAR	A0A0G2K2M9	1227.55879	39.5234	2	0
376	sRtPPVTR	A0A0G2K2M9	1073.45304	20.1205	3	1
377	sLTRsPPAIR	A0A0G2K2M9	1257.57872	34.3349	3	1
378	SLtRsPPAIR	A0A0G2K2M9	1257.57872	34.3349	3	1
379	sLsGsSPcPK	A0A0G2K2M9	1259.37942	20.036	2	0
380	SLsYsPVER	A0A0G2K2M9	1197.45543	35.4031	2	0
381	sRsVsPcPK	A0A0G2K2M9	1257.41116	18.9944	2	1
382	SPAVsPSKASEDAK	F8WFS9	1453.65408	26.2135	2	1
383	KLEQEQEGERKDAATEEPGsPVK	F8WFS9	2479.12676	48.6889	3	2
384	AGTKsPAVsPSKASEDAK	F8WFS9	1890.82337	26.9177	3	2
385	AGtKSPAVSPSKAsEDAK	F8WFS9	1890.82357	26.8659	2	2
386	STPAsPVQsPTR	F8WFS9	1387.56493	20.9576	2	0
387	LEQEQEGERKDAATEEPGSPVKsTPAsPVQsPTR	F8WFS9	3719.58622	34.0048	4	2
388	LEQEQEGERKDAAtEEP GSPVKsTPAsPVQsPTR	F8WFS9	3719.58622	34.0048	4	2
389	AGTKsPAVSPSK	F8WFS9	1209.58725	20.989	2	1

390	SKESVPEFPLsPPK	P16949-2	1621.79339	76.0474	2	1
391	DLSLEEIQKK	P16949-2	1282.62891	51.2589	2	1
392	DLSLEEIQK	P16949-2	1154.5413	49.4146	2	0
393	ASGQAFELILsPR	P16949-2	1468.7179	79.6772	2	0
394	ESVPEFPLsPPKKK	P16949-2	1662.85149	83.0152	3	2
395	KKDLsLEEIQK	P16949-2	1410.73032	73.0669	3	2
396	ESVPEFPLsPPK	P16949-2	1406.66305	68.704	2	0
397	FTGYQTIQQQSSsETEGEGGNTADAssEEGDRVEDGK	Q923W4	4263.61856	48.2	3	1
398	FTGYQTIQQQSSsETEGEGGNTADAsSEEGDRVEDGK	Q923W4	4263.61856	48.2	3	1
399	FTGYQtIQQQSSSEtEGEGGNtADASSEEGDRVEDGK	Q923W4	4263.59512	49.3711	3	1
400	FTGYQTIQQQSSSETEGEGGNTADAssEEGDRVEDGK	Q923W4	4183.63856	49.0878	3	1
401	QSRsPLPSHAR	I7FKL4	1315.62482	40.5819	3	1
402	QsRSPLPSHAR	I7FKL4	1315.62482	40.5819	3	1
403	NIVTPRtPPPSQGK	P02688-4	1571.796	33.6191	3	1
404	NIVtPRTPPPSQGK	P02688-4	1571.79333	31.7568	2	1
405	TTHYGLPQKsQR	P02688-4	1582.73947	49.5812	3	1
406	FsWGAEGQKPGFGYGGR	I7FKL4	1880.81502	75.9168	3	0
407	TTHYGsLPQK	P02688-4	1211.54672	35.0631	2	0
408	RGsGKDSHTR	P02688-4	1180.52328	75.663	3	2
409	FsWGGR	P02688-4	789.30751	49.5647	2	0
410	ERPKtPPSNLSPIEDASPTEELR	Q9JKS6	2723.24266	72.3896	3	1
411	ERPKtPPSNLSPIEDAsPTEELR	Q9JKS6	2723.24266	72.3896	3	1
412	ERPKTPPSNLsPIEDAsPTEELR	Q9JKS6	2723.24266	72.3896	3	1
413	ERPKtPPSNLsPIEDAsPTEELR	Q9JKS6	2803.20563	61.3722	3	1
414	SScSEySPSIEsDPEGFEIsPEKIIEVQK	Q9JKS6	3511.42226	87.5006	3	1
415	NLAKGVTStsDsEEDDDQEGEKKR	F1SW39	2895.20031	43.6477	4	2
416	NLAKGVTsTsDSEEDDDQEGEKKR	F1SW39	2895.18884	41.3778	4	2
417	NLAKGVTsTSDsEEDDDQEGEKKR	F1SW39	2895.18884	41.3778	4	2
418	NLAKGVTsTSDSEEDDDQEGEKKR	F1SW39	2895.18884	41.3778	4	2
419	NLAKGVTStsDsEEDDDQEGEK	F1SW39	2611.00061	29.4277	3	0
420	NLAKGVTsTSDSEEDDDQEGEK	F1SW39	2610.97939	29.3885	2	0
421	NLAKGVTsTsDSEEDDDQEGEK	F1SW39	2610.97939	29.3885	2	0
422	NLAKGVTsTSDsEEDDDQEGEK	F1SW39	2610.97939	29.3885	2	0
423	QSNAsSDVEAAEKETSVSKEDTDQEEK	F1SW39	3079.27412	48.3264	3	2
424	QSNAsDVEAAEKETSVSKEDTDQEEK	F1SW39	3079.27412	48.3264	3	2
425	RPPsPEPSAK	A0A0G2K8W9	1145.53374	23.5972	2	0
426	TSsKEsSPVPSPTSDR	A0A0G2K8W9	1821.72934	25.5585	3	1
427	TSSKEssPVPSPTSDR	A0A0G2K8W9	1821.72856	25.577	2	1
428	TssKEssPVPSPTSDR	A0A0G2K8W9	1821.72934	25.5585	3	1
429	TSsKEssPVPSPTSDR	A0A0G2K8W9	1901.69648	22.2134	2	1
430	AQLPTSVVTITSEsPGKR	A0A0G2K8W9	2139.07488	64.9572	3	1
431	AQLPTSVVTITSEsSPGKR	A0A0G2K8W9	2139.07488	64.9572	3	1
432	AQLPTSVVTITsESSPGKR	A0A0G2K8W9	2139.0747	64.1942	3	1
433	tSSKEssPVPSPTSDRK	A0A0G2K8W9	1869.85837	40.4923	3	2

434	TSsKESSPVPSPTSDRK	A0A0G2K8W9	1869.85837	40.4923	3	2
435	TSSKEsSPVPSPTSDRK	A0A0G2K8W9	1869.85837	40.4923	3	2
436	TsKESSPVPSPTSDRK	A0A0G2K8W9	1869.85837	40.4923	3	2
437	TSSKEsSPVPSPTSDRK	A0A0G2K8W9	1869.85837	40.4923	3	2
438	TSSKEssPVPsPTSDRK	A0A0G2K8W9	2029.78896	20.9162	2	2
439	TSSKEsSPVPsPTSDRK	A0A0G2K8W9	1949.82427	25.3214	3	2
440	DSSSSSSSSSDsDSDGEEHGSDIGPR	G3V644	2737.97823	26.4462	3	0
441	DSSSSSSSSSDDsDGEEHGSDIGPR	G3V644	2737.97823	26.4462	3	0
442	DSSSSSSSSsDsDsDGEEHGSDIGPR	G3V644	2897.90839	26.4323	3	0
443	DSSSSSSSSSDsDsDGEEHGSDIGPR	G3V644	2817.94084	25.7269	3	0
444	NLsSEEVARPR	F1M1Y0	1337.61651	34.9282	2	0
445	AVPAAtPPRtGSPLTVATGNDQAATEAK	F1M1Y0	2781.28299	48.6201	3	1
446	AVPAAtPPRTGsPLTVATGNDQAATEAK	F1M1Y0	2781.28299	48.6201	3	1
447	AVPATPPRtGSPLtVATGNDQAATEAK	F1M1Y0	2781.28537	46.3298	3	1
448	WVHFSDAsPEHVtPELTPR	F1M1Y0	2365.01191	79.5674	3	0
449	WVHFsDAsPEHVTPELTPR	F1M1Y0	2365.01869	81.1023	3	0
450	WVHFsDAsPEHVtPELTPR	F1M1Y0	2444.98111	73.2177	3	0
451	EKVVtPPAAsDIPADSPAPGPPGPPGSAGPPGPPGPR	F1M1Y0	3471.71032	63.4465	4	1
452	EKVVTPPAAsDIPADSPAPGPPGPPGSAGPPGPPGPR	F1M1Y0	3471.71032	63.4465	4	1
453	EGKPEDEVEPEDEEKsDEEEKPDKK	M0RBL8	3024.27436	87.554	4	2
454	GTDDsPKNSQEDLQDR	M0RBL8	1884.75753	27.2063	2	1
455	GtDDSPKNSQEDLQDR	M0RBL8	1884.75753	27.2063	2	1
456	GTDDSPKNsQEDLQDR	M0RBL8	1884.75819	28.3514	3	1
457	EGKPEDEVEPEDEEKsDEEEKPDK	M0RBL8	2896.19298	54.5422	4	1
458	sLQLAER	A0A0G2K1Y8	1153.52629	41.4672	2	0
459	QSRPVAGGPAGAPPAsPsPQR	P09951	2566.19731	38.5001	4	0
460	DASPGRGSHsQTPsPGALPLGR	P09951	2305.01492	52.7585	3	1
461	DAsPGRGSHSQTPSPGALPLGR	P09951	2225.05268	67.1523	3	1
462	DASPGRGSHSQTPsPGALPLGR	P09951	2225.04955	66.8177	4	1
463	DASPGRGSHSQtpSPGALPLGR	P09951	2225.04955	66.8177	4	1
464	DASPGRGSHSQTPSPGALPLGR	P09951	2225.04955	66.8177	4	1
465	DASPGRGsHSQTPSPGALPLGR	P09951	2225.0514	67.9196	3	1
466	SKEPSSPGTDDVFTPgpsDsPGSQR	P26431	2612.12634	54.3764	3	1
467	ADLPVITIDPAsPQsPESVDLVNEELKGK	P26431	3221.52748	87.7693	3	1
468	ADLPVITIDPAsPQsPESVDLVNEELK	P26431	3036.42036	89.8161	3	0
469	KEDsDEDEDEDEDDsDEDEDEDEFEPVVK	Q5U328	3962.32109	60.8318	3	1
470	KEDsDEDEDEDEDDsDEDEDEDEFEPVVK	Q5U328	3882.34512	61.6196	3	1
471	StSPPPSPEVWAESR	B2GUY4	1706.74738	55.3647	2	0
472	sSTSPPSPEVWAESR	B2GUY4	1706.74738	55.3647	2	0
473	STsPPPSPEVWAESR	B2GUY4	1706.74738	55.3647	2	0
474	SSsLPSYGR	B2GUY4	1033.43269	30.8558	2	0
475	KGAEeeeeEDDDsEEEIK	B2GUY4	2318.8528	35.1368	2	1
476	TsPAKQQAPPVR	A0A0P6JBR9	1359.67637	25.8862	3	1
477	tSPAkQQAPPVR	A0A0P6JBR9	1359.67655	25.5903	3	1

478	TVtPASSAKtSPAK	A0A0P6JBR9	1505.66512	19.4077	2	1
479	tVTPASSAKTsPAK	A0A0P6JBR9	1505.66512	19.4077	2	1
480	TVtPASSAKtSPAKQQAPPVR	A0A0P6JBR9	2282.08978	29.2722	3	2
481	TVTPASSAKtSPAK	A0A0P6JBR9	1425.69684	21.7453	2	1
482	TVTPASSAKTsPAK	A0A0P6JBR9	1425.69684	21.7453	2	1
483	TsLAAEENDssSEGPEEEIPPLTSSGETGPPVPR	D3ZKX8	3706.51788	77.8367	4	0
484	TSLAAEENDssSEGPEEEIPPLTSSGETGPPVPR	D3ZKX8	3706.52455	77.649	3	0
485	AVDssEEIEVEVPVVDRR	D3ZKX8	2354.96053	67.5069	3	1
486	AVDssSEEIEVEVPVVDRR	D3ZKX8	2274.98731	66.8097	3	1
487	AVDSsEEIEVEVPVVDRR	D3ZKX8	2274.99482	66.0465	3	1
488	SLPELDRKsDsETEGLVFAR	A0A0G2K0F3	2524.10949	81.6017	3	2
489	DLKGPSQEQDEsGGIEDsPDRGAcSTPELPQFESVK	A0A0G2K0F3	4008.71007	73.1584	3	2
490	DLKGPSQEQDESGGIEDsPDRGAcSTPELPQFESVK	A0A0G2K0F3	3928.72267	81.3098	4	2
491	DLKGPSQEQDEsGGIEDsPDRGAcSTPELPQFESVK	A0A0G2K0F3	4088.65069	70.1111	4	2
492	DLKGPSsQEDEsGGIEDsPDRGAcSTPELPQFESVK	A0A0G2K0F3	4088.65069	70.1111	4	2
493	NDGVKESSESNTtIEDEDTKVR	A0A091DNE7	2794.07765	33.96	3	2
494	ESSEStNttIEDEDTKVR	A0A091DNE7	2280.82708	30.5921	3	1
495	ESsEstNTTIEDEDTKVR	A0A091DNE7	2280.81379	30.1993	2	1
496	ESSESTNttIEDEDTKVR	A0A091DNE7	2200.8469	30.8021	3	1
497	TSNsTEKTPsPPEPEPAGTAQK	Q3ZB98-4	2414.01307	26.9605	3	1
498	TSNStEKtPSPPEPEPAGTAQK	Q3ZB98-4	2414.01307	26.9605	3	1
499	KTSNsTEKTPsPPEPEPAGTAQK	Q3ZB98-4	2542.12247	33.3834	3	2
500	KtSNSTEKTPsPPEPEPAGTAQK	Q3ZB98-4	2542.12247	33.3834	3	2
501	KTSNStEKtPSPPEPEPAGTAQK	Q3ZB98-4	2542.10415	31.1037	3	2
502	KtSNStEKTPSPPEPEPAGTAQK	Q3ZB98-4	2542.11166	30.3466	3	2
503	KTsnSTEKTPSPPEPEPAGTAQK	Q3ZB98-4	2542.11166	30.3466	3	2
504	EKSPPDQsAVPNTPPsTPVKLEGAGDGcAK	D3ZZ99	3194.42649	54.1692	4	2
505	EKsPPDQsAVPNTPPSTPVKLEGAGDGcAK	D3ZZ99	3194.42827	54.2293	3	2
506	GATPAEDDEDNDIDLFGsDEEEEDEKAAAR	Q68FR9-2	3262.27645	70.7448	3	1
507	KGATPAEDDEDNDIDLFGsDEEEEDEKAAAR	Q68FR9-2	3390.37029	83.901	3	2
508	TGDLGIPPNPEDRsPsPEPIYNSEGK	A0A1S3FKT6	2926.27011	60.9722	3	1
509	TGDLGIPPNPEDRsPsPEPIYNSEGKR	A0A1S3FKT6	3082.36164	61.3314	3	2
510	TDSERTDTAADGETsATEsDQEEDAEKL	G3V874	3161.18112	33.9726	3	1
511	TDSERTDtAADGETsAtESDQEEDAEKL	G3V874	3241.17065	34.1025	3	1
512	TDTAADGETsATEsDQEEDAEKL	G3V874	2572.94805	34.2172	3	0
513	TDTAADGETsAtESDQEEDAEKL	G3V874	2572.94805	34.2172	3	0
514	TDtAADGETsAtESDQEEDAEKL	G3V874	2652.8993	35.2326	3	0
515	NISLssEEEAEGLAGHPR	D3ZKQ4	2055.84916	56.792	3	0
516	AERGGssGEELEDEEPVK	Q925G1	2077.79762	36.0219	3	1
517	GGssGEELEDEEPVK	Q925G1	1721.61907	38.7855	2	0
518	AERGGssGEELEDEEPVKK	Q925G1	2205.89584	39.0185	3	2
519	RGsGSVDETLFALPAASEPVIPSSAEK	F1LQN3	2795.35975	89.8148	3	1
520	RGSGsVDETLFALPAASEPVIPSSAEK	F1LQN3	2795.35975	89.8148	3	1
521	RGSGSVDEtLFALPAASEPVIPSSAEK	F1LQN3	2795.35975	89.8148	3	1

522	KAQIITEKtSPK	F1LQN3	1423.75762	47.9654	3	2
523	KAQIITEKTsPK	F1LQN3	1423.75762	47.9654	3	2
524	TEARSSDEENGPPsSPDLDR	D3ZH75	2318.878	29.6113	3	1
525	tEARSSDEENGPPsSPDLDR	D3ZH75	2318.878	29.6113	3	1
526	TEARssDEENGPPsSPDLDR	D3ZH75	2398.8439	29.59	3	1
527	EGsPLKEEsLAREDsPLSSPSSQPGTPDEQLVLGK	Q5RJL0	3824.75625	74.3643	4	2
528	EGSPLKEEsLAREDsPLSSPSSQPGTPDEQLVLGK	Q5RJL0	3824.75193	74.3118	3	2
529	EGsPLKEESLAR	Q5RJL0	1395.65005	42.4808	3	1
530	YREGsPLKEESLAR	Q5RJL0	1714.81914	68.4671	3	2
531	yREGSPLKEESLAR	Q5RJL0	1714.82445	67.7005	3	2
532	SVKEDSLSTGAEENTSNsTEKTPsPPEPEPAGTAQK	Q3ZB98-3	3860.66978	43.6733	4	2
533	SVKEDSLSTGAEENTSNsEKtPSPPPEPEPAGTAQK	Q3ZB98-3	3860.66978	43.6733	4	2
534	YGPVSVADTTGSGAADAKDDDDIDLFGsDDEESEDAKR	B5DEN5	4142.70336	85.4457	4	2
535	RAsVcAEAYNPDEEEDDAESR	G5C2D5	2492.94461	46.8907	3	1
536	TNSPDLDSSQSLLssGADQEPLQR	A0A0G2JTB5	2705.15058	60.6556	3	0
537	TSSPssAGSVSLGHYTPTSR	A0A0G2JTB5	2138.87603	46.6615	3	0
538	TssPSSAGSVSLGHYTPTSR	A0A0G2JTB5	2138.87603	46.6615	3	0
539	EGGGDSSASSPtEEEQEQQGEISAcSDEGTAQEGK	A0A0G2K613	3603.30593	33.9868	3	0
540	EGGGDSSASsPTEEEQEQQGEIsAcSDEGTAQEGK	A0A0G2K613	3603.30043	37.9032	3	0
541	EGGGDsSASSPtEEEQEQQGEISAcSDEGTAQEGK	A0A0G2K613	3523.35815	34.9934	3	0
542	EGGGDSSASsPTEEEQEQQGEISAcSDEGTAQEGK	A0A0G2K613	3523.35815	34.9934	3	0
543	EGGGDSSAsSPTEEEQEQQGEISAcSDEGTAQEGK	A0A0G2K613	3523.35815	34.9934	3	0
544	EGGGDsSASSPtEEEQEQQGEISAcSDEGTAQEGK	A0A0G2K613	3523.35815	34.9934	3	0
545	RTsPSKPSSAPALRPGPK	A0A0G2JW88	1913.99416	76.3261	4	1
546	RtSPSKPSSAPALRPGPK	A0A0G2JW88	1914.00234	77.0828	4	1
547	TsPSKPSSAPALRPGPK	A0A0G2JW88	1757.89538	45.9132	3	0
548	TSPsKPSSAPALRPGPK	A0A0G2JW88	1757.89538	45.9132	3	0
549	tSPSKPSSAPALRPGPK	A0A0G2JW88	1757.89538	45.9132	3	0
550	AAVGLtGNDIATPPNKEELPPsPEKK	A0A0G2JW88	2704.3147	55.4978	3	2
551	SAssDTsEELNAQDSPK	Q9JJ19	2005.6712	27.5396	2	0
552	SASSDTsEELNAQDSPK	Q9JJ19	1925.70084	26.8737	2	0
553	sAsSDTSEELNAQDSPK	Q9JJ19	1925.72086	29.9552	2	0
554	SAssDTSEELNAQDSPK	Q9JJ19	1925.72086	29.9552	2	0
555	KLEKEEEEGISQEsSEEEQ	A0A0P6J786	2396.93356	34.3656	3	2
556	AANKtPPKsPGDPAK	A0A0G2K2D6	1638.72536	22.4036	3	2
557	AANKtPPKSPGDPAK	A0A0G2K2D6	1558.75983	31.132	3	2
558	AEDGAAPsPSSETPK	F1LMW7	1523.62127	24.4844	2	0
559	GEAAAERPGEAAVASSPsK	F1LMW7	1864.84824	29.3972	3	0
560	GEAAAERPGEAAVASSsPSK	F1LMW7	1864.84824	29.3972	3	0
561	GEAAAERPGEAAVAsSPSK	F1LMW7	1864.84824	29.3972	3	0
562	GVТАSSSsPPASVPK	A0A0G2K0M8	1451.67434	27.6769	2	0
563	GVТАSSSPPAsVPK	A0A0G2K0M8	1451.67434	27.6769	2	0
564	GLDPEPTQPGTVKNPTEAATAPAsPK	A0A0G2K0M8	2654.26234	46.9165	3	1
565	AAFsKDESKEPIVEVR	A0A0G2K0M8	1884.91273	70.4011	3	2

566	AAFSKDEsKEPIVEVR	A0A0G2K0M8	1884.91273	70.4011	3	2
567	VQTtPPPTIQGQK	A0A1S3FNU0	1474.72827	27.2853	2	0
568	VQtTPPPTIQGQK	A0A1S3FNU0	1474.72827	27.2853	2	0
569	VGSLtPPSsPK	A0A1S3FNU0	1229.52399	30.1005	2	0
570	VGSLtPPSsPKTQR	A0A1S3FNU0	1614.72887	29.5925	3	1
571	NVEDtDGSSPEDLMAALTGTEEK	Q6RJR6	2569.00825	89.6885	2	0
572	NVEDTDGssPEDLMAALTGTEEK	Q6RJR6	2569.00825	89.6885	2	0
573	VVSStsEEEEAFTEK	A0A091CN57	1831.694	45.3887	2	0
574	VVSsTsEEEEAFTEK	A0A091CN57	1831.694	45.3887	2	0
575	VVssTsEEEEAFTEK	A0A091CN57	1911.65972	50.7208	2	0
576	GNAEGssDEEGKLVIDEPAKEK	A0A0P6JDF1	2462.04945	49.9989	3	2
577	sRsGSIIGSR	D4A720	1179.49012	28.4674	2	1
578	sGsIIGSR	D4A720	936.3578	25.7002	2	0
579	sRsGsIIGSR	D4A720	1259.45755	25.6178	2	1
580	sGSIIGSR	D4A720	856.39202	27.8316	2	0
581	KAEAAAAPAVPGAQPQGHVSPTPAAttSPGEKGEAGTPVAAGT TAAAIPR	A0A0G2K9C5	4715.30204	68.6616	5	2
582	KAEAAAAPAVPGAQPQGHVSPTPATtSPGEKGEAGtPVAAGT TAAAIPR	A0A0G2K9C5	4715.30204	68.6616	5	2
583	KAEAAAAPAVPGAQPQGHVsPTPATsPGEKGEAGTPVAAG TTAAAIPR	A0A0G2K9C5	4715.30204	68.6616	5	2
584	KAEAAAAPAVPGAQPQGHVsPTPATsPGEKGEAGTPVAAG TTAAAIPR	A0A0G2K9C5	4715.30204	68.6616	5	2
585	KAEAAAAPAVPGAQPQGHVsPtPAtTSPGEKGEAGTPVAAGT TAAAIPR	A0A0G2K9C5	4715.30204	68.6616	5	2
586	SSGsLsPGLETEDPLEAR	D3ZF26	2004.82476	63.8673	2	0
587	ASRVPssDEEVVEEPQSR	D3ZF26	2160.8796	35.3116	3	1
588	GEGAQDEEEGGAssDATEGHDEDDEIYEGERYQGIPR	A0A1S3F2Q2	4001.49944	61.041	4	0
589	GEGAQDEEEGGASsDAtEGHDEDDEIYEGERYQGIPR	A0A1S3F2Q2	4001.49944	61.041	4	0
590	GEGAQDEEEGGASSDAtEGHDEDDEIyERGEYQGIPR	A0A1S3F2Q2	4001.49944	61.041	4	0
591	LEREDssEEEEEEIDDEEIER	D4ACM9	2769.02519	49.7878	3	1
592	IVEPEVVGEsDsEVEGDAWR	D4ACM9	2361.94504	70.4929	2	0
593	RNSssPVsPASVPGQR	A0A1S3F6J8	1865.73534	27.4337	2	1
594	RNSssPVSPASVPGQR	A0A1S3F6J8	1785.76711	29.5987	3	1
595	RNssSPVSPASVPGQR	A0A1S3F6J8	1785.76711	29.5987	3	1
596	SRVNssGEsGGESDEFLQSR	B2GUV7	2367.85517	46.5621	3	1
597	SRVNssGEsGGEsDEFLQSR	B2GUV7	2367.85737	44.1951	3	1
598	SRVNssGESGGESDEFLQSR	B2GUV7	2287.89202	46.764	3	1
599	sRVNsSGESGGESDEFLQSR	B2GUV7	2287.89202	46.764	3	1
600	SRVNssGEsGGESDEFLQSR	B2GUV7	2287.89202	46.764	3	1
601	RHstEGPEDPPPWAEK	Q5BJT1	1912.81962	82.2146	3	1
602	RHsTEGPEDPPPWAEK	Q5BJT1	1912.81962	82.2146	3	1
603	RNtAPEAQESGLPSGLR	Q5BJT1	1862.88224	53.7148	3	1
604	EGEEPTVYsDDEEPKDEAAR	P70580	2345.93784	39.4411	3	1

605	EGEEPTVySDDEEPKDEAAR	P70580	2345.93784	39.4411	3	1
606	SPDRTEEVLSPDGSPSKsPSK	G3V9D7	2280.0368	52.591	3	2
607	SPDRTEEVLSPDGSPSKSPsK	G3V9D7	2280.0368	52.591	3	2
608	SPDRTEEVLSPDGSPsKSPSK	G3V9D7	2280.0368	52.591	3	2
609	SPDRTEEVLSPDGSPsKsPSK	G3V9D7	2360.0071	38.2179	3	2
610	SAsSPKPDTKVPQATAEAK	B7X6I3	1992.96148	40.7493	3	1
611	SASsPKPDTKVPQATAEAK	B7X6I3	1992.96148	40.7493	3	1
612	sASSPKPDTKVPQATAEAK	B7X6I3	1992.96148	40.7493	3	1
613	ENSAAPSPIRHSTsPAKEEQK	Q920Q0	2441.14913	63.113	4	1
614	ENSAAPSPIRHStSPAKEYEQK	Q920Q0	2441.14913	63.113	4	1
615	ENSAAPSPIRHsTSPAKEYEQK	Q920Q0	2441.14913	63.113	4	1
616	ENSAAPSPIRHsTsPAKEYEQK	Q920Q0	2521.0996	41.2675	3	1
617	ENSAAPSPIRHStsPAKEYEQK	Q920Q0	2521.0996	41.2675	3	1
618	ENSAAPsPIRPHsTSPAKEYEQK	Q920Q0	2521.10784	40.5062	3	1
619	WAsSREETGAPVEDSPGQAK	O35314	2181.94751	40.2204	3	1
620	WAsSREETGAPVEDSPGQAK	O35314	2181.94751	40.2204	3	1
621	WASSREEtGAPVEDSPGQAK	O35314	2181.94751	40.2204	3	1
622	VDNEEWtGGGGHsREAVDDQESLHPSNQQVSK	O35314	3572.54661	75.3155	4	1
623	VDNEEWtGGGGHsREAVDDQESLHPSNQQVSK	O35314	3572.54661	75.3155	4	1
624	AQQQQQQQQQQQQQQQQQQQQQQHsFEDELSEVFENQSPAACK	Q5PPG5	4835.17171	87.0504	4	0
625	AQQQQQQQQQQQQQQQQQQQQQQHsSFEDELSEVFENQSPAACK	Q5PPG5	4835.17171	87.0504	4	0
626	AQQQQQQQQQQQQQQQQQQQQQQHSSFEDELsEVFENQSPAACK	Q5PPG5	4835.17171	87.0504	4	0
627	VKEVHDELEDLPsPPPPLsPPPTTsPHKQTEDK	A0A091CWS6	3881.72591	87.3473	4	2
628	EVHDELEDLPsPPPPLsPPPTTSPHKQTEDK	A0A091CWS6	3574.58616	84.2229	4	1
629	EVHDELEDLPsPPPPLsPPPTTsPHKQTEDK	A0A091CWS6	3654.57849	72.5263	4	1
630	QNSDPTsEGPGPSPNPPSWVRPDNEAPPKVPQR	A0A1S3EWI0	3614.67766	73.7177	4	1
631	QNSDPTSEGPGPSPNPPSWVRPDNEAPPKVPQR	A0A1S3EWI0	3614.67766	73.7177	4	1
632	QNsDPTSEGPGPSPNPPSWVRPDNEAPPKVPQR	A0A1S3EWI0	3614.67766	73.7177	4	1
633	QAEVADQQTTDLPAENGETENQsPAsEEEKEAK	Q5U1W8	3733.53616	40.4287	4	1
634	SQSSdTEQPSPtSGGGK	Q5RKG9	1809.65668	18.7972	2	0
635	SQSSdTEQPSPtSGGGK	Q5RKG9	1729.68778	19.1533	2	0
636	SQSSdTEQPSPtSGGGK	Q5RKG9	1729.68778	19.1533	2	0
637	KKSPAtPQAKPEGAAGAAAEEEDEYSGLc	A0A0G2K350	3228.39666	83.5289	4	2
638	KKsPATPQAKPEGAAGAAAEEEDEYSGLc	A0A0G2K350	3228.39666	83.5289	4	2
639	RVEsEEsGDEEGKK	A0A1S3GJR3	1738.65962	20.7959	3	2
640	RVEsEEsGDEEGKK	A0A1S3GJR3	1658.69006	29.7669	3	2
641	SAssGAEGDVSSEREP	B0K014	1724.60332	27.7537	2	1
642	DIIRQPsEEEIIK	A0A091CMD4	1649.81423	59.6827	2	1
643	QPSEEEIIK	A0A091CMD4	1152.51982	34.7699	2	0
644	RGsGDTSSLIDPDTSLSLR	G5BR57	2185.98956	80.974	3	1
645	RGSGDTsSLIDPDTSLSLR	G5BR57	2186.00164	80.2026	3	1
646	RGSGDTsLIDPDTSLSLR	G5BR57	2186.00164	80.2026	3	1
647	RGSGDtSSLIDPDTSLSLR	G5BR57	2186.00164	80.2026	3	1
648	KQtPPASPSPQPAEDRPPSsPIYEDAAPLK	D3ZGE6	3331.50781	61.4509	3	1

649	AKPAAQSEEETAAAsPAAsPTPQSAQEPEPSAPGK	Q4G061	3251.39781	29.4648	3	0
650	AKPAAQSEEetAASPAASPtPQSAQEPEPSAPGK	Q4G061	3251.39781	29.4648	3	0
651	AEEEGGsDGsAAEAEPR	Q4G061	1821.61894	21.3028	2	0
652	RAPPGPLPPAASPGLPPAAsPPAAPsSPR	Q9JKA9	2728.30478	49.7578	3	1
653	SEsPKEPEQLRK	A0A0P6JBQ6	1507.71695	43.9668	3	2
654	SEsPKEPEQLR	A0A0P6JBQ6	1379.61754	33.769	3	1
655	TADsssSEDEEEYVVEK	A0A091CSL1	2143.68628	46.6277	2	0
656	TADSsssEDEEEYVVEK	A0A091CSL1	2143.68628	46.6277	2	0
657	ERsPALKsPLQSVVVR	G5C6F8	1925.96694	65.3365	3	2
658	VLHAQcHSTPDsAEDVR	Q7TP75	2001.85179	49.2052	3	0
659	IDASKNEEDEGHNSNsSPR	Q9JJ54	2051.83476	29.7183	3	1
660	IDASKNEEDEGHNSNsPR	Q9JJ54	2051.83476	29.7183	3	1
661	TAKDsDDDDDTVTVDRDR	A0A0P6JWE4	2217.91121	53.3452	3	2
662	VAAAGSGPsPPCsPGHDRER	Q99M64	2164.85427	29.2986	3	1
663	TsPcQsPTAPEYSAPSLSPIRPSR	Q62910	2659.17029	60.6505	3	0
664	APELLGPEDQLVLGPEQPEDEVGEssDEEPVESR	Q9Z1H9	3835.63534	86.9614	3	0
665	AFGEssTEsDEDEEEGcGHTHcVR	Q6MFY6-2	2964.93003	37.8655	3	0
666	KKEPAISSQNsPEAR	Q4KLL0	1721.81815	47.4626	3	2
667	VQIPVSHPDPPVsDNEDDsYDEDVHDPR	A0A0G2K2P5	3448.35459	58.9618	3	0
668	VQIPVSHPDPPVsDNEDDsYDEDVHDPR	A0A0G2K2P5	3448.35459	58.9618	3	0
669	VQIPVsHPDPDPVsDNEDDSYDEDVHDPR	A0A0G2K2P5	3448.35585	59.2835	4	0
670	EGTQASEGYFSQsQEEEFAQSEEPcAK	A0A0H2UHL9	3133.23341	67.0472	3	0
671	EGtQASEGYFSQSQEEEFAQSEEPcAK	A0A0H2UHL9	3133.23341	67.0472	3	0
672	EGTQASEGYFsQSQEEEFAQSEEPcAK	A0A0H2UHL9	3133.23341	67.0472	3	0
673	VLSsTsEEDEPGVVK	G5C4S9	1735.70133	35.5246	2	0
674	VLSStsEEDEPGVVK	G5C4S9	1735.70133	35.5246	2	0
675	VLSstsEEDEPGVVK	G5C4S9	1815.66729	47.4651	2	0
676	VLssTsEEDEPGVVK	G5C4S9	1815.66729	47.4651	2	0
677	DQAPVVPGLKGQsPTAPGPK	F1LQZ9	2208.10739	49.2218	3	1
678	DQAPVVPGsLKGQsPTAPGPK	F1LQZ9	2208.11105	48.4587	3	1
679	QNsDPTSENPLPTR	A0A0G2K490	1732.7537	34.0875	2	0
680	ASAAEGSEAsPPSLR	D4A5J1	1509.65962	33.043	2	0
681	ASAAEGSEAsPPsLR	D4A5J1	1589.62693	30.257	2	0
682	TYEtPPPSPGLDPtFSNQPVPPDAVR	A0A1S3GHC6	2939.30171	66.6009	3	0
683	tYEtPPPSPGLDPtFSNQPVPPDAVR	A0A1S3GHC6	2939.30171	66.6009	3	0
684	AEsGDsLSSEDRLLYSIDAYR	D4A0V6	2622.06127	89.0408	3	1
685	TASGssVTSLEGTR	Q6JE36	1512.60005	34.25	2	0
686	RRsPsPYYSR	G5BT96	1428.58125	36.0203	3	2
687	ELVSSSSGSDsDsEVEK	Q63396	1988.71907	27.6094	2	0
688	ELVsssSSGSDSDSEVEK	Q63396	2068.68638	30.6195	2	0
689	SADEcEGGsTPRPEDsLSGDSDVDTASTISLLSGK	D4A1G8	3797.54396	79.0405	3	0
690	SADEcEGGSTPRPPEDsGDsDVDTASTISLLSGK	D4A1G8	3797.54396	79.0405	3	0
691	SADEcEGGSTPRPPEDsLsGDSDVDTASTISLLSGK	D4A1G8	3797.54396	79.0405	3	0
692	NSSAITsPK	G5BIK6	984.43867	20.8327	2	0

693	KRsPsPSPTPEAK	A0A1S3FCV0	1541.67391	24.1326	3	2
694	RDsLTsPEDELGAEVGDEAGDKK	D3ZT47	2578.06364	66.5158	3	2
695	HSSLPTEsDEDIAPAQR	B5DFK6	1932.83632	48.7694	3	0
696	HSSLPtESDEDIAPAQR	B5DFK6	1932.84439	48.9995	2	0
697	DKsPVREPIDNLTPEER	G5B843	2074.99007	67.9005	3	2
698	SAGSssPEAGEDsDHEDGNYcPPVKR	M0RD63	2988.04707	31.1842	3	1
699	APTAAPsPEPR	A0A0G2JZI0	1173.52883	22.6611	2	0
700	IAKEEEsEEEsNEEEEEDEEESEAEAK	E9PTG1	3445.22935	39.4474	3	1
701	QNSsPPSSLNK	A0A091E6Y3	1238.539	21.8415	2	0
702	QNsSPPSSLNK	A0A091E6Y3	1238.539	21.8415	2	0
703	KAEGEPQEEsPLKSK	A0A0G2K1G0	1736.81539	42.17	3	2
704	SAPssPTLDcEK	A0A091CNX4	1451.51419	26.5523	2	0
705	sAPsSPTLDcEK	A0A091CNX4	1451.51419	26.5523	2	0
706	sSPSKHQPPPIR	A0A091D0Z4	1410.69324	43.94	3	1
707	SSPsKHQPPPIR	A0A091D0Z4	1410.68455	43.1607	3	1
708	SsPSKHQPPPIR	A0A091D0Z4	1410.68455	43.1607	3	1
709	RPsEsDKEEELEKVK	Q5QD51	1962.84891	55.1307	3	2
710	sADVsPTTEGVK	G5BMJ9	1350.51896	25.5359	2	0
711	RGsDELTVPVR	G5BY35	1209.56235	46.4802	2	1
712	DEKRPEAAsPQKER	F1LPP6	1720.80247	48.9932	3	2
713	TNPPTQKPPsPPVSGR	A2VD09	1739.84871	33.2402	3	0
714	YEDEVFGDsEPELDEEsEDEVEEEQEDR	Q6AY21	3536.26927	69.6775	3	0
715	DScSsPPSLNYGK	D4A053	1491.5853	35.1305	2	0
716	ATTEEPETDEVDQVSEsNsIEELER	O08815	2996.19232	56.6418	3	0
717	HSDSGASETSLsPPsSPPSRPR	D3ZCG2	2395.9935	42.1802	3	0
718	SHSGASPDNtAPPPPPRPQPSHSR	A0A0G2JZY3	2651.21478	60.6416	4	0
719	SHsGASPDNTAPPPPPRPQPSHSR	A0A0G2JZY3	2651.20941	61.4103	4	0
720	SHSGAsPDNTAPPPPPRPQPSHSR	A0A0G2JZY3	2651.20941	61.4103	4	0
721	sHSGASPDNTAPPPPPRPQPSHSR	A0A0G2JZY3	2651.21649	59.8628	4	0
722	VKVDGPRsPSYGR	A0A1S3GYL4	1497.72426	50.0785	3	2
723	TDGsIsGDRQPVTVADYISR	B1H2A6	2296.9896	63.9463	3	1
724	KAdSDSEDKGEESKPK	A0A091DWT2	1829.78126	43.1968	4	2
725	HTGPNsPDTANDGFVR	A0A1S3GCH0	1764.73179	43.6297	3	0
726	SLsPPQSQSK	G5BJ57	1138.50897	22.9145	2	0
727	QDLcLKSPDVTPTVTVSEPEDDSPGsVTPPssGTEPSAAESQGK	Q64548	4821.06236	68.6086	4	0
728	cYSVQEPEsEDsEEEPSAVPVVVAESQSAR	D4ABZ3	3325.365	69.6017	3	0
729	cYSVQEPESEDsEEEPSAVPVVVAESQSAR	D4ABZ3	3325.365	69.6017	3	0
730	DVAtSPIsPTENNTTPPDALTR	A0A1S3F098	2457.06093	51.3513	3	0
731	DVAtSPISPtENNTTPPDALTR	A0A1S3F098	2457.06093	51.3513	3	0
732	DVATsPIsPTENNTTPPDALTR	A0A1S3F098	2457.06093	51.3513	3	0
733	KsPPPAK	A0A0G2JWM2	804.3996	18.642	2	1
734	TRsPsPTLGESLAPR	A0A091E7E8	1728.77377	48.2114	3	1
735	AKAAETVPDLPsPPTEAPAPASNTSNR	A0A0G2K9L2	2769.31871	60.7106	3	1
736	AKAAEtVPDLPSPPTEAPAPASNTSNR	A0A0G2K9L2	2769.31871	60.7106	3	1

737	LPEEGGssRAEDSSEGHEEEVLGGHGEK	Q63259	3068.22171	56.5629	3	1
738	LPEEGGssRAEDsSEGHEEEVLGGHGEK	Q63259	3068.22171	56.5629	3	1
739	LPEEGGSSRAEDssEGHEEEVLGGHGEK	Q63259	3068.22171	56.5629	3	1
740	TEEVGENTQVEDTEPSsPVTK	F1M842	2356.0165	34.024	3	0
741	GsPTRPNPPVVR	A0A1S3FYC1	1257.60784	29.2054	3	0
742	KPGLsQTPSPHPQLRASNAGAK	Q2IBD4	2419.2063	70.0144	3	1
743	AtPPNQGRPDsPVYANLQELK	A0A0G2K1Z2	2556.14942	62.0077	3	0
744	AttPPNQGRPDSPVYANLQELK	A0A0G2K1Z2	2556.14668	61.2469	3	0
745	tDDVSEKtsLADQEEVR	A0A1S3EM22	2161.80557	34.1907	3	1
746	GGSPLTTTQGGsPTK	F1M787	1468.66321	26.8102	2	0
747	GGSPLTTTQGGSPtK	F1M787	1468.66321	26.8102	2	0
748	THTsPPRAPSSPGR	D3ZEI4	1527.70436	39.1619	3	1
749	THtSPPRAPSSPGR	D3ZEI4	1527.70436	39.1619	3	1
750	RKsEPAVGPPR	A0A091DVL9	1273.64136	51.0982	3	2
751	ETPSSSPVSPQEsPKHENK	F1M820	2144.94927	34.6563	3	1
752	KVPLPGPGsPEVKR	D3ZE17	1540.82742	62.642	3	2
753	SGSSsEGsERSQEGAPSTLLADDQK	A0A0G2JTK1	2683.08988	42.5203	3	1
754	KAESSESEDsssEDEAPQTQKPK	P41777	2821.03349	20.7302	3	1
755	DHsPTPsVFNSDEERYR	A0A0P6JEE5	2195.84721	56.2186	3	1
756	ASsPPDRRIDIFGR	A0A1S3FPW0	1510.70798	74.4076	3	1
757	TSsPTTLPPPLAR	A0A0G2JY73	1320.65828	47.9948	2	0
758	TsSPTTLPPLAR	A0A0G2JY73	1320.65828	47.9948	2	0
759	TLLEEAQARAtNILK	A0A0W4ZC23	1750.91193	83.2047	3	1
760	SAsADNLILPR	F1MA89	1236.60174	54.5986	2	0
761	sHYLQRRLPLsFLASSK	M0R6J5	2163.07064	72.3578	3	2
762	SPAEVKsPAEAKsPAEAK	F1LRZ7	1956.8721	19.533	3	2
763	SPSEAKsPAGAKsPAEAK	F1LRZ7	1872.81424	19.0631	3	2
764	SLAEAKsPEKAK	F1LRZ7	1338.6696	30.2922	2	2
765	SPAEVKsPAVAKsPAEVK	F1LRZ7	1954.9406	20.2658	2	2
766	AKtDHGAEIVyKSPVVSGDtSPR	P19332-8	2654.12619	51.3083	3	2
767	ESPPQPPADDGSEEPGsETSDAK	P19332-8	2406.94718	19.6249	3	0
768	TTPsPKTPPGsGEPPKSGER	P19332-8	2166.94297	19.4704	3	2
769	HTQEALKAsPK	A0A0G2K5C6	1289.62635	40.0542	3	1
770	TEATQGLDYVPsAGTIsPTSSLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4838.08462	82.7848	4	2
771	TEATQGLDYVPSAGTISPTssLEEDKGFKSPPcEDFSVTGESEK	A0A0G2K5C6	4838.08462	82.7848	4	2
772	FTDQLSLsPEDAEsLSVLSVVSPDTTKQEATPR	A0A0G2K5C6	3594.61484	82.6115	3	1
773	FtDQLSLSPEDAESLSVLSVVsPDTTKQEATPR	A0A0G2K5C6	3594.61045	81.8591	3	1
774	EKEVVPDsPGDKGSTNR	A0A0G2K5C6	1894.85941	30.773	3	2
775	DRtPEEKDR	A0A0G2K5C6	1225.51947	27.7344	3	2
776	FTDQsLsPEDAEsLSVLSVVSPDTTK	A0A0G2K5C6	2912.29319	86.069	3	0
777	FtDQLSLSPEDAESLSVLSVVsPDTTK	A0A0G2K5C6	2912.2952	84.5816	3	0
778	ELALssPEDLTQDFEELKR	A0A0G2K5C6	2380.04375	89.6889	2	1
779	EGsSEKDEGEQEEEGETAEAGEGEEAEAKEEK	P12839	3564.35923	30.7005	3	2
780	EGSsEKDEGEQEEEGETAEAGEGEEAEAKEEK	P12839	3564.35923	30.7005	3	2

781	AKSPVPKsPVVEVKPKPEAK	P12839	2225.19228	89.7071	4	2
782	EKAEEEGGSEEVGDKsPQESK	P12839	2458.01603	29.2612	3	2
783	EVAKEsPKEEK	P12839	1353.62839	27.7041	3	2
784	KSEVQAHsPSR	F1LNK0	1305.59827	30.2947	3	1
785	KDDQsPLDIK	F1LNK0	1238.56694	30.9138	2	1
786	ASQPSPPAHEAGySTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.82436	72.0227	4	0
787	AsQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.82436	72.0227	4	0
788	ASQPSPPAHEAGYStLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.82436	72.0227	4	0
789	ASQPSPPAHEAGYsTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.82436	72.0227	4	0
790	ASQPsPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.82436	72.0227	4	0
791	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.80825	75.0495	4	0
792	ASQPSPPAHEAGYSTLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4144.80825	75.0495	4	0
793	EAAsPPSSADKSGLSR	F1LNK0	1568.69377	19.8985	2	1
794	ASQPSPPAHEAGYStLAQSYTSDHPSELPEEPSSPQER	F1LNK0	4224.79392	31.1316	3	0
795	ETsPETSLIQDEVALK	F1LNK0	1839.86553	62.5198	2	0
796	EtSPETSLIQDEVALK	F1LNK0	1839.86553	62.5198	2	0
797	VAIIRtPPKSPATPK	P15146-4	1655.92453	52.6577	3	2
798	KSEVQAHsPSRK	F1LNK0	1433.69062	63.5975	3	2
799	KSEVQAHSPsRK	F1LNK0	1433.68879	64.3562	3	2
800	EAAsPPSSADK	F1LNK0	1068.42241	18.4726	2	0
801	KETsPETSLIQDEVALK	F1LNK0	1967.9639	79.2008	3	1
802	KEtSPETSLIQDEVALK	F1LNK0	1967.9639	79.2008	3	1
803	KETSPETsLIQDEVALK	F1LNK0	1967.9639	79.2008	3	1
804	KETSPETsLIQDEVALK	F1LNK0	1967.9639	79.2008	3	1
805	KLGGDGSPtQVDVSQFGSFKEDEK	P15205	2607.2023	86.2623	3	2
806	TLEVVSQSvGSAHtPYYQSPTDEK	P15205	3125.34739	30.9151	3	0
807	SSsPVKKGDGK	P15205	1169.55393	22.2354	3	2
808	SPSLSPsPPSPIEK	P15205	1582.68352	20.7294	2	0
809	AQPSDSAPEKGNKSPsPPPDGsPAATPEIR	F1LMX1	3145.37832	28.8731	4	2
810	SPsPPPDGSPAATPEIR	F1LMX1	1755.79631	20.8114	2	0
811	KGSsEESVDEDRLAPEPLPTAK	A0A0G2KBB9	2492.17655	63.129	3	2
812	KASSsESEPELTQLSK	A0A0G2KBB9	1967.81999	30.2642	2	1
813	KASSsSESEPELTQLSK	A0A0G2KBB9	1967.81999	30.2642	2	1
814	KAssSSESEPELTQLSK	A0A0G2KBB9	1967.81999	30.2642	2	1
815	HSDsGSDSKHEASASSSSAAAAAR	O88778	2337.96987	60.3802	4	1
816	HsDSGSDSKHEASASSSSAAAAAR	O88778	2337.96987	60.3802	4	1
817	sRsPGTPAGEGSGSPPK	D3ZZ99	1728.69834	18.863	3	1
818	AGEAsAEsTGAADGAPQEEGEAK	Q05175	2292.85454	19.3233	2	0
819	RGsGKDSHTR	P02688-2	1180.52213	84.1213	3	2
820	TTHYGLPQKsQR	P02688-2	1582.73673	42.8877	3	1
821	NIVTPRtPPPSQGK	P02688-2	1571.7968	20.3394	2	1
822	QsRSPLPSHAR	I7EFB0	1315.62659	32.608	3	1
823	QSRsPLPSHAR	I7EFB0	1315.62659	32.608	3	1
824	QRDASPGRGsHSQTPSPGALPLGR	P09951	2509.2123	86.5346	4	2

825	QRDAsPGRGSHSQTPSPGALPLGR	P09951	2509.2123	86.5346	4	2
826	KGAtPAEDDEDNDIDLFGsDEEEEDKEAAR	Q68FR9-2	3470.35251	62.3826	3	2
827	RAsPsPPPKR	B2RYB3	1252.56086	19.1059	3	2
828	RYsPsPPPK	B2RYB3	1188.48625	19.2666	2	1
829	AAsPsPQSVR	B2RYB3	1159.45305	18.7747	2	0
830	SScSEySPSIESDPEGFEIsPEKIIEVQK	Q9JKS6	3431.47226	85.5779	3	1
831	SDAAPAASDsKPsSAEPAPSSK	A0A0G2K1L8	2217.89371	18.8617	3	0
832	FTGYQTIQQQSSSETEGEGGNTADAssEEGDRVEDGKGK	Q923W4	4368.79282	30.6707	3	2
833	NHPDSELESTANRHsEETEEER	O35314	2676.09047	72.8599	4	1
834	NHPDSELESTANRHSEEtEEER	O35314	2676.07998	73.6166	4	1
835	NHPDSELEStANRHSEETEEER	O35314	2676.09243	74.3747	4	1
836	NHPDSELEsTANRHSEETEEER	O35314	2676.09145	75.1865	4	1
837	AEAHFVELEKtHSREQSsQEsGEETR	O35314	3241.2853	63.8945	4	2
838	AEAHFVELEKTHSREQssQEsGEETR	O35314	3241.28847	67.8731	4	2
839	TSSKEssPVPsPTSDR	A0A0G2K8W9	1901.70012	19.082	2	1
840	TSsKEsSPVPSPTSDRK	A0A0G2K8W9	1949.8295	19.8028	3	2
841	TSSKEssPVPSPTSDRK	A0A0G2K8W9	1949.8295	19.8028	3	2
842	AQTLPTSVVTItSESSPGKRR	A0A0G2K8W9	2139.08292	43.5832	3	1
843	TSLAAEENDSsEGPEEEIPPLTSSGETGPPVPR	D3ZKX8	3626.53305	31.2982	3	0
844	TSLAAEENDssSEGPEEEIPPLTSSGETGPPVPR	D3ZKX8	3626.53305	31.2982	3	0
845	TsLAAEENDsSSEGPEEEIPPLTSSGETGPPVPR	D3ZKX8	3626.53305	31.2982	3	0
846	DQPAALPLAAEETVNLPSPPPsPAsEQTALEEATSGESAQAP SAFK	P15146-4	4930.26723	85.7569	4	0
847	DQPAALPLAAEETVNLPSPPPsPASEQTALEEATSGESAQAP SAFK	P15146-4	4930.26723	85.7569	4	0
848	AQSGTDssPEHKIPAPR	A0A0G2K2M9	1937.8143	20.6484	3	1
849	TDRGTDDsPKNSQEDLQDR	M0RBL8	2256.94333	30.1013	3	2
850	ADLPVITDPASPQsPEsVDLVNEELKGK	P26431	3221.53818	86.1009	3	1
851	SLPELDRDKSDsEtEGLVFAR	A0A0G2K0F3	2524.10611	82.3226	3	2
852	DLKGPSQEDEsGGIEDSPDRGAcSTPELPQFESVK	A0A0G2K0F3	3928.73794	84.1882	4	2
853	DLKGPSQEDESGGIEDSPDRGAcSTPELPQFESVK	A0A0G2K0F3	3928.73794	84.1882	4	2
854	DLKGPSQEDESGGIEDSPDRGAcStPELPQFESVK	A0A0G2K0F3	3928.73794	84.1882	4	2
855	DLKGPSsQEDESGGIEDSPDRGAcSTPELPQFESVK	A0A0G2K0F3	3928.73794	84.1882	4	2
856	ETDPsPEER	A0A0G2K0F3	1139.4251	18.7028	2	0
857	TGDLGIPPNPEDRSPsPEPIYNsEGKR	A0A1S3FKT6	3082.34616	53.2392	3	2
858	VKEVHDELEDLPsPPPPLsPPPTTSPHK	A0A091CWS6	3200.50356	89.1363	4	1
859	NSQEDsEDsEEKDVK	A0A091CNN3	1898.65788	18.975	2	1
860	SGKNSQEDSEDsEEKDVK	A0A091CNN3	2090.85001	29.4468	3	2
861	SSsLPSYGR	A0A0P6JDF1	1033.43669	20.3091	2	0
862	GGQEPAGAGsPsPPEDR	A0A0P6JY41	1768.67107	19.1299	2	0
863	KVQIPVSHPDPPVsDNEDDsYDEDVHDPR	A0A0G2K2P5	3576.46328	69.5715	4	1
864	SATTPPsGSPR	A0A1S3FNU0	1141.48955	18.5964	2	0
865	SATTPSGsPR	A0A1S3FNU0	1141.48955	18.5964	2	0
866	QTLINIPSNLNsDsEVEDISEIESNR	Q3ZB99	3077.32944	86.6972	3	0

867	QTLINIPsLNDsDSEVEDISEIESNR	Q3ZB99	3077.32944	86.6972	3	0
868	GtWPNSVLGEVtEVDSSGESDDTVIEDTTEPNPSVK	Q6RJR6	3853.6373	85.8272	3	0
869	IDASKNEEDEGHsNSSPR	Q9JJ54	2051.83005	28.4664	3	1
870	VIRsADVsPTTEGVKR	G5BMJ9	1874.87784	20.6892	3	2
871	RGsDELTVPVR	Q9QXY2	1209.56157	31.1929	2	1
872	RQVDEGVWPPPNNLLNQsPK	Q9QXY2	2368.15281	85.6533	3	1
873	NLAKGVTSTSDEEDDDQEGERKRR	F1SW39	2815.22671	58.9627	4	2
874	LHLESPQPSPKssPQEAGNVDIWR	Q5PQP4	2832.29752	79.3346	3	1
875	LHLESPQPSPKsSPQEAGNVDIWR	Q5PQP4	2832.29752	79.3346	3	1
876	IYQFPDcDsDEDEDLKLDQALK	A0A091EHQ8	2899.21817	79.7928	3	1
877	ASDSGPSSSSSSsPPRTFPYITcHR	Q07266	3019.27384	83.9253	3	1
878	ASDSGPSSSSSSsPPRTFPYITcHR	Q07266	3019.27384	83.9253	3	1
879	ASDSGPSSSSsSSSSPPRTFPYITcHR	Q07266	3019.27384	83.9253	3	1
880	ASDSGPSSsSSSSSPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
881	ASDSGPSSSSsSSPPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
882	ASDSGPssSSSSSPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
883	ASDsGPSSSSSSSPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
884	ASDSGPSSSSSSsSSPPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
885	ASDSGPssSSSSSPRTFPYITcHR	Q07266	3019.28921	84.1354	4	1
886	ASDSGPSSsSSSSSPRTFPYITcHR	Q07266	3019.27384	83.9253	3	1
887	ELVSSSSsGsDSDSEVEK	Q63396	1988.73284	19.8697	2	0
888	AAsALLLRsPR	B2RZ79	1314.6364	30.9774	2	1
889	KMAPPKEVEEDSDEEMsDEEEEDsGEEVVIPQK	G5ASV2	4208.62514	72.7464	4	2
890	KMAPPKEVEEDSDEEMsDEEEEDsSGEEVVIPQK	G5ASV2	4208.61294	71.2297	4	2
891	KMAPPKEVEEDsDDEEMsDEEEEDSSGEEVVIPQK	G5ASV2	4208.61294	71.2297	4	2
892	KSTPSGDQEEPVGPPAPDsEILQLHGTQGcPR	Q3KR64	3464.57265	31.0933	4	1
893	KGtPIKDGEK	A0A0N4XEC0	1152.56523	28.8589	2	2
894	AAKPCPtEASPPAASPSGDsPPATAPYDPR	D3ZVW3	3123.30576	20.979	3	0
895	AAKPCPTEAsPPAAsPSGDSPPATAPYDPR	D3ZVW3	3123.30576	20.979	3	0
896	HSDSGTSEASLsPPsSPPSRPR	A0A1S3GLQ8	2395.99454	29.6317	3	0
897	TVLQEcvccQcyAKFGGHLPVPR	M0RBY7	2859.27903	62.4762	3	1
898	KASStPAK	A0A1S3F8L6	869.41319	17.3911	2	1
899	KASStPAK	A0A1S3F8L6	869.41319	17.3911	2	1
900	KAESSsDssDSDSSEDEAPAKPVSATK	P41777	2952.09482	19.3321	3	1
901	KAESSSDSSDsDssEDEAPAKPVSATK	P41777	2952.09482	19.3321	3	1
902	KAESssDsSDSDSSEDEAPAKPVSATK	P41777	2952.09482	19.3321	3	1
903	KAESSsDSSDSDSSEDEAPAKPVSATK	P41777	2952.09482	19.3321	3	1
904	ATNmFGssWYPLFDNsTLDTPTDK	A0A0R3SS49	2964.09062	60.0761	2	0
905	AtNmFGssWYPLFDNsTLDTPTDK	A0A0R3SS49	2964.09062	60.0761	2	0
906	AtNmFGSSWYPLFDNstLDTPTDK	A0A0R3SS49	2964.09062	60.0761	2	0
907	AtNmFGSSWYPLFDNstLDTPTDK	A0A0R3SS49	2964.09062	60.0761	2	0
908	TLNVWRDRQIyNEDQLAILDAVK	A0A0K0D219	2952.49404	64.0306	4	2
909	SETSSNPssPEIcPNK	A0A0P6JL35	1973.66179	19.7321	2	0
910	SETssNPssPEIcPNK	A0A0P6JL35	1973.66179	19.7321	2	0

911	GQPAQGPVSEEsPPsPKPGK	F1LPG9	2133.92392	19.6262	3	0
912	KMAPPKKEVEEDSEDEEMSEDEDSSsGEEVVIPQK	Q9QZX1	4208.61294	71.2297	4	2
913	KMAPPKKEVEEDSEDEEMsEDEDSSsGEEVVIPQK	Q9QZX1	4208.61294	71.2297	4	2
914	KMAPPKKEVEEDsEDEEMsEDEDSSSGEEVVIPQK	Q9QZX1	4208.61294	71.2297	4	2
915	KAKPsPPRTAsPGAGSPEPR	A0A1S3G318	2235.02451	68.9552	3	2
916	QPPAALIKPASSPPSQSAsPAKPPsPGAPALQVPTKPPR	D3ZE17	3981.05263	74.6659	4	0
917	APATARVsPPEsPR	Q9JIR4	1595.69913	19.6715	3	1
918	cDQcEENYFyNRSWPGcQEePAcYR	A0A1S3F2U6	3509.22214	17.5236	3	1
919	RPADIRsPEQVK	P16884	1475.73914	36.6428	3	1
920	SPAEEKsPAEKPPAEAK	P16884	1858.89127	16.2772	3	1
921	AKsPVKEEIKPPAEVK	P16884	1829.97573	81.3283	4	2
922	KEEVKsPVEEVK	P16884	1480.73233	35.5418	3	2
923	QRDAsPGRGSHSQTPSPGALPLGR	P17599	2509.20742	81.0152	4	2
924	QRDASPGRGSHsQTPSPGALPLGR	P17599	2509.20742	81.0152	4	2
925	QRDASPGRGsHSQTPSPGALPLGR	P17599	2509.20351	81.7769	4	2
926	DAsPGRGSHSQTPSPGALPLGR	P17599	2225.04673	53.0954	3	1
927	DASPGRGsHSQTPSPGALPLGR	P17599	2225.04673	53.0954	3	1
928	DASPGRGSHSQTPsPGALPLGR	P17599	2225.04458	57.5968	4	1
929	DASPGRGSHSQtPSPGALPLGR	P17599	2225.04458	57.5968	4	1
930	DASPGRGSHsQTPSPGALPLGR	P17599	2225.04458	57.5968	4	1
931	VTDGITKsPEKR	F1LNK0	1410.70292	26.5143	3	2
932	AEAHFVELEKTHsREQssQESGEETR	O35314	3241.28603	60.5666	4	2
933	RRGsGsVDETFLALPAASEPVIPSSAEK	F1LQN3	3031.4249	89.5824	3	2
934	RRRsPSLSSK	A0A0G2K4F6	1097.54706	36.7374	3	2
935	RRRsPsPAPPPPPPPPR	A0A0G2K4F6	1959.93949	35.5342	3	2
936	KKSPATPQAKPEGAAGAAAEEEDEySGGLc	A0A0G2K350	3228.39035	80.2318	3	2
937	RTSPsKPSSAPALRPGPK	A0A0G2JW88	1914.00197	70.4303	4	1
938	RHsTEGPEDPPPWAEK	A0A091E7B4	1912.82059	79.6685	3	1
939	RHStEGPEDPPPWAEK	A0A091E7B4	1912.82059	79.6685	3	1
940	KQKGsEENLDETR	A0A0G2JSM7	1613.71946	34.5798	3	2
941	SPAEEKsPAEVKsPAEVK	P16884	1984.91434	17.5448	3	2
942	SPAEEKsPAEKsPAEVK	F1LRZ7	1956.87613	17.4204	3	2
943	SPAEEKsPAEKsPAEK	F1LRZ7	1928.84269	17.3335	3	2
944	SPAEEKsPAEVKsPVEAK	F1LRZ7	1984.91434	17.5448	3	2
945	SPAEEKsPVEVKsPASVK	F1LRZ7	1970.92948	17.6214	3	2
946	SPAGAKsPAEKsPVVAK	F1LRZ7	1854.88199	17.453	3	2
947	sPAEVKsPVTVKsPAEK	F1LRZ7	2064.88803	17.4279	3	2
948	SPVTVKsPAEKsPVEVK	F1LRZ7	2012.9727	17.7008	2	2
949	SPGEAKsPAEKsPAEVK	F1LRZ7	1942.86582	17.4844	3	2
950	AKsPVKEEIKPPAEVK	F1LRZ7	1829.97548	86.3544	4	2
951	KEEVKsPVEEVK	F1LRZ7	1480.73076	30.4647	2	2
952	SPSEAKsPAGAKsPAEVK	F1LRZ7	1872.81644	17.3093	3	2
953	ELALssPEDLTQDFEELKREER	A0A0G2K5C6	2794.23099	29.9504	3	2
954	EGDGSATTDAAPATSPKAEPsKAGDAPSEEK	P07936	3181.37368	17.7503	4	2

999	VSEEAESQQWDTSKGDQVsQNGLPAEQGsPR	A0A0G2K8W9	3504.44712	43.9734	3	1
1000	tAsPPPPP	A0A0G2K4F6	1051.4251	19.8157	2	0
1001	KPPAPPSPVQSQsPsTNWsPAAPAKK	A0A0G2K4F6	2895.28635	43.0803	3	1
1002	AQSGtDSsPEHKIPAPR	A0A0G2K2M9	1937.81449	25.7377	3	1
1003	IHTTSLtGQSPPLASGHQGEVDAPSEPGAtNIQQPSSPDSTK	A0A0G2K2M9	4482.02797	60.3202	4	0
1004	sRsPLAIR	A0A0G2K2M9	1059.47441	25.8926	2	1
1005	GtDDSPKNSQEDLQDR	M0RDJ7	1884.76238	23.1647	2	1
1006	tSNSTEKTPsPPEPEPAGTAQK	Q3ZB98-4	2414.02226	22.7555	2	1
1007	RLsLEsEGANEAAAPELSALEEAFR	A0A0G2K2D6	2948.30875	89.1312	3	1
1008	EAAAAPAVAPGPAQPGHVSPtPATTsPGEKGEAGTPVAAGTTA AAIPR	Q3MUI2	4516.13149	59.5307	4	1
1009	STEEsLsEDVFTEsELSPIREELPSSELR	A0A0G2K7Y2	3535.48239	88.115	3	1
1010	NIsLsSEEEAEGLAGHPR	D3ZKQ4	2055.8416	56.7462	2	0
1011	DSSSssSSSSDSDSDGEEHGSDIGPR	G3V644	2897.92636	22.8412	3	0
1012	GTWPNSVLGEVTEVDSSeDDTVIEDTTENPSVK	Q6RJR6	3853.60654	83.1961	3	0
1013	GRLTPsPDIIVLsDNEASSPR	A0A091DW43	2384.09543	69.8022	3	1
1014	QcRTSSPSsAGsVSLGHYTPTSR	A0A0G2JTB5	2583.07779	50.6996	3	1
1015	AAEsEssEEDSESEDEAPAGLPSQVTTPGK	D4A206	3274.22678	51.2549	3	0
1016	GGTPAGSTRGsPTRPNPPVR	A0A1S3FYC1	2041.99491	41.266	3	1
1017	ALPQASEASAAtQVLSPAVEQMOPVmSsDLPATPAAPAEPK	Q5FVK6	4262.95179	84.905	5	0
1018	ESEALPEKEGDELGEGERPEEDAAAIELssDEAVEVEEVIEESR	G3V8L9	4960.13247	89.5494	4	1
1019	SSscGDAELLQQATLPVGsPSKPLSR	Q5U2P5	2774.2518	69.8097	3	0
1020	KDQStcLMQLFQSGAmFEPDmQEANFGGsPR	G5C4Z6	3619.49338	44.9413	3	1
1021	SRGEHSSTLPASTPSYTSGTSPtSLSSLEEDSDSSPsRR	A0A091CJ97	4120.80727	89.5935	4	2
1022	SRGEHSSTLPASTPSYTSGTSPtLSSLEEDSDSSPsRR	A0A091CJ97	4120.83901	84.2079	4	2
1023	SRGEHSSTLPASTPSYTSGTSPtSLSSLEEDSDSSPsRR	A0A091CJ97	4120.83901	84.2079	4	2
1024	SRGEHSSTLPASTPSYTSGTSPtSLSSLEEDSDsPSRR	A0A091CJ97	4120.81118	84.9645	4	2
1025	SRGEHSSTLPASTPSYTSGTSPtSLSSLEEDSDsPSRR	A0A091CJ97	4120.83901	84.2079	4	2
1026	QsRSPLPSHAR	G5C0K7	1315.62568	36.1016	3	1
1027	QSRsPLPSHAR	G5C0K7	1315.62568	36.1016	3	1
1028	HsSSAPPFFFFPGRR	D3ZUD3	1519.72107	32.37	3	1
1029	RKsPENAEGK	M0R953	1195.54667	27.8305	3	2
1030	ARGPGGsPSGLQKR	Q99MC0	1447.71704	38.0778	3	2
1031	SPA@VKSPVEAKsPAEVK	F1LRZ7	1984.9354	11.9668	3	2
1032	sPAEVKsPAEVK	F1LRZ7	1401.61504	10.6091	2	1
1033	ESPPQPPADDGSEEPGSETSDAKStPTAEDVTAPLVEER	P19332-8	4102.801	12.0761	3	1
1034	ESPPQPPADDGSEEPGSETSDAKsPTAEDVTAPLVEER	P19332-8	4102.801	12.0761	3	1
1035	ESPPQPPADDGSEEPGSETSDAKStPtAEDVTAPLVEER	P19332-8	4102.801	12.0761	3	1
1036	VKDEFtAEKEASPPSSADK	F1LNK0	2115.95102	63.4896	3	2
1037	DGsPDAPATPEKEEVPFSEYK	F1LNK0	2373.01616	12.7279	2	1
1038	EKAEEEGGsEEEVGDKSPQESK	P12839	2458.01584	40.2218	3	2
1039	AEEEGGSEEEVGDKSPQEsK	P12839	2200.88321	10.6253	3	1
1040	AEEEGGSEEEVGDKSPQEsK	P12839	2200.88321	10.6253	3	1
1041	FtDQSLSPEDAESLSVLSVVSPDtTK	A0A0G2K5C6	2912.2659	13.0409	3	0

1042	cLsPDDSTVK	A0A0G2K5C6	1201.48418	10.895	2	0
1043	FTDQSLSPEDAEsLsVLsVVSPDTTKQEATPR	A0A0G2K5C6	3674.58103	12.9166	3	1
1044	TPPSNLsPIEDAsPTEELR	O88778	2212.94583	12.0387	3	0
1045	GYSYFtGSSPLSPSTPSESPTFSPsK	O88778	2952.23819	12.6083	3	0
1046	GySYFTGSSPLSPSTPSESPTFSPSK	O88778	2952.23819	12.6083	3	0
1047	GYSYFtGSSPLSPStPESPTFSPSK	O88778	2952.23819	12.6083	3	0
1048	EKSPPDQsAVPNTPPsTPVK	A0A0G2JSM7	2236.00486	11.001	3	1
1049	EtEVSKGSAEsPDEGITTEGEGEcEQTPEELEPVEK	P15205	4167.69468	11.5891	3	1
1050	sASSDTSEELNAQDSPK	Q9JJ19	1845.74529	10.9088	2	0
1051	SAsSDTSEELNAQDSPK	Q9JJ19	1845.74529	10.9088	2	0
1052	SASsDTSEELNAQDSPK	Q9JJ19	1845.74529	10.9088	2	0
1053	GQAYAtEWSDDESGNPFGGNEANGGANPFEDDAK	Q9Z0W5	3597.39145	12.7758	3	0
1054	GQAYATEWSDDEsGNPFGGNEANGGANPFEDDAK	Q9Z0W5	3597.39145	12.7758	3	0
1055	GQAYATEWsDDESGNPFGGNEANGGANPFEDDAK	Q9Z0W5	3597.39145	12.7758	3	0
1056	AEPEKsEGAAEEQPEPAPAPEQEAAAPGPAGGEAERP	Q05175	3645.65622	11.23	3	1
1057	VSEEAESQQWDtSKGDQVSQNGLPAEQGsPR	A0A0G2K8W9	3504.49062	11.439	4	1
1058	RAsPsPPPKR	A0A091E4V9	1252.55783	16.7014	3	2
1059	RESPsPAPKPR	A0A091E4V9	1301.63614	39.0577	3	1
1060	REsPSPAPKPR	A0A091E4V9	1301.63614	39.0577	3	1
1061	RRtPsPPPR	A0A091E4V9	1223.54468	16.7177	3	2
1062	AAETVPDLPsPPTEAPAPASNTSNR	A0A0G2K9L2	2570.19266	11.7183	3	0
1063	AAETVPDLPSPPtEAPAPASNTSNR	A0A0G2K9L2	2570.19266	11.7183	3	0
1064	SGKNSQEDSEDsEEKDVK	A0A0G2K7X3	2090.84085	37.2037	3	2
1065	SASSPKPDtKVPQATAEAK	B7X6I3	1992.96347	46.5365	3	1
1066	NIVTPRtPPPSQGK	G5C0K7	1571.79947	16.7739	3	1
1067	GTDDsPKNSQEDLQDR	M0RDJ7	1884.7648	11.7464	3	1
1068	TDRGTDDsPKNSQEDLQDR	M0RDJ7	2256.94004	42.5685	3	2
1069	GsSQPNLSTSSEQEYGK	A0A091EJ23	2041.83977	11.4263	2	0
1070	GSsSQPNLSTSSEQEYGK	A0A091EJ23	2041.83977	11.4263	2	0
1071	TIEMyRAASFPtEWVLHK	K8RAT3	2339.03226	11.3448	3	1
1072	SPSDLsPEsPVLSSPPK	G5C8C5	1883.79753	11.7387	2	0
1073	EAAGGNDssGATSPINPAVALE	A0A0G2KA95	2187.87309	13.0523	2	0
1074	SPAEEKPPAEAKsPAEAK	P16884	1858.89713	42.5149	3	1
1075	SPAEEKPPAEAKsPAEAKsPAEAK	P16884	2522.16959	44.6021	3	2
1076	SPAEEKsPAEAKPPAEAKsPAEAK	P16884	2522.16372	43.4997	4	2
1077	SPVVAKsPAEAKsPAEAKPPAEAK	P16884	2520.22171	46.2946	3	2
1078	AQPsDsAPEKGKNSPSPPDGSPAATPEIR	F1LMX1	3145.39052	0.2694	4	2
1079	TPPSNLsPIEDAsPTEELR	Q9JKS6	2212.9473	10.9961	3	0
1080	KGAEeeeeEDDDsEEEIK	A0A1S3GME2	2318.86667	11.7509	3	1
1081	TPSPKEEDEEAEsPPEKK	A0A0G2K7X3	2106.91458	41.695	3	2
1082	EKsPPDQSAVPNTPPSTPVKLEGGLPQEPTS	A0A0G2JSM7	3420.67422	88.6995	4	2
1083	KLEKEEEEGISQEsSEEEQ	A0A0P6J786	2316.96732	23.557	3	2
1084	KLEKEEEEGISQEsSEEEQ	A0A0P6J786	2316.96732	23.557	3	2

Lowercase m: oxidation on methionine. Lowercase c: carbamidomethyl on cysteine.