

Electronic Supplementary Information

Superhydrophilic Nanocomposite Adsorbent Modified via Nitrogen-rich Phosphonate-functionalized Ionic Liquid Linker: Enhanced Phosphopeptide Enrichment and Phosphoproteome Analysis of Tau Phosphorylation in Hippocampal Lysate of Alzheimer's Transgenic Mice

Chenglong Xia,¹ Qiya Wang,² Weida Liang,¹ Binbin Wang,¹ Quanshou Feng,¹ Chenyang Zhou,¹ Yishan Xie,¹ Yinghua Yan,¹ Lingling Zhao,¹ Bo Jiang,³ Wei Cui,^{2,*} Hongze Liang^{1,*}

¹Key Laboratory of Advanced Mass Spectrometry and Molecular Analysis of Zhejiang Province, School of Materials Science and Chemical Engineering, Ningbo University, Ningbo 315211, China

²Ningbo Key Laboratory of Behavior Neuroscience, Zhejiang Province Key Laboratory of Pathophysiology, School of Medicine, Ningbo University, Ningbo 315211, China

³CAS Key Laboratory of Separation Science for Analytical Chemistry, National Chromatographic Research and Analysis Center, Dalian Institute of Chemical Physics, Chinese Academy of Science, Dalian, Liaoning 116023, P.R. China

E-mail addresses:

lianghongze@nbu.edu.cn

cuiwei@nbu.edu.cn

Contents

Chemicals and Materials.....	3
Characterization and Measurement.....	4
MALDI-TOF MS Analysis.....	5
Label-free quantitative phosphoproteomics.....	5
Figures S1-S8.....	7
Tables S1–S9.....	13
References.....	116

Chemicals and Materials.

All reagents are from commercial sources and no further purification is required. Graphene was purchased from Nanjing XFNANO Materials Tech Co., Ltd. Tetraethyl orthosilicate (TEOS), sodium hydroxide, titanium sulfate ($Ti(SO_4)_2$), Three gallium chloride ($GaCl_3$), acetonitrile (ACN) and ammonia solution (25-28 wt%) were purchased from Sinopharm Chemical Reagent Co., Ltd. Polyethyleneimine (PEI, $M_w = 70$ kDa, 50 wt% in H₂O) was purchased from Aladdin Chemical Reagent (Shanghai, China). 3-chloropropyl triethoxysilane (CPTES) was purchased from Adamas-beta. Cetyltrimethylammonium ammonium bromide (CTAB) was obtained from Beijing Solarbio Science & Technology. 1,3-dibromopropane was obtained from HWRK Chem. Triethyl phosphite was purchased from Chengdu Gracia Chemical Technology. Hydrobromic acid (48 wt%) was obtained from J&K Chemical. Pyridoxal 5'-phosphate was obtained from Shanghai Yuanye Biotechnology. Trifluoroacetic acid was purchased from Aladdin. β -casein, bovine serum albumin (BSA), iodoacetamide (IAA), dithiothreitol (DTT) and 2,5-dihydroxybenzoic (DHB) were all obtained from Sigma Aldrich. Human serum and human blood were acquired from Ningbo University Hospital follow standard clinical procedures. Deionized water was produced by a Milli-Q apparatus (Millipore, Bedford, USA).

Collections of human serum, saliva, blood and CSF samples from healthy volunteers were conducted according to the protocol approved by Ningbo University Ethical Board. Use and care of laboratory animals followed the National Institutes of Health (NIH) Guide (NIH Publications No. 8023, revised 1978) and were authorized

by the Animal Care and Use Committee of Ningbo University. APP/PS1 and tau P301S transgenic mice and their wildtype littermates were purchased from GemPharmatech Company (Nanjing, Jiangsu, China). Mice were raised with a 12-h light/dark cycle (humidity: $50 \pm 10\%$, temperature: 22 ± 2 °C).

Characterization and Measurement.

Fourier-transform infrared (FT-IR) spectra were obtained on a NICOLET 6700 Fourier transform infrared spectrometer (Thermo Scientific, USA). Zeta potential was measured on a Zetasizer Nano ZS90 analyzer (Malvern, UK). Thermogravimetric analysis (TG) was obtained on the Q500 Thermogravimetric analyzer (TA, USA). Water contact angles were measured on a Dataphysics OCA25. The adsorption/desorption isotherms of nitrogen were measured at 77K by an ASAP2020 analyzer (Micromeritics, USA). Inductively coupled plasma optical emission spectroscopy (ICP-OES) was analyzed on an Aglient 5110 (Aglient, USA). The X-ray photoelectron spectroscopy (XPS) was obtained by Thermo's K-Alpha spectrometer (Thermo Science, USA). Scanning electron microscopy (SEM) images and energy dispersive X-ray analysis (EDX) were obtained by a Nova NanoSEM 450 electron microscope (FEI, USA). Transmission electron microscopy (TEM) images are presented on a Tecnai F20 electron microscope (FEI, USA). The results of MALDI-TOF-MS analysis were given at a 5800 Proteomics Analyzer (Applied Biosystems, USA) with a Nd-YAG laser at 355 nm.

MALDI-TOF MS Analysis.

0.5 μ L of eluent and 0.5 μ L of DHB solution (20 mg mL⁻¹, 50% ACN/ 49% H₂O/ 1% H₃PO₄, v/v) was mixed completely. The mixed solution was dropped upon the plate and dried, and analyzed by MALDI-TOF MS. MALDI-TOF spectrometer autoflex maX (Bruker Scientific, USA) was used in positive ion mode with an Nd:YAG laser (383 nm). The acceleration voltage was run at 20 kV, and the repetition rate was 1000 Hz.

Label-free quantitative phosphoproteomics.

LC-MS/MS analysis was analyzed on an EASY-nLC 1200 system (Thermo Scientific, USA) coupled with Orbitrap Fusion Lumos mass spectrometer (Thermo Finnigan, San Jose, USA) with nanoelectrospray ion source. Phosphopeptides of mice brain lysate were redissolved in 0.1% TFA (20 μ L), loaded on a trap column (100 μ m \times 2 cm, 5 μ m, 100 \AA , C18, Thermo Scientific, USA), and eluted and separated through an analytical column (75 μ m \times 100 cm, 5 μ m, 100 \AA , C18, Thermo Scientific) with mobile phase A (2% acetonitrile with 0.1% formic acid) and mobile phase B (90% acetonitrile with 0.1% formic acid) for 60 min. Elution gradient was set as follows: 0–40 min, 5–28% B; 40–42 min, 28–90% B; 42–60 min, 90% B. The flow rate was 250 nL/min. The mass spectrometer was run in positive mode. Full-scan MS spectra (m/z 350–1600) were acquired in Orbitrap with a resolution of 60,000 at m/z 200. MS² spectra were obtained with a resolution of 15,000 at m/z 200.

Raw data were analyzed with MaxQuant 2.0.5.0. The database was uniprot_mice_88108_20210914.fasta. Search parameters were set as follows: Variable modifications, oxidation (M), acetyl (N-term), phospho (STY); Fixed modification, carbamidomethylation (C); Digestion mode, trypsin; Maximum missed cleavages, 2; Main search ppm, 6; PSM FDR, 0.01; Proftein FDR, 0.01; Min peptide length, 2; FTMS MS/MS tolerance, 20 ppm; FTMS top peaks per 100 Da, 12.

Figures S1-S8

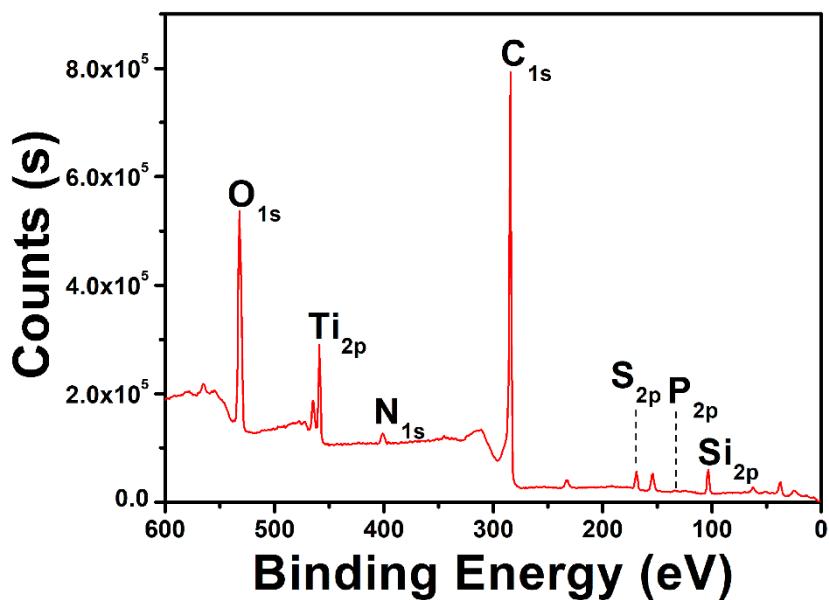


Figure S1. XPS of G@mSiO₂@PEI-PFIL-Ti⁴⁺

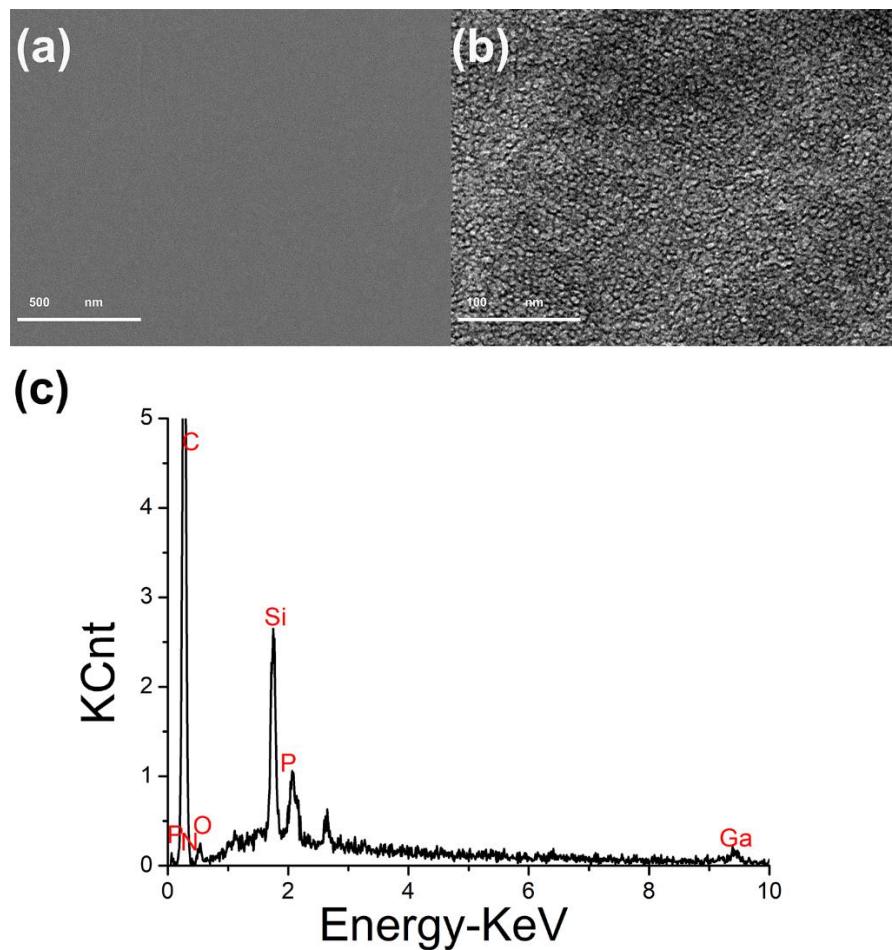


Figure S2. (a) SEM, (b) TEM, (c) EDX of the G@mSiO₂@PEI-PFIL-Ga³⁺.

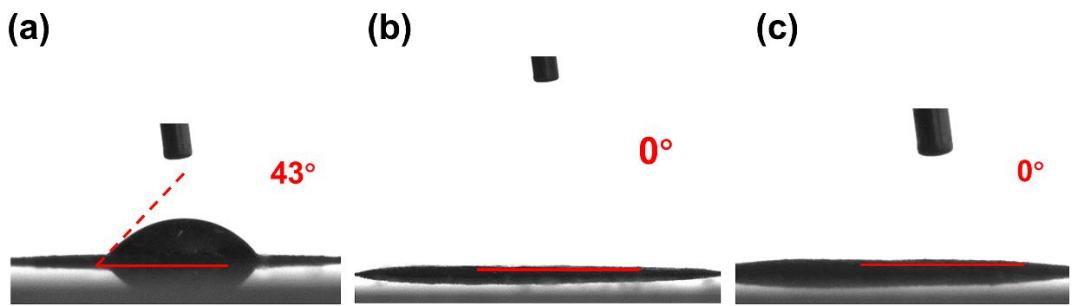


Figure S3. (a) water contact angle of G@mSiO₂-CP, (b) G@mSiO₂@PEI, (c) G@mSiO₂@PEI-PFIL-Ga³⁺.

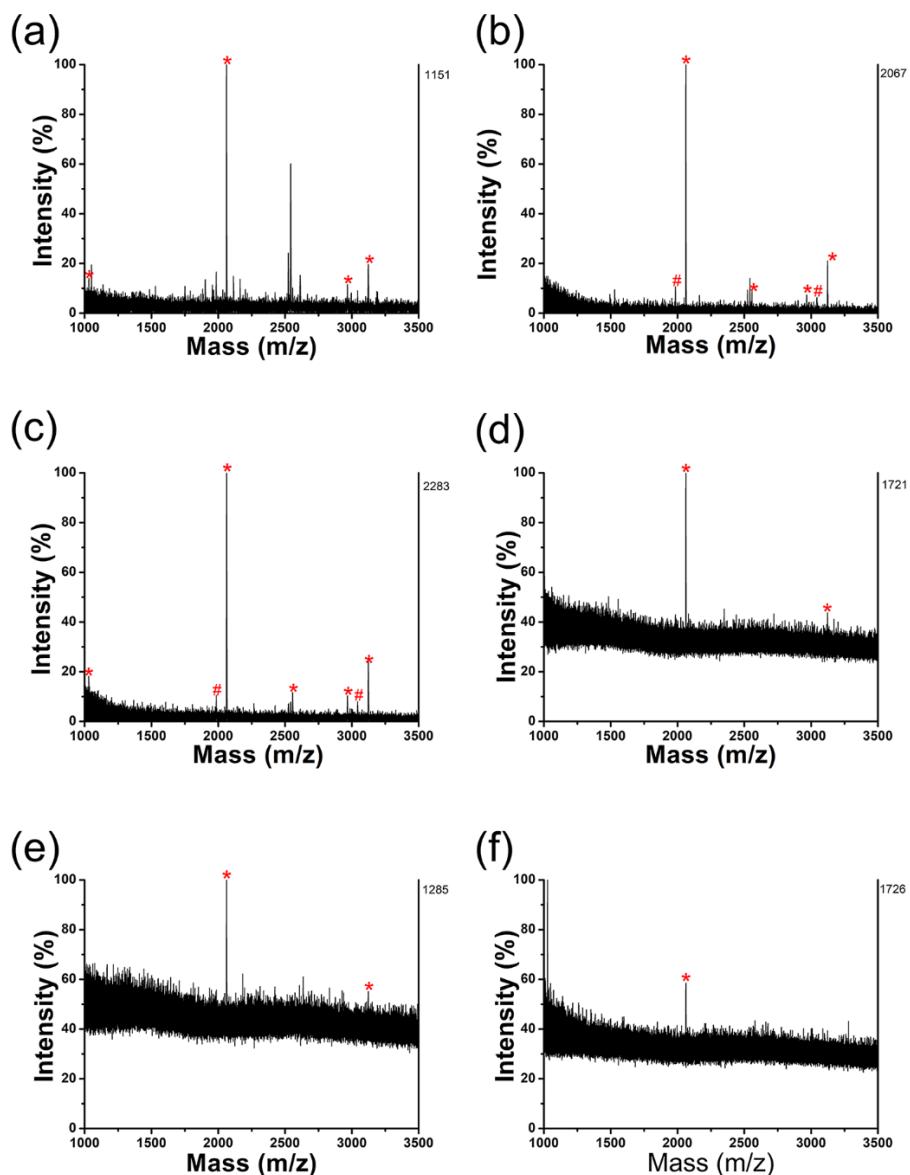


Figure S4. The MALDI-TOF MS spectra of tryptic digest mixture of β -casein and BSA (1:500, molar ratio) with different loading buffers containing 50% ACN and (a) 0.5% TFA, (b) 1% TFA, (c) 2% TFA, (d) 3% TFA, (e) 4% TFA and (f) 5% TFA. The peaks of phosphopeptides are marked with *, and the peaks of dephosphopeptides are marked with #. Elution buffer, NH₄OH solution (10 v%).

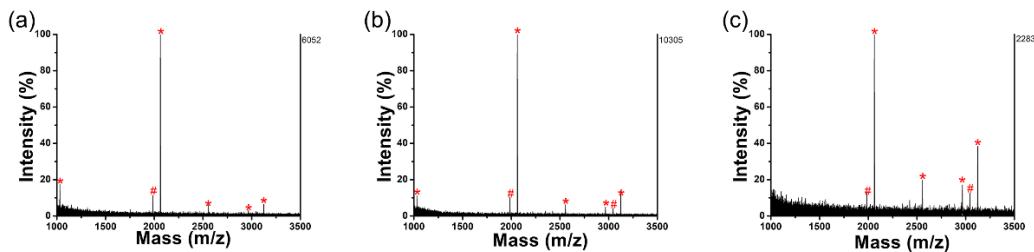


Figure S5. The MALDI-TOF MS spectra of tryptic digest mixture of β -casein and BSA (1:500, molar ratio) with different elution buffers of NH₄OH concentrations diluted with deionized water (a) 3 v%, (b) 5 v% and (c) 10 v%. The peaks of phosphopeptides are marked with *, and the peaks of dephosphopeptides are marked with #. Loading buffer, 50% ACN, 2% TFA, v/v).

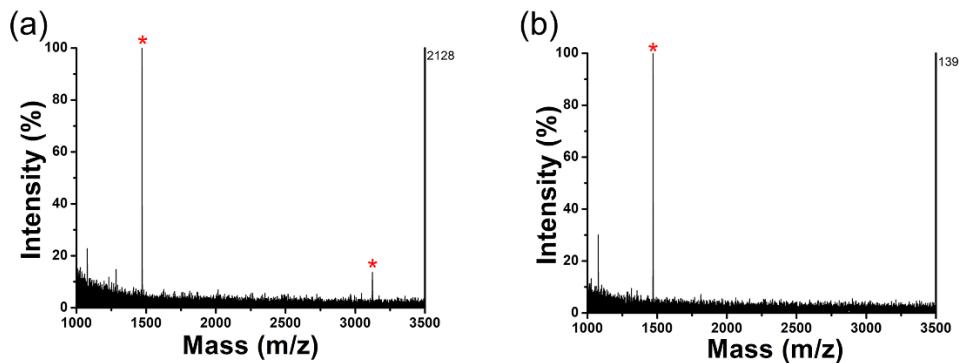


Figure S6. MALDI-TOF MS spectra of β -casein tryptic digest (a) 100 fmol, (b) 10 fmol after enrichment by G@mSiO₂@PEI-PFIL-Ga³⁺ nanocomposite. The peaks of phosphopeptides are marked with *, and the peaks of dephosphopeptides are marked with #.

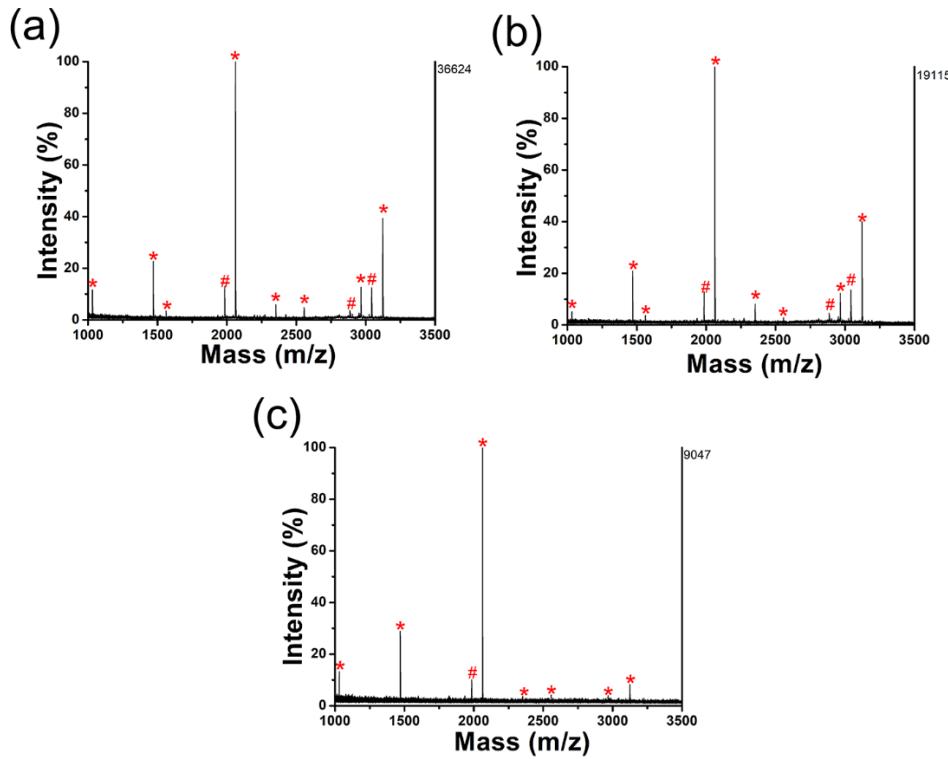


Figure S7. MALDI-TOF mass spectra of β -casein trypsin digestion (2 pmol) of G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposites after (a) 1, (b) 5, and (c) 10 times enrichment.

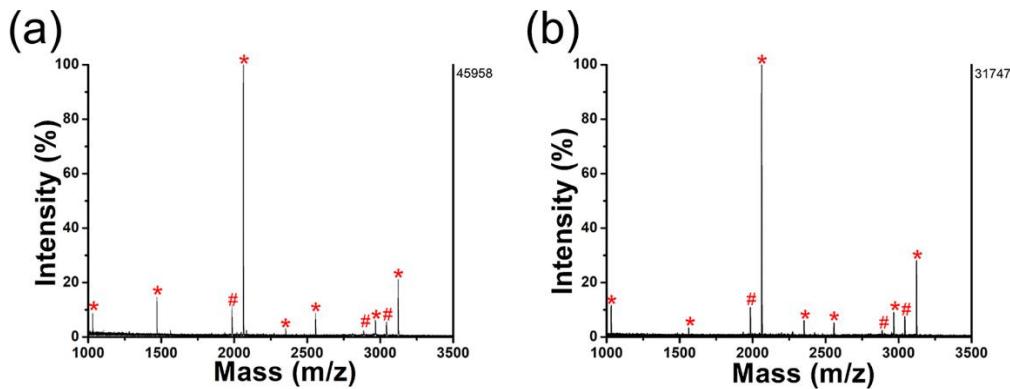


Figure S8. MALDI-TOF MS spectra of β -casein tryptic digest after enrichment by different batches G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposite (a) batch I and (b) batch II. The peaks of phosphopeptides are marked with *, and the peaks of dephosphopeptides are marked with #.

Tables S1–S9**Table S1.** The detailed information of phosphopeptides from β -casein digests enriched by G@mSiO₂@PEI-PFIL-Ti⁴⁺.

NO.	m/z	Peptide Sequence	Phosphorylation Site
1	1031	FQ[pS]EEQQQTEDELQDK	1
2	1154	[pS][pS]EEKFLR	2
3	1279	FQ[pS]EEQQQTEDELQDKIHPF	1
4	1561	RELEELNVPGEIVESL[pS][pS][pS]EE[pS]ITR	4
5	2061	FQ[pS]EEQQQTEDELQDK	1
6	2352	NVPGEIVE[pS]L[pS][pS][pS]EESITR	4
7	2556	FQ[pS]EEQQQTEDELQDKIHPF	1
8	2966	ELEELNVPGEIVE[pS]L[pS][pS][pS]EESITR	4
9	3123	RELEELNVPGEIVE[pS]L[pS][pS][pS]EESITR	4

Table S2. Comparison with the enrichment performance of some other affinity materials based on IMAC methods reported in recent years.

Affinity Materials	Sensitivity (β -casein)	Selectivity β -casein /BSA (molar ratio)	The Number of Phosphopeptides from Saliva	Ref
Fe ₃ O ₄ @PDA@mTiO ₂ @PEI-g-ZIF-8	2 fmol	1:1000	16	1
mCNT@PDA@PEI-ZIF-8	0.5 fmol	1:2000	20	2
Ti ⁴⁺ -MGMSs	0.5 fmol/ μ L	1:500	14	3
MG@ mSiO ₂ -ATP-Ti ⁴⁺	4 fmol	1:1000	19	4
magG@PDA-Hf ⁴⁺	0.08 fmol	1:500	-	5
Fe ₃ O ₄ @ILI-01@Ti ⁴⁺	0.5 fmol	1:5000	16	6
CTSM@AMPA-Ti ⁴⁺	0.4 fmol	1:1000	35	7
Fe ₃ O ₄ @mPDA@Ti ⁴⁺	0.1 fmol/ μ L	1:200	38	8
MagSiO ₂ @SiO ₂ @PDA@Ti	50 fmol/mL	1:500	-	9
TpPa-2-Ti ⁴⁺	4 fmol	1:100	-	10
Fe ₃ O ₄ @SiO ₂ @Ce-Zr-MOF@PA	0.1 fmol/ μ L	1:800	15	11
G@mSiO ₂ -PFIL-Ti ⁴⁺	0.15 fmol	1:10000	23	12
Fe ₃ O ₄ @mSiO ₂ @APA@Ti ⁴⁺ /Nb ⁵⁺	0.05 fmol	1:1500	24	13
MCNC@COF@Zr ⁴⁺	10 fmol	1:200	-	14
(4 μ -PEO-Ti ⁴⁺)	2 fmol	1:1000	15	15
Fe ₃ O ₄ @PDA@PMAA@PAMAM	1 fmol/ μ L	1:500	17	16
Fe ₃ O ₄ @mSiO ₂ -Ti ⁴⁺	0.1 fmol/ μ L	-	13	17
Ti ⁴⁺ -IMAC HPHM	5 fmol	1:1000	-	18
G@mSiO₂@PEI-PFIL-Ti⁴⁺	0.1 fmol	1:12000	27	Our work

Table S3. The change of atomic content for G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposite after the 0th and the 10th time of phosphopeptides enrichment.

	0th time (At %)	10th time (At %)
C1s	90.75	94.42
N1s	2.92	3.20
P2p	0.73	0.64
Ti2p	5.60	1.74

Table S4. The detailed information of endogenous phosphopeptides enriched from human serum.

No.	m/z	Peptide Sequence	Phosphorylation Site
1	1390	D[pS]GEGDFLAEGGGV	1
2	1459	AD[pS]GEGDFLAEGGGV	1
3	1545	D[pS]GEGDFLAEGGGVR	1
4	1616	AD[pS]GEGDFLAEGGGVR	1

Table S5. Detailed information on phosphopeptides enriched from human saliva by G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposites.

No.	m/z	Sequence	Phosphorylation Site	Ref
1	819	DGyMPR	1	19
2	886	KLsEATR	1	19
3	934	RFsLFGK	1	20
4	951	ILsNNPSK	1	20
5	1001	ssEEKFL	2	21
6	1022	ItFYEDR	1	20
7	1076	SsEEKFLR	1	22
8	1104	WDSWTsSR	1	23
9	1115	tDsDEKFI	2	21
10	1142	WPsPKEEDR	1	24
11	1155	ssEEKFLR	2	21
12	1172	SPEQEEtASL	1	21
13	1192	DsSEEKFLR	1	21
14	1234	sEQFLDEER	1	21
15	1270	D[pS][pS]EEKFLR	2	24
16	1311	ssEEKFLRR	2	21

17	1347	DSsEEKFLRR	1	21
18	1426	DssEEKFLRR	2	21
19	1461	GGDsEQFLDEER	1	21
20	1481	ssEEKFLRRIG	2	21
21	1539	SccLIPQTVsHR	3	20
22	1597	DssEEKFLRRIG	2	21
23	1637	ssEEKFLRRIGR	2	21
24	1752	QPQITPNPVtQHVQS	1	24
25	1784	ISDGGSsEQFIDEER	1	3
26	1899	QPGPAGPPGFsRmGKAGPP	2	22
27	2722	GGDsEQFIDEERQGPPLGGQQSQPS	1	21

Table S6. The phosphopeptides obtained from the tryptic digest of mice brain lysate enriched by G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposites.

Protein IDs	Phospho (STY) Probabilities	Mass
Q3UVL4	AAAAAVGPGLGSQPGDS(1)PEGPEADAPER	2502.1623
Q3UVL4	AAAAAVGPGLGS(0.65)GPGDS(0.35)PEGPEADAPERR	2658.2634
Q9CY29	AAAASAAEAGIAT(0.996)PGT(0.004)EDSDDALLK	2315.1129
A0A140LJ68	AAAEEANCIMEVEDLT(0.988)FT(0.529)S(0.483)PFCLQ VK	2914.3551
A0A087WRM2	AAASGPASASAPAAEILLT(1)PAR	1992.064
B2RX11	AAAS(0.012)PS(0.24)S(0.749)PR	842.42463
A9UGK3	AAATADPGAGNPQAGDS(0.001)S(0.001)GGDS(0.019)G GGLPS(0.978)PGEQELS(0.001)R	3237.4406
P28667	AAAT(1)PES(1)QEPQAK	1326.6416
D3Z183	VAILT(1)DDEEEQKR	2044.9913
Q9D2E2	AADS(1)DDDVPVPPTSDGGVNK	2051.9284
B1AWE0	AAEEAFVNDIDES(0.214)S(0.779)PGT(0.007)EWER	2351.019
A2AJI1	AAEEEKEPAAPAS(0.956)PAPS(0.048)PVPS(0.503)PT(0.49 3)PAQPQK	2749.3923
Q8BTI8	AAETPAVASCWSGPQVS(1)PEHK	2208.027
Q5SX A5	AAET(0.001)VPDLPS(0.998)PPT(0.001)EAPAPASNTSTR	2476.2082
Q5SS40	AAFDDAI AELDT(0.016)LS(0.979)EES(0.005)YK	2086.9583
A0A0A6YY91	AAFS(1)KDES(1)K	981.47673
A0A0A6YY91	AAFS(0.5)KDES(0.5)K	981.47673
A0A0A6YY91	AAFS(1)KDES(1)KEPIVEVR	1803.9367
Q6A018	AAGAVEAVCT(0.09)GHT(0.241)GKVS(0.669)PPPR	2061.0426
Q8R554	AAGGAAS(1)PGPGGGAR	1152.5636
Q05BZ0	AAGGGGGS(1)GEDEAQSR	1404.5866
A2A791	AAHQES(1)DNENEIQIQNQLK	2208.0407
Q569Z0	AAILKAS(1)PK	897.56475
A0A286YDA2	AAKES(1)EEEEEEETEEK	2023.8229
C6EQG9	AALPAGEEGGS(1)PEGAK	1310.6466
Q9R1L5	AALS(1)PVQEHEHETGR	1393.695
Q3URG1	AANKT(1)PPKS(1)PGDPAR	1505.795
Q2NKI4	AAPALT(1)PPDR	1007.54
Q8R554	AAPGT(0.001)GGPT(0.077)PGRS(0.922)PPAPAR	1713.8911
Q3UL43	AAPQS(0.929)PS(0.071)VPK	980.5291
Q9ESJ4	AAPT(0.001)T(0.999)PPPPVK	1074.6073
O08614	AAQAS(1)LNALNDPIAVEQALQEK	2293.1914
B1AQX6	AAQGPAGS(1)PDKGK	1182.5993
D6RE47	AAS(1)ALLLRS(1)PR	1153.6931
Q3TBZ3	AASAPAKES(1)PK	1055.5611
D3Z0D7	AAS(1)DPNPAEPEAR	1194.5629
P42128	AASEQQADAS(0.006)GGDS(0.994)PK	1517.6594

Q8BQY0	AASEVAGLGAGT(0.999)PS(0.981)PS(0.02)ES(0.001)SAL CASK	2304.0904
Q8BQY0	AASEVAGLGAGT(1)PS(0.977)PS(0.023)ES(0.001)SALC ASK	2304.0904
Q8R2V4	AAS(1)LTEDR	861.41921
Q3UGC1	AAS(1)PPASASDLIEQQQK	1739.869
B0LAC6	AAS(0.998)PS(0.002)KTEIQTIFK	1519.8246
A2A8V9	AAS(1)PS(1)PQSVR	998.51451
Q3UQU5	AAS(0.98)S(0.02)ESSGDREK	1222.5426
Q80U91	AAS(0.963)T(0.037)DLGAGEAVVVGK	1344.6885
A0A087WSE3	AAS(1)VELPQR	969.52434
H3BJL3	AAT(1)PEEK	744.36538
A0A1L1SQ28	AAVGS(0.998)PGS(0.002)LESAPR	1297.6626
A0A1L1SQ28	AAVGS(0.999)PGSLES(0.001)APR	1297.6626
P27546	AAVGVT(0.007)GNDIT(0.164)T(0.83)PPNKEPPPS(1)PEK K	2543.3231
Q8C1D8	AAVLS(1)DS(1)EDDAGNASAK	1619.7275
Q5FW97	AAVPSGAS(0.001)T(0.004)GIY(0.995)EALELR	1803.9367
Q8K232	AAVVT(0.014)S(0.985)PPPT(0.001)TAPHK	1472.7987
A0A1B0GQW2	ADADAGPAGGT(0.003)APDS(0.997)PR	1524.6805
A0A0N4SUV3	ADALQAGAS(0.927)QFES(0.039)S(0.035)AAK	1650.7849
Q8CHR4	ADALQAGAS(1)QFETSAAK	1664.8006
Q8R0M4	ADAPDAGAQ(0.939)DS(0.058)ELPS(0.003)Y(0.001)HQ NDVSLDR	2757.2114
Q14C38	ADEDKS(1)DAEGKPAR	1487.6852
Q3UAY3	ADEPS(1)PPAEEKDEGGK	1711.7537
B9EHJ3	ADGAT(0.47)S(0.53)DDDDLHDDR	1614.6758
O35295	ADGDS(0.5)GS(0.5)ER	892.35225
O35295	ADGDS(1)GS(1)ER	892.35225
A0A0N4SVM0	ADLEEQLS(1)DEEK	1404.6256
Q3U2G6	ADLES(1)PQR	914.44576
Q8C845	ADLNQGIGEPQS(0.771)PS(0.229)R	1567.759
P68404	ADPAAGPPPS(0.994)EGEES(0.003)T(0.003)VR	1765.8119
P60879	ADQLADES(0.995)LES(0.003)T(0.003)R	1433.6634
Q3UNH4	ADSAS(0.999)PS(0.001)PR	886.41446
A0A494BAG5	ADS(1)DGDLSENDDGAGDLR	1820.7297
Q7TPM0	ADS(0.998)DS(0.002)EDKGEESKPK	1620.7115
E9QN14	ADS(1)EAS(0.289)S(0.711)GPLLDDK	1403.6416
Q3TQI7	ADS(0.008)ES(0.992)EEDEQESEEVR	1866.7239
A2ARP8	ADS(1)KESLK	876.45526
E9PV14	ADS(1)S(1)DETDTSPAER	1529.6118
E9PV14	ADSS(1)DETDT(1)FAER	1529.6118
Q571D4	ADSVAGAIQSDPAEGS(0.989)QES(0.011)HGR	2167.973
Q7TQ95	ADS(1)VPNLEPSEESLVTK	1813.8945
B2RRE3	LDGES(1)DKEQFDDDK	2496.114

E9QNN1	AEAENNNSGVESSGYGS(0.999)PGPT(0.001)WDR	2366.0047
Q14C38	AEDEGS(0.972)T(0.028)EEGGKADEDK	1765.7126
Q14C38	AEDEGS(0.5)T(0.5)EEGGKADEDK	1765.7126
P26645	AEDGAAPS(0.001)PS(0.075)S(0.821)ET(0.103)PK	1442.6525
P26645	AEDGAAPS(0.964)PS(0.014)S(0.014)ET(0.008)PKK	1570.7475
Q925J6	AEDS(0.993)S(0.007)EGHEEEVLGGR	1699.7285
Q8K0I9	AEEAASAS(0.007)ADGDPS(0.99)GEEEPEVT(0.002)S(0.001)SDTGAPVSPLPK	3512.5438
Q547J4	AEEAGIGDT(1)PNQEDQAAGHVTQAR	2464.1215
A0A5F8MPE1	AEEAT(1)PVTALR	1156.6088
A0A5F8MPE1	AEEAT(0.999)PVT(0.001)ALR	1156.6088
Q5SUC3	AEEDEILNRS(1)PR	1427.7005
P08553	AEEEGGS(1)EEEGB(1)DR	1479.5597
P08553	AEEEGGSEEEGSDRS(1)PQESK	2135.8727
Q8BGC0	AEEGGES(1)EGDAS(1)EKDAK	1707.7071
Q8BGC0	AEEGGES(0.5)EGDAS(0.5)EKDAK	1707.7071
Q8BGC0	AEEGGES(0.999)EGDAS(0.001)EKDAK	1707.7071
Q52KE7	AEEKS(1)PVSINVK	1299.7034
A0A087WPL5	AEENNNS(0.001)GVES(0.003)S(0.003)GY(0.002)GS(0.964)PGPT(0.026)WDR	2294.9676
Q8C916	AEEQDLSEVELS(0.999)PVGS(0.001)EEPR	2199.0179
E9Q0E9	AEESGGS(0.004)S(0.128)S(0.739)PT(0.128)HDEN	1502.5757
Q9DCU2	AEFPS(0.006)KVS(0.86)T(0.134)R	1120.5877
Q543Y7	AEGAT(0.002)LS(0.014)NAT(0.055)GAVES(0.214)T(0.231)S(0.246)QAGDRGS(0.338)VS(0.284)S(0.596)Y(0.021)DR	2943.3442
Q3UYK7	AEKPSALNS(1)EEETTHEQSTEQDK	2486.1045
A2ARP8	AELEEMEEVHPS(1)DEEEEETK	2387.9799
Q9QYG0	AELQEVTQIT(0.134)EEKPLLPGQT(0.768)PET(0.098)AK	2648.3909
Q8BR92	AELVLIDEDDEKS(1)LR	1743.8891
Q3UNN4	AENKVENES(1)DEGDKIQDR	2074.9403
B9EHN0	AENYDIS(1)PADR	1249.5575
P55144	AEQPTES(0.033)GS(0.967)PEVHGER	1868.7959
P55144	AEQPTES(0.001)GS(0.999)PEVHGER	1868.7959
Q9CRB0	AESCGS(1)FDETESEESSK	1877.7109
Q9JIS5	AES(1)GGKGER	889.42536
A0A1B0GR96	AESGGSSGSS(0.01)QS(0.988)PERPS(0.001)S(0.001)LADR	2147.9679
Q4JG03	AES(1)PEEVACR	1146.4975
F8WHU5	AES(1)PETSVESTQSTPQK	1875.8698
Q6PBC0	AETAPLPTSVDDT(1)PEVLNR	2024.0062
Q6PBC0	AET(1)APLPTSVDDTPEVLNR	2024.0062
B2RQQ5	AETEEAEEPEEDEDNAS(0.734)GS(0.251)AS(0.015)K	2379.931
Q9Z2D6	AETSESSGSAPAVPEAS(0.007)AS(0.993)PK	1958.9069
G3UX78	AEVES(1)PLK	871.4651

Q61316	AFS(1)DPFVEAEK	1238.5819
H7BX46	AFS(1)EDEALAQQDSK	1537.6896
A8IP73	AFS(1)FPVS(1)PER	1135.5662
A8IP73	AFS(0.5)FPVS(0.5)PER	1135.5662
A8IP73	AFS(0.001)FPVS(0.999)PER	1135.5662
Q80XK6	AFTEVFLDD(0.5)HS(0.5)PANR	1804.838
A0A571BEW4	AFYGS(1)EEDEAK	1244.5197
A0A571BEW4	AFY(0.663)GS(0.337)EEDEAKGPGSEEATAALPAR	2623.2038
Q80TN1	AGAY(0.155)DFPS(0.842)PEWDT(0.002)VTPEAK	2079.9426
Q3UPL4	AGDGSEHCS(0.583)S(0.417)PDLR	1486.6107
O88939	AGDS(1)DEESR	964.37338
Q91XV3	AGEAS(0.058)AES(0.427)T(0.516)GAADGAAPEEGEAK	2074.8927
G3UY87	AGGAGGEGS(1)DDDTSLT	1408.559
S4R2F1	AGGGAGGS(1)GGS(0.964)GPS(0.036)AILR	1427.7117
S4R2F1	AGGGAGGS(1)GGS(0.999)GPS(0.001)AILR	1427.7117
A0A286YDH6	AGGGRPSSPSVVS(1)EK	1597.806
Q5SUG2	AGLLS(0.036)S(0.964)PVAR	969.56073
Q5SUG2	AGLLS(0.045)S(0.955)PVAR	969.56073
A0A0N4SUJ0	AGNS(1)DS(1)EEDDANER	1507.5659
D3YYN7	AGQENIS(0.993)VS(0.007)KR	1187.6258
D3YYN7	AGQENIS(0.994)VS(0.003)KR	1187.6258
Q9EP97	AGQHS(1)PLR	864.4566
P06837	AGS(1)AETESA AK	1020.4724
Q3UFI4	AGS(1)DAAASRPR	1057.5265
B9EJI9	AGS(1)DVASEGPSPR	1228.5684
A0A087WRM8	AGS(0.919)IS(0.075)T(0.006)LDSLDFAR	1451.7256
Q8CFD2	AGS(1)PDQEGFFNLLTHVQGDR	2187.0345
F6R1B7	AGS(0.986)PGS(0.014)EVVTLQQFLEESNK	2119.0433
Q3UVZ8	AGS(0.997)PLCNS(0.003)NLQDSEEDVEPPSYHLFR	2960.3247
A0A338P6D9	AGS(1)PQLDDIR	1070.5356
Q3TDG9	AGSRLS(1)AEDR	1060.5261
Q80U46	AGS(0.611)S(0.389)PTQGAQNEAPR	1469.6859
E9Q453	AGS(0.001)S(0.947)S(0.051)LEAVR	975.49852
Q8VED9	AGS(1)VADSDAVVK	1117.5615
Q9QYB8	AGT(0.687)KS(0.313)PAVS(0.966)PS(0.034)K	1128.6139
Q5GH64	AGT(1)PTLPVFQVR	1284.719
E9PUL5	AHG GHPGS(1)PR	971.46856
Q3UHE7	AHNLQDGQLS(0.119)DT(0.119)GDLGEDIAS(0.762)N	2269.0095
Q3UHE7	AHNLQDGQLSDT(0.289)GDLGEDIAS(0.711)N	2269.0095
Q3UHE7	AHNLQDGQLS(0.109)DT(0.119)GDLGEDIAS(0.772)N	2269.0095
A0A1L1SQI7	AHRPSAPS(1)PPPR	1268.6738
F8S0X7	AHS(1)PQGEGEIPLHR	1526.759
P61967	AIEQADLLQEEDES(1)PR	1841.8643

Q71UP6	AILFLPLPVS(0.5)S(0.5)D	1270.7173
Q71UP6	AILFLPLPVS(0.654)S(0.346)D	1270.7173
Q3UJU9	AIPGEAGDAAILPS(0.207)LS(0.793)QEGQEK	2180.0961
A0A2U3TZF4	AISAPT(0.033)S(0.717)PT(0.249)R	999.53491
A0A2L2P590	AIS(1)LEGEPR	970.50836
D3YZ62	AIS(1)PTSATSSGR	1133.5677
A0A0G2JDC3	AIT(1)PPVAS(1)PVGR	1163.6663
Q6KCD5	AITSLLGGGS(1)PK	1099.6237
Q8CIJ3	AKPAAQSEEET(0.006)AT(0.085)S(0.909)PAAS(0.924)PT (0.074)PQS(0.001)AER	2611.2362
A2ARP8	AKPAS(1)PAR	796.45554
Q3TDI5	AKPS(0.999)PEHAPT(0.001)ISAPDASGPQK	2085.0491
D6RG95	AKS(1)PT(1)PDGSER	1143.552
D6RG95	AKS(1)PTPDGSER	1143.552
A2A8V9	AKS(0.657)PT(0.343)PS(0.012)LS(0.988)PAR	1210.667
Q91V36	AKT(1)PT(1)PEPFDSETR	1574.7577
E9PUD6	ALDAEGEDSS(0.002)PAS(0.998)PQR	1628.7278
D3YYY8	ALDIDS(1)DEEPEAK	1430.6413
A0A5F8MPE3	ALDS(1)WFEEK	1123.5186
Q8BST8	ALEAPPEEDDV(1)ANEELAER	2298.0135
Q8CIJ3	ALENGEADEPS(0.492)FS(0.547)DPEDFVDDVS(0.961)E EELLGDVLK	3608.6054
Q8CIJ3	ALENGEADEPSFSDPEDFVDDVS(1)EEELLGDVLK	3608.6054
Q8CIJ3	ALENGEADEPS(0.472)FS(0.547)DPEDFVDDVS(0.981)E EELLGDVLK	3608.6054
P09411	ALES(1)PERPFLAILGGAK	1767.9883
A2AAE1	ALET(0.005)IPIT(0.995)PIER	1351.7711
A2ARP8	ALGLEES(1)PEEEGK	1386.6515
Q99J77	ALGS(0.989)PT(0.011)K	672.38064
Q9JM73	ALIQTCLNSPDS(0.999)PPR	1667.8301
F6SMY7	ALLS(1)S(1)PEGEEK	1158.5768
A0A6I8MWZ1	ALMHHPDRHS(1)GAS(1)AEVQKEEK	2485.1768
Q921Q7	ALPLS(1)PAQELQR	1321.7354
A0A087WSM1	ALPRDS(1)LEGDDFEK	1590.7526
Q8BLC4	ALPSVGLQS(0.001)DQS(0.999)PQR	1581.8111
B7ZNF6	ALQS(1)PEHHIDPIYEDR	1918.9173
P16054	ALS(1)FDNR	821.40317
Q6PBC0	ALS(1)NLSSR	846.45593
F7B9R2	ALS(1)QDDQDDIHLK	1496.7107
Q8BYP9	ALS(0.996)S(0.004)AQR	731.3926
Q99JJ1	ALSSGPAS(1)PK	913.4869
A0A0N4SVU7	ALVHQQLS(0.992)NES(0.008)R	1252.6524
A0A0N4SVU7	ALVHQQLS(0.982)NES(0.018)R	1252.6524
A0A0N4SVU7	ALVHQQLS(1)NESR	1252.6524

Q5DTM8	ALVVPEPEPDS(0.005)DS(0.995)NQER	1880.8752
A2APX8	AMSIASILTNTVEELEES(1)R	2092.0358
Q3UC00	ANENHGS(1)PR	980.44241
Q9CTM9	ANFDEENAY(0.001)FEDEEEEDS(0.008)S(0.008)NVDLPY (0.008)IPAENS(0.753)PT(0.222)R	3805.6027
Q6NVE5	ANFSES(1)PPLPR	1213.6091
A0A0N4SWC1	ANLGSEAEREPLLGPJS(0.834)PGS(0.166)R	2093.0501
H3BIW0	ANLS(1)PDR	771.38752
D6Q0F4	ANRAD(S(1)EEEGAVELAA	1630.7435
F2Z3Z9	ANS(0.999)FVGT(0.001)AQYVSPELLTEK	2053.0368
A0A0R4J1Y6	ANS(1)LDGFAQNCQDSVNVQPVSR	2502.1557
E9Q7E9	ANS(1)LDNER	917.42027
Q7TSH2	ANS(1)PDAAFSSPALLR	1515.7682
A0A1D5RLY6	ANS(1)QDSLASR	1047.4945
Q69Z38	ANTLS(1)PVR	856.47667
E9Q1W0	ANVVVT(0.049)S(0.951)PK	814.45487
E9Q1W0	ANVVTS(1)PK	814.45487
E9Q1W0	ANVVVT(0.044)S(0.956)PK	814.45487
Q3TN35	APDRT(1)PPSEEDSAEAER	1855.8184
A2ARP8	APDS(1)GAEVER	1029.4727
G5E8T0	APEGEEETFYVS(1)PEDLEAQLQSDER	2867.2621
E9PV14	APES(1)DT(1)GDEDQDQER	1690.6554
A0A3B2WBC6	APES(1)PPAAEPAPA VGPAGDPCPPR	2307.0954
A2ARP8	APIS(0.001)LS(0.029)QDPS(0.97)PPLNGSTTSCGPDR	2453.1493
A0A286YDE4	APPDS(0.999)PT(0.001)TPVR	1136.5826
A0A286YDE4	APPDS(0.483)PT(0.517)TPVR	1136.5826
C9K0Z8	APPGPLPPAASPGPPAAS(1)PPAAPS(0.538)S(0.462)PR	2411.2597
E9Q6I5	APPVPGAVS(0.008)GGS(0.992)GEVDELFDVK	2126.0532
Q3TV22	APQS(0.992)PT(0.008)LAPAK	1079.5975
A2A8V9	APQT(0.01)S(0.663)S(0.327)PPPVR	1135.5986
Q5U4C3	APS(1)PAPAVS(1)PK	1020.5604
B7ZMR0	APS(1)PQGR	711.36639
F8WHU5	APS(0.999)PS(0.001)QPPKK	1035.5713
A0A1C7ZMY3	APSPVVS(0.998)PT(0.002)ELSK	1310.7082
Q3UHE9	APSQAAES(0.536)S(0.463)PT(0.001)K	1172.5673
Q6KAS0	APSQPPS(0.966)PT(0.034)EER	1294.6153
Q6KAS0	APSQPPS(1)PTEER	1294.6153
Q3TR97	APSQPPS(1)PTREER	1450.7165
A2AIV3	APS(1)S(1)DEECFFDLLSK	1743.7662
B2RSY3	APS(0.017)S(0.983)PGR	670.33984
Q3UNH4	APS(1)WDAGAPPR	1220.5938
S4R1M2	APTAALS(1)PEPQDSK	1410.6991
Q3UH26	APT(1)PGGGHPDS(1)PGLPAPAGQQQR	2192.0723

A0A1B0GRH3	APVS(0.01)VACGGES(0.99)PLDGICLSEADK	2331.0723
Q3TES0	AQAPELQQEEERPGAVGS(1)PR	2148.056
Q3UMU9	AQEDGQDS(1)EDGPR	1402.5597
O88737	AQGPSGQEAES(1)PR	1312.6008
Q9CYT6	AQGQIRS(0.999)PT(0.001)K	1084.5989
Q99P72	AQIITEKT(0.163)S(0.837)PK	1214.6871
Q99P72	AQIITEKT(0.768)S(0.232)PK	1214.6871
Q5XJE5	AQIS(1)DDDR	918.40429
Q9QXS1	AQLEPVAS(1)PAK	1109.6081
D3Z5R4	AQLVS(1)PPAPPTK	1204.6816
Q9JLM8	AQPAPPELNS(0.001)ES(0.002)EDYS(0.963)PS(0.028)S(0.005)S(0.001)ETVR	2576.1514
B7ZNJ3	AQPGS(1)PQALGGPHGPATAK	1740.8907
A0A5H1ZRL1	AQPS(0.5)S(0.5)PGGEGPQLGAAGGPR	1789.8707
A0A1B0GR41	AQRLS(1)QETEALGR	1457.7587
Q8BTI8	AQS(0.964)GT(0.036)DS(0.102)S(0.899)PEHK	1242.5477
Q7TSJ2	AQS(1)PLLPEPLK	1191.6863
A0A1L1ST22	AQT(0.63)GS(0.37)AGADPTADVSGQS	1618.7071
A0A1L1ST22	AQT(0.73)GS(0.27)AGADPTADVSGQS	1618.7071
Q62261	AQTLPTSVVTITS(0.002)ES(0.713)S(0.284)PGKR	2058.0957
Q9D481	ARPSQLPEQSSAQQNNGSVS(0.002)DIS(0.998)PVQAAK	2966.4694
F8VQ11	ARS(1)DDYLSR	1081.5152
Q8BNW9	AS(1)AAEGSEAS(0.951)PPS(0.049)LR	1428.6845
H7BX46	ASADNS(1)PGR	873.39406
D3YUS5	ASADS(0.036)S(0.963)LENLS(0.001)TASSR	1594.7435
A0A494BAV2	AS(1)AEQIEEVTK	1332.6409
D3Z491	ASATS(0.02)LS(0.85)GS(0.125)DS(0.005)ETEGK	1525.6744
H3BIW0	AS(1)DLEEEENATR	1362.5899
B2RX66	ASDPQS(1)PPQVSR	1267.6157
Q9QXS6	ASDSGPSSSSS(0.001)S(0.004)S(0.148)S(0.847)PPR	1665.7078
Q9D4F2	AS(0.002)DS(0.998)PVHR	867.41988
Q3UZP2	AS(1)EEEPEYGEESR	1510.606
Q9ESN6	ASEGASIPS(1)PVVR	1268.6725
Q6DID3	ASEPVKEPVQT(0.007)AQS(0.993)PAPVEK	2091.0848
Q6NVE8	AS(0.416)ES(0.528)DT(0.052)EEFY(0.003)DAPEDVHLG T(0.021)GY(0.001)PVGS(0.978)PGK	3053.3414
D3Z362	AS(0.636)ES(0.032)S(0.332)PLLAYR	1192.6088
H9KV01	AS(0.52)ES(0.49)S(0.49)S(0.49)EEKDDY(0.009)EIFVK	1961.8742
Q3TBZ3	ASGPAS(1)PEK	842.4134
Q9CZ46	AS(1)GQAFELILKPPS(0.858)PIS(0.142)EAPR	2207.195
O70166	AS(1)GQS(1)FEVILK	1177.6343
Q544Y7	AS(1)GVAVSDGVIK	1101.603
Q4FK36	AS(1)GVQVADEVCR	1289.6034
H3BIV5	ASLLESSAAGS(1)PR	1244.6361

D3Z399	ASLRS(0.5)AT(0.5)PRLR	1226.7208
B2RQQ5	AS(0.421)LS(0.579)PMDEPV PDS(0.062)ES(0.938)PVEK	2012.9249
S4R2J8	AS(1)PDASSNPEPAETR	1527.6801
Q6GQT6	ASPEEPGDS(1)PPLR	1350.6416
Q7TSF4	AS(1)PGAAPGPR	879.45626
Q8C916	AS(1)PGPGELGK	911.47125
V9GXI9	AS(1)PGPGGLSGGESLLVK	1524.8148
A2A7T3	AS(1)PINEDIR	1013.5142
Q3TQD2	AS(1)PLLSDK	829.45453
Q543V3	AS(1)PPDTDGFSDVR	1362.6052
A2AU34	AS(1)PPGLELK	910.51238
Q0QWG9	AS(1)PPVPSLVGTSGPR	1420.7674
G1C1N8	ASPSCFH S(1)EDED S LK	1707.7046
Q8BIC0	AS(1)PSLGGR	743.3926
E9PUL5	AS(0.999)PS(0.001)PSPSEAR	1084.5149
E9PUL5	AS(1)PSPSPSEAR	1084.5149
E9PXE2	AS(1)PT(0.123)S(0.877)PDKK	929.48181
S4R2T7	AS(0.723)PT(0.505)S(0.772)PGPEGGA CTPQNPPR	1976.901
A0A087WNU5	AS(0.006)S(0.994)EEEDHSR	1145.4585
D6RH82	ASSEQAEQPNQPS(0.038)S(0.96)PPGS(0.002)ENVVPR	2491.1575
E9Q9D6	AS(0.016)S(0.984)FSGISILTR	1237.6667
Q3UHE9	ASS(1)LDLNK	846.4447
Q3TE28	ASS(1)LEDLVLK	1073.5968
G3UXH4	AS(0.002)S(0.998)LGETDESSEL R	1479.6689
G3UXH4	ASS(1)LGETDESSEL R	1479.6689
A0A087WQ48	AS(0.5)S(0.5)PDDDVQQVVF D LICK	2034.9568
I6L9G8	ASSPDPPS(1)PLLVR	1334.7194
A0A140LIS5	ASS(1)PPDR	728.34532
A0A140LIS5	AS(0.545)S(0.455)PPDRIDIFGR	1429.7314
Q8C4N2	AS(0.229)S(0.771)RPRPDDLEI	1354.6841
D3Z4K1	AS(0.022)VAS(0.983)DPES(0.995)PPGGNEPAA ASGQR	2150.9829
D3Z4K1	ASVAS(1)DPESPPGGNEPAA ASGQR	2150.9829
D3Z4K1	ASVASDPES(1)PPGGNEPAA ASGQR	2150.9829
G8JL85	AS(0.002)VGDS(0.001)S(0.001)QEFS(0.996)PIQE AQQDR	2177.9825
Q6DVA0	AS(0.009)VRGS(0.991)S(0.984)EDDED T(0.016)R	1522.6496
Q569Z6	ASVSDL S(1)PR	930.47706
E9Q8B3	AT(0.013)ALS(0.987)EEELDNEDYYSLLNVR	2443.1391
D3YUQ9	ATAPQT(0.001)QHVS(0.999)PMR	1422.7038
Q8BHS4	ATAQT(1)EER	904.42502
Q8C845	ATDELAS(0.919)KLS(0.081)R	1189.6303
Q9CQV4	AT(0.469)DS(0.531)HS(0.531)DS(0.469)EEELAAFCPQLD DSTVAR	2850.225
Q9CQV4	AT(0.525)DS(0.5)HS(0.5)DS(0.475)EEELAAFCPQLDDST VAR	2850.225

Q61655	AT(0.022)DS(0.022)WALAVDEQEAAVKS(0.986)MS(0.986)S(0.986)LQIKEEK	3063.507
Q3TER0	ATEEPSGT(0.018)GS(0.981)DELIK	1532.7206
Q8K1G7	ATEIGS(1)PPR	926.48214
A0A5F8MPN1	ATFAGGS(1)R	765.37695
A0A2R8W6N3	ATGV(1)AEDADPR	1187.5418
B9EHN0	ATLPS(1)PDKLPGFK	1369.7606
A2AGR1	AT(0.099)LS(0.866)DS(0.035)EIETNSATSAIFGK	2040.9851
Q60829	ATLSEPGEEPQHPS(1)PP	1671.774
P56399	ATNN(1)LER	903.44101
A0A0A6YW88	AT(0.732)PAT(0.268)EESTVPATQSSALPAAK	2127.0695
A0A0A6YW88	AT(1)PATEESTVPATQSSALPAAK	2127.0695
A0A0A6YW88	AT(0.738)PAT(0.262)EESTVPATQSSALPAAK	2127.0695
Q3TN44	AT(1)PEASGSGEK	1032.4724
Q3UH88	ATSACAPIS(0.859)S(0.141)PK	1188.5809
D3Z2Z6	ATS(1)VGDQLEAPAR	1313.6575
P06837	ATTDNS(0.994)PS(0.006)S(0.001)K	1006.4567
S4R1B0	AT(0.537)T(0.463)PPNQGRPDS(0.986)PVY(0.014)ANLQ ELK	2395.2132
A0A087WRY3	ATVTPS(1)PVK	898.51238
A0A0A6YY32	AVDS(1)LGLDR	944.49271
Q5XG69	AVDS(0.964)S(0.874)S(0.162)EEIEVEVPVVDRR	2114.0491
A0A1W2P6V9	AVDTLS(1)PDWDFDR	1535.6892
A0A2R8VK70	AVEEPLNAFKES(1)K	1460.7511
Q00PI9	AVEEQGDDQDS(1)EK	1448.5903
P60710	AVFPS(1)IVGR	944.54435
Q8BHL3	AVGGAPS(1)PPPPVR	1200.6615
A0A0N4SWD0	AVIES(1)DEEQGR	1231.5681
A0A5F8MPF3	AVLS(1)PIR	754.47012
A2AM69	AVNS(0.606)T(0.39)RET(0.004)PPK	1198.6306
Q8C6M1	AVPIAVADEGES(1)ES(1)EDDDLKPR	2341.0921
Q5SUA5	AVPLEAVT(0.407)GLS(0.613)VT(0.984)S(0.996)GR	1555.857
Q9EPN1	AVPNVDAGS(0.017)IIS(0.923)DT(0.06)ER	1642.8162
Q9EPN1	AVPNVDAGSIIS(0.001)DT(0.16)ERS(0.839)DDGKES(0.01)GK	2546.2096
B9EHJ3	AVPVS(0.776)PS(0.224)AVEEDEDDEDGHTVVATAR	2579.1987
B2RXW6	AVRT(0.009)S(0.358)IY(0.275)T(0.358)K	1037.5869
Q5D0A4	AVS(0.999)DT(0.001)KK	747.41267
E9PVU7	AVS(1)EEGNDSAGGAALK	1474.69
D6RGQ9	AVS(1)EQDTK	876.41888
Q9CS54	AVS(0.037)S(0.963)PPTSPR	997.51926
P49586	AVT(0.013)CDIS(0.987)EDEED	1381.5191
G3X9N3	AVT(1)PEKK	771.44905
O88587	AVYQGPGS(0.119)S(0.881)PVK	1188.6139

O88587	AVYQGPGSS(1)PVK	1188.6139
O88587	AVYQGPGS(1)SPVK	1188.6139
Q3UWU7	CDES(1)PNREVQSSEAEALAR	2146.9549
Q3UWU7	CDESPNREVQS(1)SEAEALAR	2146.9549
F7BCP8	CDTSNNEEGELFDFDS(1)GDEVPEADR	2975.1523
F7CYX4	CET(0.001)S(0.999)PPPTPR	1140.5234
F7CYX4	CET(0.458)S(0.542)PPPTPR	1140.5234
B2RXW8	CET(0.027)S(0.973)PPSSPR	1116.487
P18526	CEVQLVES(1)GGGLVK	1473.7497
Q3UDA7	CGSGPVHISGQHLVAVEEDAES(1)EDEDEEDVK	3365.4478
D3YYN7	CIELSCGS(1)VR	1179.5376
D3YYN7	CIELS(1)CGSVR	1179.5376
A2ARP8	CLS(1)PDDSTVK	1120.507
A0A286YE88	CTAPLT(0.159)PS(0.454)S(0.232)S(0.156)PEQR	1529.7144
E9PV14	CTDPELVS(0.958)PDS(0.042)GCETTLEEATGSK	2582.1
Q9DD05	DAAQS(0.001)S(0.999)PAFGDR	1220.5422
Q9DD05	DAAQSS(1)PAFGDR	1220.5422
Q9DD05	DAAQS(0.583)S(0.417)PAFGDRR	1376.6433
P35831	DADVSEES(1)PPPLPER	1636.758
P35831	DADVS(0.001)EES(0.999)PPPLPER	1636.758
Q69ZR9	DAQS(1)PLLEVDAASVK	1541.7937
E0CXJ3	DAS(1)DDLDDLNFFNQK	1755.7588
A0A087WPT7	DAS(1)DVEDEKPPPLPR	1663.8053
O70166	DAS(1)LEELQK	1031.5135
E0CXN3	DAS(1)PKEER	930.44067
Q8K070	DAS(0.995)PPEPAS(0.005)PTIGLDKK	1721.8836
A0A3B2WBH9	DAS(1)PPPDKPEPPK	1476.7613
A2AAU2	DAS(1)PVGLK	785.42832
Q3ZB20	DAS(1)PVGVK	771.41267
Q8BLA0	DAVT(0.112)EDS(0.888)PQPPLPSVR	1706.8475
Q8BLA0	DAVTEDS(1)PQPPLPSVR	1706.8475
Q8BLA0	DAVT(0.225)EDS(0.775)PQPPLPSVR	1706.8475
Q7TPW0	DCALS(1)PDELK	1146.5227
Q3TPT3	DDDAETGLT(1)DGEEKEEPKEEEK	2492.0562
A0A087WS46	DDDDIDLFGS(1)DDEEESEEAK	2271.8663
Q9Z204	DDEKEPEEGEDDRDS(1)ANGEDDS	2451.8906
B9EHJ3	DDISEIQS(0.009)LAS(0.948)DHS(0.043)GR	1728.7915
Q3U172	DDKDEEDDGT(0.001)GS(0.999)PHLNNR	2012.8308
A0A0G2JGX4	DDKS(0.243)S(0.757)PKK	903.46616
A0A0G2JGX4	DDKS(0.159)S(0.841)PKK	903.46616
D3Z589	DDS(1)FDSDLDSFGSR	1446.5899
A0A087WRY3	DDS(0.99)HS(0.012)AEDS(0.998)EDEKDDHK	1957.741
A0A087WNZ7	DDSLDLS(1)PQGR	1201.5575

Q99P72	DDS(1)PKEYTDLEVSNK	1738.7897
Q3TSE1	DDS(1)PTQTLASPNACR	1631.7209
Q3TSE1	DDS(0.426)PT(0.507)QT(0.067)LASPNACR	1631.7209
A2TJV2	DDVS(1)PEEQGK	1102.4778
Q3UGH4	DDYLET(0.001)LS(0.83)S(0.17)PK	1266.598
Q3UGH4	DDYLETLS(0.999)S(0.001)PK	1266.598
Q80U46	DEAAS(1)PGAK	844.39266
A2ARP8	DEAS(1)EEKEQVLEQK	1660.7792
Q80TW3	DEDGES(1)GPDEGPDLEESSAGYK	2281.8982
Q80TW3	DEDGESGPDEGPDLEES(1)SAGYK	2281.8982
A0A0A0MQD4	DEEPEDINIAIS(1)K	1471.7042
S4R2F3	DEFLPALSLQSGALGGS(0.735)S(0.195)ES(0.07)LK	2205.1165
Q9D0A2	DEILPT(0.017)T(0.983)PISEQK	1469.7613
Q9D0A2	DEILPTT(1)PISEQK	1469.7613
Q8VDD5	DELADEIANS(0.654)S(0.346)GK	1347.6154
Q3UMP4	DELTES(1)PK	917.43419
Q4JG03	DEPPPLS(0.457)PAPLT(0.54)PAT(0.002)PSSLDPFFSR	2635.317
P08551	DEPPS(1)EGEAEEEEKEK	1830.7643
K3W4L0	DES(0.001)AS(0.01)ET(0.649)S(0.649)T(0.654)PS(0.036)E HS(0.001)AAPSPQVEVR	2497.1205
A0A0A6YY91	DES(1)KEPIVEVRT(1)EEER	1943.9436
Q69ZA1	DES(1)PVSHR	925.42536
Q69ZA1	DES(0.864)PVS(0.136)HR	925.42536
J3QPJ0	DES(0.008)S(0.008)AES(0.008)DIS(0.968)S(0.504)AKAFN T(0.504)VKR	2141.0237
A0A0N4SUM4	DETGEYS(0.971)DS(0.029)DEKPLK	1858.8109
G3X9H5	DEVAEAS(0.994)DPES(0.006)KPCR	1688.7312
G3X9H5	DEVAEAS(1)DPESKPCR	1688.7312
A0A5F8MPE1	DEVDAAES(0.003)T(0.991)PT(0.006)DR	1404.6005
A0A5F8MPE1	DEVDAAES(0.74)T(0.259)PT(0.002)DRR	1560.7016
Q80XK6	DFATAPPT(0.185)S(0.815)PAK	1201.5979
Q3TWG5	DFQEYVEPGEDFPAS(1)PQR	2109.928
D3Z0Y2	DFT(1)PVCTTELGR	1394.65
D3Z0Y2	DFTPVCT(1)TELGR	1394.65
A0A654IDS7	DGAAVA AVS(0.015)ADRDS(0.93)PPCAGLNAT(0.027)S (0.027)R	2428.1401
Q5SVR0	DGAHS(0.215)GDPNS(0.717)AT(0.069)EEDEPPTPK	2149.9036
E9Q824	DGDES(0.082)S(0.918)PILTSFELVK	1735.8516
E9Q824	DGDES(0.154)S(0.846)PILTSFELVK	1735.8516
E9Q824	DGDES(0.013)S(0.973)PILTSFELVK	1735.8516
Q8C6M1	DGDRS(0.711)PS(0.288)EDEFLCDSSDR	2259.8822
Q80TV8	DGGAAS(1)PATEGR	1087.4894
F8WGT1	DGGEALVS(1)PDGTVTEAPR	1769.8432
Q99PC9	DGGGENTDEAQQPQPS(0.045)QS(0.731)PS(0.18)S(0.045)NK	2357.0004

Q4JG03	DGGS(1)GNSTIIVSR	1261.6262
Q4JG03	DGGSGNS(1)TIVSR	1261.6262
Q3V2W5	DGGS(1)PPLLEK	1011.5237
Q922F2	DGLALEKT(0.204)S(0.796)PDR	1300.6623
Q922F2	DGLALEKT(0.933)S(0.067)PDR	1300.6623
F6U7V1	DGPS(1)PTSGSSK	1018.4567
F6U7V1	DGPSPTSGS(1)SK	1018.4567
Q05D44	DGS(1)EEDEDNSKR	1379.5437
B2KF50	DGS(1)GENLAASQER	1332.5906
B2KF50	DGS(0.984)GENLAAS(0.363)QERLPS(0.653)DGELPDG PCAQQPVGK	3375.5637
A0A1L1SSL7	DGSIS(1)PVSSECSAVER	1678.7468
A0A668KLC6	DGS(1)PDAPAT(1)PEKEEVAFSEYK	2266.0277
Q76JQ0	DGS(1)PLLGGCSDSSGSLR	1663.7472
P08228	DGVANVS(1)IEDR	1173.5626
Q3U1V6	DGVLS(1)PSSQAQLSSR	1530.7638
A0A571BDA2	DHLS(1)PDFYDESETDPGAELPAR	2589.1143
Q9D824	DHS(0.982)PT(0.018)PSVFNSDEER	1715.7387
Q9D824	DHS(1)PTPSVFNSDEER	1715.7387
Q9D824	DHS(0.999)PT(0.001)PSVFNSDEER	1715.7387
Q91Z78	DHS(1)S(1)QS(1)EEEVVEGEK	1687.7173
Q9QYB8	DIATEKPGS(1)PVK	1240.6663
Q9QYB8	DIAT(0.071)EKPGS(0.929)PVKS(0.913)T(0.19)PAS(0.896) PVQS(0.869)PS(0.131)K	2407.2595
Q9QYB8	DIAT(0.563)EKPGS(0.439)PVKS(0.642)T(0.372)PAS(0.98 5)PVQS(0.934)PS(0.066)K	2407.2595
P63101	DICNDVLS(1)LLEK	1417.7123
D3YUQ9	DIIDLFGS(1)DEEEEDKEAAR	2066.8916
A0A668KM74	DIGS(1)ENDFADDEHSTFEDNDSR	2513.9691
A0A668KM74	DIGSENDFADDEHS(1)TFEDNDSR	2513.9691
Q9JJ27	DIILAPES(0.996)CEGS(0.8)PS(0.161)S(0.04)AHS(0.003)K	1983.9208
E9PWW9	DIQKLS(1)PIPEEVVR	1621.9039
P63017	DIS(1)ENKR	860.43519
Q9QYX7	DIS(0.999)IS(0.001)EEEIK	1161.5765
Q9QYX7	DIS(0.994)IS(0.006)EEEIK	1161.5765
Q9QYX7	DIS(0.988)IS(0.012)EEEIK	1161.5765
A0A0R4J087	DIS(1)NLEENDETR	1433.627
A0A286YCI8	DIS(1)PEEIDLK	1157.5816
Q3V437	DKAS(1)PEPEKDFVEK	1617.7886
B2RSY3	DKDS(0.5)S(0.5)EPDENPATEPR	1785.7653
E9PV14	DKS(1)DS(1)ETEGLVFAR	1552.7369
A0A1L1ST22	DKS(1)FDDEESVDGNRPSSAASAFK	2458.0884
B7ZMZ2	DKS(1)PSSLLEDAK	1288.6511
B7ZD63	DKS(1)PVREPIDNLTPeer	1994.0069

Q9QYB8	TESVTSGPLS(1)PEGSPSK	1901.9218
Q9QYB8	DKTEVTSGPLSPEGS(0.922)PS(0.1)KS(0.874)PS(0.104) K	2301.1336
A2ARP8	DKT(1)PEEKDK	1088.535
Q3U9Y8	DKT(0.993)PVQS(0.007)QQPSATTPSGADEK	2171.0342
Q3U9Y8	DKT(1)PVQSQQPSATTPSGADEK	2171.0342
A0A668KLC6	DKVTDGIS(0.879)KS(0.121)PEK	1402.7304
I3PQW3	DLEFCS(1)T(1)EEEKETDR	1886.784
A2AMD0	DLEFCS(1)T(1)EEEKETGDR	1943.8055
A4FUR1	DLES(1)LS(1)PR	915.46616
G3UZB0	DLFSLDSEGPS(0.001)PT(0.182)S(0.817)PPLR	1913.9371
Q9Z1Z0	DLGHPVEEEDES(1)GDQEDDDDEIDDGDKDQDI	3487.3303
E9PV14	DLKGPS(1)S(1)QEDESGGLEDSPDR	2216.9669
B7ZMV4	DLLGGEES(1)PGEK	1286.599
A0A0G2JDW7	DLLHPS(1)PEEEK	1292.6248
Q3UXP3	DLLSDLQDIS(0.982)DS(0.018)ER	1604.753
Q6PGB9	DLLS(1)PESGSLVR	1271.6721
Q6PGB9	DLLSPESGS(1)LVR	1271.6721
E9PY18	DLNSSFET(0.096)S(0.904)PK	1223.567
E9PY18	DLNSSFETS(1)PK	1223.567
E9QLQ9	DLQRPD(0.001)EHAFS(0.953)PDS(0.047)ENFDWK	2519.0989
Q3TPT3	DLQS(1)AEKEEQEK	1432.6682
Q80T68	DLS(1)EELEALK	1145.5816
D3Z1Z8	DLS(1)LEEIQKK	1201.6554
E9Q3M9	DLS(1)PSEGDVAPPKR	1466.7365
Q99LJ0	DLS(1)PTLLDNSAAK	1343.6933
Q3UUK5	DLTGGDLT(0.011)S(0.989)PDASASSCGR	1865.8061
Q3UUK5	DLTGGDLTSPDASAS(1)SCGR	1865.8061
Q3UUK5	DLTGGDLT(0.003)S(0.997)PDASASSCGR	1865.8061
B2RQQ5	DLTGQVPT(1)PPVK	1250.6871
Q8BJ05	DLVQPDKPAS(1)PK	1293.6929
E9Q3M9	DMLPS(1)EGDVAPPKR	1510.745
E9Q3M9	DMS(1)PPEGDVAPPK	1338.6126
P27546	DMS(1)PSAETEAPLAK	1445.6708
X5J4K0	DNAKNT(1)LY(1)LQMS(1)K	1524.7606
Q3TRX6	DNFFQVFS(1)PVFER	1630.778
A0A286YDU2	DNS(1)EEFLKR	1136.5462
A0A0A6YXK7	DNS(0.033)IS(0.964)PES(0.003)DVDTASTISLVTGETER	2622.2144
A0A087WQ58	DPEEAT(0.002)LS(0.006)FPAQS(0.197)LS(0.795)PEPVP QEEEK	2753.292
Q80T41	DPIEDINS(1)PEHIQR	1661.8009
F6SMY7	DPKDS(0.993)PGS(0.007)ENR	1200.5371
A0A1D5RM97	DPLEEIQPLNDLDES(0.007)QPPAPGS(0.908)PES(0.085) R	2829.3305

Q64727	DPNAS(1)PGDAGEQAIR	1496.6855
Q3UEX8	DPSQT(0.67)S(0.33)PLGTPR	1254.6204
Q3UEX8	DPSQT(0.73)S(0.27)PLGTPR	1254.6204
S4R166	DPVPQSGLS(0.999)PER	1280.6361
S4R166	DPVPQS(0.025)GLS(0.975)PER	1280.6361
S4R166	DPVPQS(0.101)GLS(0.899)PER	1280.6361
A0A087WSE3	DQEAPSPEALPS(0.002)PGQES(0.977)PDGPS(0.022)PR	2444.1092
Q9Z0R4	DQFS(1)PDDFLGR	1295.5782
B7ZCJ0	DQGEPVS(0.5)PS(0.5)EDEPFSWPGPK	2183.9647
E9PV14	DQGGS(1)QEDVSK	1148.4946
B1AXH1	DQGHS(0.003)S(0.541)S(0.34)PT(0.046)GS(0.069)LAR	1398.6488
A0A2R8W6N3	DQGNDS(0.901)AS(0.077)T(0.022)APR	1217.5273
Q8CHR4	DQKLS(1)ELDDR	1217.5888
O54991	DQNLPQILEES(0.066)RS(0.934)E	1656.7955
Q8C078	DQPPEADGQELPLEAS(0.893)DPES(0.107)R	2279.019
E9Q784	DQRPS(0.137)S(0.863)PIR	1054.552
A0A494B870	DQTEDPAS(0.147)S(0.705)PT(0.074)S(0.074)K	1361.5947
Q99PP2	DQVVGGNVS(1)PR	1126.5731
P48437	DRAS(1)PESLDLTR	1358.679
Q9Z2C9	DRDS(1)DEAVFLTA	1337.6099
Q5SUH7	DREDS(1)PER	1002.4367
Q8BNW8	DRGGDT(0.428)S(0.5)DT(0.062)ES(0.008)S(0.002)IIIR	1720.8228
Q91W39	DRS(1)PIRGS(1)PR	1139.616
Q5M9P7	DRS(1)PSPLR	926.49338
Q0VBL3	DRT(1)PPLLRYR	1129.6244
C9K0Z8	DS(0.003)AS(0.997)PGAASGLDPLDSAR	1685.7857
C9K0Z8	DS(0.102)ASPGAAS(0.898)GLDPLDSAR	1685.7857
C9K0Z8	DS(0.012)AS(0.988)PGAASGLDPLDSAR	1685.7857
Q3TUJ9	DSASQDINLNS(1)PNK	1501.7009
A7TU71	DSCS(0.013)S(0.987)PPSLNYGK	1410.6085
A7TU71	DSCS(0.019)SPPS(0.981)LNYGK	1410.6085
A7TU71	DSCSS(1)PPSLNYGK	1410.6085
Q5D0A4	DS(1)DDDDDVTVTVDR	1565.6329
Q3UJU9	DS(0.635)DKES(0.365)GDAEDEVSCETVR	2126.8546
Q3UPL0	DSDQVAQS(1)DGEES(1)PAAEEQLLGER	2559.1209
A0A0R4J166	DS(0.001)EDS(1)LDS(1)VLCY(1)DR	1672.6886
O35954	DS(0.681)ENS(0.659)S(0.659)EEEFFDAHEGFSDSDEVFP K	2979.1843
F7BTP0	DSGETQASSS(0.01)T(0.094)S(0.896)PR	1408.6066
Q8C943	DSGLEDGRES(0.993)PS(0.007)FDTPSQR	2078.9141
A0A1B0GRU8	DSGNWDT(0.001)S(0.003)GS(0.028)ELS(0.968)EGELEK R	2194.9614
Q52KR3	DSGPES(1)PGR	900.39372
S4R2F3	DSLES(0.003)S(0.997)PVEPK	1186.5717

S4R2F3	DSLES(0.024)S(0.976)PVEPK	1186.5717
S4R2F3	DSLES(0.012)S(0.988)PVEPK	1186.5717
Q05D95	DSLS(0.001)T(0.004)HT(0.497)S(0.497)PS(0.002)QS(0.999) PNSVHGSR	2079.957
Q05D95	DSLS(0.079)T(0.442)HT(0.218)S(0.26)PS(0.004)QS(0.996) PNSVHGSR	2079.957
Q9ES97	DS(1)PESPFEVIIDK	1474.7191
Q69Z96	DS(1)PVLSNSGPR	1127.5571
D6RE33	DSQDTS(0.002)AEQS(0.998)DHDDEVASLASASGGFGSK	2897.2071
Q3UDH4	DS(0.583)RPLS(0.417)PVLHLVK	1459.8511
Q3UDH4	DS(0.621)RPLS(0.389)PVLHLVK	1459.8511
F6WJB7	DS(0.001)S(0.001)IIDPGT(0.004)EQDLPS(0.939)PENS(0.0 26)S(0.029)VK	2314.0812
A0A5F8MPK0	DSS(0.006)LS(0.993)PT(0.001)GQSQLR	1374.6739
Q8R4Z6	DSS(1)PGSLPK	886.43961
F7AR27	DS(0.031)S(0.969)PVPSFGE GTK	1306.6041
Q3TQV3	DS(0.354)S(0.292)T(0.292)S(0.062)PGDYVLSVSENSR	1898.8494
Q9WV69	DSSVPGS(0.837)PS(0.127)S(0.035)IVAK	1329.6776
A6H8H5	DSVDDNHLS(1)PSR	1340.5957
H3BKM2	DTAAT(0.003)FQS(0.589)VDGS(0.408)PQAEQSPLESTS K	2580.1827
A0JNY3	DTAS(0.803)LS(0.016)T(0.004)T(0.128)PS(0.039)ES(0.009 PR	1447.6791
A4FUR1	DTDAYSDL(1)DGEK	1414.5736
P0DP28	DTDS(1)EEEIR	1092.4571
A2A9X5	DTEVFICT(0.16)T(0.84)PLLK	1535.7905
A2A9X5	DTEVFICT(0.21)T(0.79)PLLK	1535.7905
A2A9X5	DTEVFICT(0.07)T(0.93)PLLK	1535.7905
Q542T4	DTGILDS(1)IGR	1045.5404
Q3TDM8	DT(0.135)GNPFPDS(0.865)GELDNPFQDPAVIQHR	2765.2681
Q3TWL5	DT(0.001)GS(0.999)PPASEEATGDSR	1575.6649
Q3TWL5	DT(0.288)GS(0.712)PPASEEATGDSR	1575.6649
Q9QXZ0	DTQDIVHDLES(1)PGIDPSI IK	2191.1008
A0A668KLC6	DTS(1)PEKTEK	1033.4928
Q6P5D3	DTS(1)PETCK	936.38586
A0A1W2P6X0	DTTEDS(1)ITEDDKR	1523.6587
D3Z4T0	DT(1)T(1)LGFS(1)RVLENK	1478.7729
Q04692	DT(0.013)VIIVS(0.981)EPS(0.99)EDEES(0.013)HDLPS(0. 001)VT(0.001)R	2553.2082
G5E884	DVAT(0.026)S(0.102)PIS(0.751)PT(0.12)ENNT(0.001)TPP DALTR	2296.1183
Q8BG92	DVDKELS(1)PK	1029.5342
Q8BGC0	DVDQDV S(1)DK	1019.4407
H3BJQ2	DVEFEVVGDS(1)PEK	1448.6671
I7HFI3	DVINRS(0.995)PT(0.005)QLQLGK	1567.8682
Q5DTN3	DVLS(1)PLRPSR	1138.6459

B2RQQ5	DVMSDET(0.002)NNEET(0.003)ES(0.942)PS(0.053)QEF VNITK	2742.1814
Q9CS69	DVQDAIAQS(1)PEKEAK	1627.8053
B2RQQ5	DVSDERLS(1)PAK	1215.6095
B9EJA2	DVS(1)PTSR	760.37153
Q8VDU7	DVT(1)IELVT(1)S(1)EK	1232.65
A0A2I3BRL8	DVYLS(1)PR	848.43922
Q3TJG6	DWEDDS(1)DEDMSNFDR	1874.6537
E9Q6E5	DYDEEEQGYDS(1)EKEK	1862.733
Q3UHC4	DYEGPAIS(1)PK	1075.5186
P26645	EAAEAEPAEPS(0.5)S(0.5)PAAEAEGASASSTSSPK	2715.1995
F6U7V1	EAAVPEEEGGT(1)PEK	1441.6573
Q9CQF4	EADEEDS(1)DEETSYPER	1899.713
Q9CQF4	EADEEDSDEETS(1)YPER	1899.713
Q6ZQ92	EADPGET(0.02)S(0.901)S(0.079)EAPSETR	1661.7017
Q6ZQ92	EADPGET(0.02)SS(0.079)EAPS(0.901)ETR	1661.7017
Q8R2V4	EADEEES(1)DHN	1173.4058
Q8C1D8	EAEDS(1)DS(1)DDNIKR	1492.6278
Q8C1D8	EAEDS(0.5)DS(0.5)DDNIKR	1492.6278
Q05CH7	EAEEES(1)S(1)GGEEEDEDENIEVVYSK	2701.0886
A0A494BBI9	EAENPVGACES(0.1)QGS(0.9)PLK	1900.8473
A0A494BBI9	EAENPVGACES(0.3)QGS(0.7)PLK	1900.8473
A0A494BBI9	EAENPVGACES(0.2)QGS(0.8)PLK	1900.8473
Q4FJL2	EAELDS(0.001)ELIIESCDAS(0.004)S(0.011)AS(0.114)EE S(0.87)PKR	2751.2393
Q3UQF1	EAELSHPS(0.71)S(0.29)DSEENEAR	1885.7926
Q3UQF1	EAELSHPS(0.999)SDS(0.001)EENEAR	1885.7926
A2ARP8	EAELT(1)PENIAAAR	1383.6994
Q6NVE8	EAENTANQAGNES(1)PVQELR	2055.9457
Q5RL55	EAEQGS(1)GEEKEEK	1448.6267
F6Q7Q7	EAEVGS(1)DGER	1047.4469
Q3V002	EAGALDSLPGIPLAT(0.163)S(0.674)S(0.163)EDLEKS	2299.1431
Q3V002	EAGALDSLPGIPLAT(0.026)S(0.974)SEDLEKS	2299.1431
Q8CBQ6	EAGDS(0.998)PNS(0.002)ASVEAALQR	1700.7966
O35691	EAGIVHS(1)DAEKEQEEEQK	2183.9818
Q05DT3	EAGS(1)EAESSSADPGPGR	1602.6758
P70441	EALVEPAS(0.856)ES(0.144)PR	1283.6357
P70441	EALVEPAS(0.001)ES(0.999)PRPALAR	1791.9479
H3BJU7	EAQELGS(1)PEDR	1229.5524
Q8C6M1	EAQPPS(1)PR	880.44028
A0A668KLC6	EAS(1)PPTSADK	1001.4666
A0A668KLC6	EASPPTS(1)ADK	1001.4666
Q9WV69	ECS(0.004)LS(0.996)PK	819.37965
A2AEW9	ECVGS(1)PDPDLEPGEAN	1684.6886

A0A3B2WCD2	EDAGS(0.996)PS(0.004)AR	888.39372
Q9ERU9	EDALDDSVS(0.001)S(0.001)S(0.001)S(0.001)VHAS(0.997)PLAS(0.582)S(0.418)PVR	2412.1405
Q6PBC0	EDAPPEDKES(1)ESEAK	1659.7112
Q6PBC0	EDAPPEDKES(0.5)ES(0.5)EAKLDGET(0.001)ASDSES R	2907.2377
F6R8S6	EDEEEDEDEPTETET(0.772)S(0.228)GER	2224.8251
F6R8S6	EDEEEDEDEPTETET(1)SGER	2224.8251
A2AI69	EDEIS(1)PPPPNPVVK	1516.7773
Q91V36	EDES(1)EDESDILEESPCGR	2094.8172
A0A338P6W1	EDFS(1)PER	878.37701
Q5DTN3	EDGGTLGVFS(1)PK	1205.5928
Q8K1J5	EDGIDAVEVAADRPGS(1)PR	1852.8915
P60521	EDHS(1)LEHR	1021.4577
Q8BRA9	EDKS(0.943)PS(0.055)EES(0.19)T(0.166)T(0.077)T(0.047)T(0.019)S(0.497)PES(0.005)ISGSVPSSGSSGR	2969.3221
Q5U3K5	EDLS(0.953)DVT(0.047)DEDTGPAQPPPSK	2193.9914
Q5U3K5	EDLS(0.667)DVT(0.667)DEDT(0.667)GPAQPPPSK	2193.9914
M0QWN7	EDPAAEPGS(1)PR	1124.5098
Q9D6E4	EDS(1)DGGTGGPAR	1117.4636
P97825	EDSES(1)PGTQR	1104.4683
P97825	EDSES(0.968)PGT(0.032)QR	1104.4683
Q9WTX2	EDS(0.988)GT(0.011)FS(0.001)LGK	1039.4822
Q5EBJ4	EDS(0.719)PLGS(0.278)PGS(0.003)QPGTPDEQPVFGK	2325.0761
Q8BND1	EDS(1)PSEDPVFLR	1389.6412
B7ZN52	EDSVVAETQLAS(0.719)HS(0.281)PEEQR	2110.9767
B7ZN52	EDSVVAETQLAS(1)HSPEEQR	2110.9767
Q99JF8	EDTDQEEKAS(1)NEDVTK	1836.7861
H7BX46	EDT(0.001)S(0.02)S(0.043)CS(0.936)PPGVILLE K	1617.7556
D3YVE8	EDYQEILDS(1)PIK	1448.7035
Q8BK46	EEAAAGS(0.032)GS(0.873)T(0.095)GEGDGK	1421.5906
E9Q4Y9	EEAHNMGS(0.281)VHMS(0.86)EICT(0.86)ELKNLR	2584.1832
A0A0R4J2D3	EEAKPAS(1)PSSVQDR	1499.7216
D3Z5X7	EEAPGAES(0.996)PS(0.004)LR	1241.5888
Q8BYH6	EEAS(1)DDDMEGDEAVVR	1765.6949
Q6DI58	EEAT(0.577)VQLS(0.711)S(0.711)VVPNPGS(0.501)S(0.50 1)DT(0.519)S(0.481)R	2159.0342
A0A087WRY3	EEDEEAES(1)PPEKK	1515.6577
Q99LS6	EEDLGS(0.977)PT(0.023)GELTSK	1461.6835
Q61687	EEDS(1)S(1)EDEKQGK	1379.5688
Q8BST8	EEDS(0.5)S(0.5)PGPQSQSHR	1539.655
Q8BPU5	EEEAY(1)KAQNQK	1336.6259
P19246	EEEEGAAAT(0.475)S(0.525)PPAEEAAS(1)PEK	2098.9179
P19246	EEEEGAAAT(0.521)S(0.479)PPAEEAAS(1)PEK	2098.9179
P19246	EEEEGAAAT(0.173)S(0.827)PPAEEAAS(0.951)PEKET(0. 049)K	2457.1031

P08551	EEEEGGEGEEEDT(0.051)KES(0.949)EEEEK	2425.9252
Q3TVP0	EEEEGIS(0.014)QES(0.993)S(0.993)EEEQ	1737.6701
P08553	EEEEEQETQEKGGS(1)GR	1634.702
G3X9H5	EEEWDEEEEEEES(0.001)DVPAPT(0.193)S(0.81)PPVS(0.942)PVNS(0.055)R	3168.3531
P46460	EEGAS(1)PLDFD	1078.4455
Q80U23	EEGT(0.002)GES(0.241)AGGS(0.757)PAR	1303.564
Q80U23	EEGT(0.957)GES(0.004)AGGS(0.038)PAR	1303.564
B1AQE4	EEIAEVANEIES(0.002)LGS(0.183)T(0.815)EER	2103.9808
Q61687	EEIS(0.409)DHENNVT(0.591)ILLEDSDLR	2340.1081
Q8BU14	EELEQQT(1)DGDCDEEDDDKDGEVPK	2794.0883
D3YVW2	EENLPEES(1)EEQK	1459.6314
Q61687	EENVNS(1)PEDKR	1315.6004
Q8R1P3	EEQELHDIHS(0.989)T(0.011)R	1492.6906
Q3US81	EEQELQDIQS(1)R	1373.6423
B2RQQ5	EEQS(1)PVKAEVVAEK	1442.7253
A0A0H2UH20	EES(1)DGEYDEFGR	1431.5426
Q3UY04	EES(0.004)EDDQNHS(0.974)DEDNT(0.023)EVS(1)PVK	2401.963
Q9JLM8	EES(1)EEGFQIPATITER	1834.8585
Q5M8R8	EES(0.738)EES(0.262)DEDMGFGLFD	1834.6727
A2ARP8	EES(1)EPEVKEDVIEK	1658.7887
A3KMN0	EES(0.263)GEQLS(0.737)PPVEAGQGPPGR	2019.9498
Q8BLH7	EES(0.993)GS(0.202)S(0.805)EEEAVLQR	1548.6904
Q8BR92	EES(1)LAT(1)DPAPGTQK	1442.6889
Q8BR92	EES(1)LATDPAPGT(1)QK	1442.6889
A0A0R4J260	EES(1)S(1)EDENEVSNILR	1748.7701
S4R2F3	EES(0.004)S(0.021)QS(0.821)S(0.152)EEKT(0.002)ELK	1609.7319
B9EJ80	EETQPLS(0.519)HS(0.481)PK	1251.6095
B9EJ80	EETQPLS(0.4)HS(0.6)PK	1251.6095
B9EJ80	EETQPLS(0.8)HS(0.2)PK	1251.6095
A2APD7	EEVAS(1)EPEEAASPTTPK	1770.816
Q3TSH0	EEVLS(0.78)ES(0.11)ET(0.11)EAHQDAAALDPDVVIK	2694.2872
Q9CSS1	EFCADHDIS(0.968)PDT(0.028)S(0.004)LR	1761.7628
Q5DTI2	EFDELS(1)PSAQR	1277.5888
Q8BGC0	EFEEDS(1)DEKEEEGDDDEEVVYER	2949.1319
V9GXD9	EFES(1)GDFQDFTR	1476.6157
Q3URP7	EFGDGS(1)DENEVEDQEPR	1950.7715
D3Z4K1	EFGEDLVEQNSSYVQDS(0.773)PS(0.227)K	2257.0023
Q9JMJ6	EFGSLPT(0.033)T(0.963)PS(0.004)EQR	1447.6943
A0A140LJB5	EFITGDVEPT(0.001)DAES(0.001)AWHS(0.998)ENEEDDK	2863.1944
H3BKC6	EFPALEQKDEDS(1)LEEDAQR	2248.0132
A0A1D5RMC1	EFQDYIEPEEGCQGS(1)PQR	2167.9117
Q4KMF6	EFT(0.023)GS(0.942)PPPS(0.034)AT(0.002)K	1217.5928

P06837	EGDGS(1)ATTDAAPAT(0.154)S(0.846)PK	1574.706
P98191	EGEAAGGDHET(0.566)ES(0.476)T(0.476)S(0.475)DKET(0.007)DIDDR	2563.043
P98191	EGEAAGGDHET(0.61)ES(0.431)T(0.505)S(0.445)DKET(0.009)DIDDR	2563.043
Q3TFP8	EGEEPTVYS(1)DDEEPKDETAR	2294.9663
Q8BGC0	EGGS(1)DGDHPER	1154.4588
Q8BXR1	EGILADCEKET(0.66)CS(0.66)PVS(0.66)EGEEFS(0.016)S(0.004)PATNTCGAK	3459.4752
Q8BXR1	EGILADCEKET(0.704)CS(0.634)PVS(0.655)EGEEFS(0.005)S(0.001)PATNTCGAK	3459.4752
F8VQN6	EGILS(0.999)PS(0.001)ELR	1099.5873
Q8BPS5	EGKEDEAS(1)T(1)DVDEKPK	1775.8061
A0A0N4SUJ0	EGLLPASDQEAGGPSDIFS(0.005)S(0.025)S(0.055)S(0.915)PLDK	2603.2239
Q8C5G1	EGLS(1)PAKR	856.47667
Q6NZL0	EGPIGGES(0.978)DS(0.022)EEVR	1459.6427
Q6NZL0	EGPIGGES(0.812)DS(0.188)EEVR	1459.6427
Q6NZL0	EGPIGGES(1)DSEEVR	1459.6427
Q5GH64	EGS(1)AELVPR	956.49271
A0A286YCI8	EGS(0.822)GGS(0.178)VHGDFPK	1272.5735
Q3UUL7	EGS(1)KEFIHPQSIEEK	1756.8632
Q8K4P8	EGSLS(1)PVNSQK	1144.5724
G3X9K3	EGS(0.988)LT(0.01)GT(0.001)K	791.4025
G3X9K3	EGS(0.988)LT(0.12)GTK	791.4025
Q811H2	EGS(1)PAPLEPEPGASQPK	1689.821
Q9Z0H8	EGS(1)PLHKG	766.39735
Q5EBJ4	EGS(1)PLKEESLAR	1314.6779
A0A140LJB7	EGS(1)QGELTPANSQSR	1559.7176
P08553	EGS(1)S(1)EKDEGEQEEEGETAEAGEGEEAEAK	3226.2553
Q0QEL9	EGS(0.611)S(0.389)IGAIDS	1090.5255
Q0QEL9	EGS(0.811)SIGAIDS(0.189)R	1090.5255
Q3UZP2	EGVDDQESLRPSNQQAS(1)K	1986.9243
H3BKN0	EGVILT(0.5)NENAAS(0.5)PEQPGDEDAM	2283.0503
A0A140LHL5	EHANIDAQSGSQAPNPS(0.004)T(0.019)T(0.038)IS(0.166)PGKS(0.773)PPPAK	2983.4635
Q4W8U9	EHLGPGS(0.5)S(0.5)QEMER	1455.6412
Q8R0V6	EHQIS(1)PGDFPNLK	1480.731
A0A0R4J087	EHS(0.74)NEHVT(0.198)ES(0.062)VADLLALEEPVDYK	2723.2926
Q91WF5	EIDVLEFGES(0.004)APAAS(0.996)K	1661.8148
Q9EPN1	EIEDLSQS(0.029)QS(0.966)PES(0.005)ETDYPVSTDTR	2712.1886
D3Z0V2	EIKPS(0.858)EKPVS(0.142)PK	1337.7555
F6WMJ3	EIKPS(0.029)ERPLS(0.971)PK	1379.7773
Q8BTI8	EIS(0.984)S(0.017)S(0.673)PT(0.299)S(0.027)K	934.46074
Q71LX8	EKEIS(1)DDEAEEEKGEK	1863.8222

Q6IR43	EKEPT(0.024)KPLES(0.941)PT(0.206)S(0.823)PVS(0.005) NETTSSFK	2619.2916
A0A4X7	EKFPEFCS(0.045)S(0.045)PS(0.911)PPVEVK	1962.9397
Q6KAP6	EKPDS(1)DDDLDIESFVTAK	2022.927
A2AJH3	S(0.942)DS(0.058)ASDSQEIK	2063.9607
A2AJH3	S(1)DSASDSQEIK	2063.9607
Q9DBN5	EKPY(1)PVAEVEQLDR	1671.8468
Q8BJ42	EKS(1)LDDPDR	1071.556
A2A8V9	EKS(1)PELPEPSVR	1366.7092
Q8K232	EKS(0.652)PPDQS(0.348)AVPNT(0.95)PPS(0.024)T(0.026)PVK	2075.0535
Q8K232	EKS(0.004)PPDQS(0.003)AVPNT(0.978)PPS(0.528)T(0.48 8)PVKLEEDLPQEPTSR	3469.7213
A2ARP8	ELALS(1)S(1)PEDLTQDFEELKR	2219.0958
Q8C5C6	ELAS(1)PLALTTR	1166.6659
A2AN08	ELAS(1)PVS(1)PELR	1196.6401
Q3UGJ7	ELEDLLS(1)PLEESVK	1599.8243
A0A1L1SV73	ELEQHIQT(0.109)S(0.891)DPENFQSEER	2315.0302
A0PJK9	ELES(0.988)S(0.012)EEGSAEER	1507.6274
Q61361	ELET(0.003)PS(0.997)EEK	1060.4924
Q3UR37	ELFDYS(1)PPLHK	1344.6714
Q3V3I7	ELGDS(0.5)S(0.5)GEGPEFVEEEEVALR	2406.0711
S4R1Y1	ELGS(1)LPSSR	944.49271
Q8VBX2	ELGS(0.163)S(0.837)VDEVEQLIR	1572.7995
Q80U19	ELGS(0.975)T(0.025)EDIYITSR	1482.7202
A0A510C1L5	ELLGLEDS(0.007)S(0.993)PAH	1266.6092
Q0VEJ0	ELNFVTDSVDQELPS(0.281)S(0.719)PK	2003.9688
D6RE47	ELS(1)APAR	742.39735
Q61423	ELS(1)EEEEDEEEEEEEEEEGR	2481.9151
A0A0J9YTW2	ELS(1)EGEEKGDPEK	1445.6522
Q8BTI8	ELS(0.974)HS(0.026)PPR	921.46683
Q8BTI8	ELS(0.774)HS(0.226)PPR	921.46683
Q8BTI8	ELS(0.246)HS(0.743)PPRENS(0.008)FES(0.002)S(0.001)L EFK	2219.0495
Q3UHD3	ELS(1)IELANIR	1156.6452
A2A4P4	ELS(1)LDDPEVEQVR	1527.7417
Q80U72	ELS(1)PEGPGK	912.45526
Q6P1G0	ELS(1)PEQDDGFRR	1447.6692
A0A2I3BR32	ELS(1)PEQSTAGKPSDGSSALDR	2131.0029
Q5SSM3	ELS(1)PGSGQK	901.45051
Q6KAP6	ELS(1)PQHK	837.43447
A2ARP8	ELS(0.013)S(0.046)EPRT(0.941)PPAQK	1438.7416
E9Q942	ELVGDT(0.015)GS(0.018)QEGDNEQPS(0.866)GS(0.098) ET(0.003)EEDPSASPQK	3203.3498
P11031	ELVSSSSSGS(0.028)DS(0.962)DS(0.009)EVEK	1827.7858

Q8BZJ5	EMEAADAEAGADGGAS(0.97)PDS(0.03)EHCGPELCFR	2964.1596
Q61316	EMLALY(1)T(1)ENEGK	1396.6544
A2ARP8	EMTLDQKS(1)PEK	1304.6282
A0A3Q4EBV8	ENES(1)PDVR	944.41994
F6RWZ9	ESTESSNT(0.031)T(0.969)IEDEDVK	2618.2083
E3WH30	ENPPS(0.991)PPT(0.007)S(0.002)PAAPQPR	1641.8111
A0A0R4J0D3	ENPPVEDS(1)S(1)DEDDKR	1730.7231
Q3UZ38	ENQRS(1)PVR	984.51009
Q3TDX2	ENQS(0.034)EGKGS(0.968)DS(0.96)DS(0.038)EGDNPEK	2107.8414
Q3TDX2	ENQS(0.655)EGKGS(0.655)DS(0.655)DS(0.036)EGDNPEKK	2235.9364
Q91WF5	ENSAAPSPGRPQS(0.056)AS(0.944)PAK	1750.8598
Q91WF5	ENS(0.01)AAPPS(0.987)PGRPQS(0.591)AS(0.412)PAKEEQK	2265.0986
Q8BLA0	ENTQIDDT(0.001)EPLS(0.995)PVS(0.003)NS(0.002)K	1972.9225
D3Z4J9	EPAFSPALQS(1)PKPQGK	1680.8835
Q3UWX7	EPAISSQNS(1)PEAR	1384.6583
E9PWE8	EPAPES(1)PKPAGVEIR	1575.8257
B7ZBV7	EPEPAPPYHS(0.993)PEDS(0.007)R	1706.7536
B7ZBV7	EPEPAPPYHS(0.793)PEDS(0.207)R	1706.7536
B7ZNA3	EPEPLHS(0.996)PDS(0.004)ER	1391.6317
F6SLK1	EPETGLDNT(0.065)S(0.934)PK	1286.599
Q8VE52	EPGEEADKPS(1)PEPGSGDPKPR	2175.008
P97492	EPGS(0.046)S(0.014)HLGS(0.941)PDTAR	1409.6535
Q923F1	EPLS(1)DEDEEDNDDVEPISEFR	2478.0194
P98203	EPNEDS(1)KPRDAEWT(1)T(1)VFK	2148.0124
E9Q7E9	EPS(0.608)GQPEDS(0.392)PEAETSTLDVFTEK	2492.1078
C6EQH1	EPS(1)LHEIGEK	1137.5666
Q6IR43	EPT(0.872)KPLES(0.147)PT(0.557)S(0.418)PVS(0.004)NETTSSFK	2362.154
Q6ZPJ9	EPTSVDSENIAAIIPS(0.005)PVT(0.383)S(0.567)PVLS(0.045)R	2552.297
Q9ERZ4	EPVANQDPVS(0.998)PS(0.002)LVQGR	1791.9115
D3Z6I8	EQAEAEVAS(1)LNR	1315.6368
D3YZU5	EQDVVPFQES(1)PK	1401.6776
Q5GQ64	EQEEENEAKS(1)GED	1492.5801
Q9CT86	EQES(1)S(1)GEEDNDLSPER	1948.777
Q1MZF8	LS(0.987)T(0.013)DDLK	1175.6034
F8VQK5	EQS(0.999)DDET(0.001)EDSVK	1380.5529
Q922F2	EQSDISIS(0.999)PR	1130.5568
Q6NZL0	EQS(0.008)ES(0.983)LS(0.01)ELR	1176.5622
A0A0G2JF68	EQSESVNTAPES(0.914)PS(0.086)K	1588.7217
A2AC90	EQS(1)PQLLELK	1284.6925
Q3UZP2	EQS(0.149)S(0.851)QES(0.999)GEET(0.001)R	1365.5644
Q3UPL0	EQT(0.546)LS(0.227)PT(0.227)IINGLHSIAR	1849.0058

Q8BTI8	ERAPS(1)PASR	969.49919
Q3UHA6	ERDAEQS(0.001)S(0.5)S(0.5)PR	1260.5695
Q3TIX9	EREADEDS(1)EPER	1460.6015
A0A0G2JDN3	ERFS(1)PPR	887.46135
F6YCJ0	ERGS(1)PVSGR	943.48354
Q3UNH4	ERPGS(0.995)T(0.005)GEGDLVSLR	1571.7903
Q9QYX7	TPPS(0.001)NLS(0.999)PIEDAS(0.877)PT(0.123)EELR	2562.2926
Q9QYX7	ERPKT(0.951)PPS(0.046)NLS(0.002)PIEDAS(0.853)PT(0.1 47)EELR	2562.2926
Q3UHD8	ERS(1)LESSQR	1090.5367
Q569Z6	ERS(1)PALK	799.4552
A0A1L1SQE2	ERS(1)PPLTPK	1023.5713
Q3TC46	ERT(1)KLIT(1)PQVAK	1382.8245
F6XQ35	ES(0.007)AMS(0.459)S(0.532)Y(0.713)LS(0.747)DLKS(0.5 42)R	1572.7454
H9KV01	ESAQAVAVALS(1)PK	1269.6929
A0PJ91	ESDDKPEIEDVGS(1)DEEEEEK	2306.9398
A0A2X0SSQ6	ESDILS(1)DEDEDFFHPLK	2024.8963
F8WIH0	ESDLSDT(0.002)LS(0.805)PS(0.193)KEK	1534.7362
A2ALU3	ES(0.174)DS(0.802)AEGDET(0.023)ES(0.001)PEQLVR	1976.8447
Q8BPN8	ES(0.705)EAGT(0.696)GS(0.649)S(0.951)EHEDGER	1675.6558
Q8BPN8	ES(0.002)EAGT(0.998)GS(0.915)S(0.085)EHEDGER	1675.6558
A0A0R4J0P6	ESEEVS(0.997)DS(0.003)ELEQTDSCTDPLPEGR	2708.1243
Q6NXW8	ES(1)ELEIK	846.43346
Q91XV3	ESEPQAAADATEVKES(0.426)T(0.574)EEKPK	2373.1183
Q3UGL9	ESES(1)PDAAACQIK	1420.614
Q99P72	ES(0.197)ET(0.306)FS(0.481)DS(0.101)S(0.915)PIEIIDEFP TFVSAK	2674.2538
Q80ZX8	ES(0.001)GVDPS(0.001)QVLLS(0.98)PDS(0.013)S(0.004) EAAR	2042.9756
Q01853	ES(1)IESEIR	961.47164
E0CX62	ESLKEEDES(1)DDDNM	1654.6152
Q9CRW9	ESLPLDLS(0.999)DDQS(0.001)NSK	1646.7635
Q4JG03	ES(0.003)NQPEDS(0.189)S(0.805)PPAS(0.002)S(0.001)E SSSTR	2174.92
A2APL8	ES(0.534)NS(0.462)NQCVY(0.004)AAHNSVVIDECK	2423.0482
A0A0G2JFM9	ES(1)PEGSYTDDANQEVR	1795.7497
A0A0R4J2D7	ESPGGCTS(0.999)PGS(0.001)QEK	1419.5936
A0A0R4J2D7	ESPGGCTS(0.799)PGS(0.201)QEK	1419.5936
A1L151	ES(1)PPLLPLGTPC	1279.6482
Q6ZQ58	ESPRPPAAAEAPAGS(1)DGEDGGRR	2249.0421
D3Z1Z2	ES(0.964)PS(0.036)HGLELSAPEK	1479.7205
F6SLK1	ES(0.689)QS(0.258)VLIADGDGS(0.574)EVS(0.473)DEEE AS(0.005)FPS(0.001)EER	2997.2847
Q5U3K5	ES(0.052)S(0.948)DEDRDSK	1166.4687
E9Q3Y7	ES(0.001)S(0.012)DNQPPS(0.957)PS(0.03)LPEELK	1852.8691

Q5SVI0	ES(0.717)S(0.297)DS(0.92)T(0.062)NT(0.004)TIEDDAK	1740.7174
Q5SVI0	ES(0.023)S(0.574)DS(0.386)T(0.016)NT(0.012)T(0.988)IE DEDAK	1740.7174
Q5SVI0	ESSDSTNT(0.616)T(0.384)IEDEDAK	1740.7174
Q5SVI0	ESSDS(0.008)T(0.936)NT(0.055)T(0.001)IEDEDAK	1740.7174
Q80TN1	ES(0.001)S(0.998)ESTNTTIEDEDTK	1784.7436
Q3TDM2	ES(0.68)S(0.32)IENEIAVLR	1358.7042
A0A668KLC6	ES(0.026)S(0.974)KDEEPLKDK	1403.678
A0A076FSX1	ES(0.018)S(0.982)PFINSTDTEK	1453.6573
Q8K2R3	ES(0.561)S(0.439)PGIEEISLR	1315.662
Q8K2R3	ES(0.734)S(0.266)PGIEEISLR	1315.662
B2RQQ5	ES(0.452)S(0.547)PLY(0.004)S(0.996)PGFS(0.001)DSTSA AK	1829.8319
Q80T83	ES(0.027)S(0.969)PS(0.004)HGLLK	1053.5455
Q62261	ESS(0.001)PVPS(0.995)PT(0.004)LDR	1283.6357
Q62261	ES(0.858)S(0.142)PVPS(0.983)PT(0.017)LDRK	1411.7307
E9Q1W0	ESTESS(0.001)NT(0.712)T(0.286)IEDEDVK	1782.7643
Q8BWX1	ESTNIFS(0.919)PS(0.074)DS(0.006)LK	1423.6831
G3UYD0	EST(0.001)S(0.002)S(0.045)KS(0.952)PPR	1074.5306
Q3UR39	ESTVLGDS(0.005)EEPS(0.995)E	1377.5783
D3Z1Z8	ESVPDFPLS(1)PPKK	1439.766
Q8K0U4	ETAPTSTYS(0.213)S(0.787)PAR	1366.6365
A0A087WP83	ETDPGS(1)PR	857.38791
E9PV14	ETDPS(1)PEER	1058.4516
P63141	ETEGEEQAQYLQVT(0.314)S(0.685)CPK	2095.9368
A0A1D5RLJ8	ETEHISSPWGES(0.257)S(0.743)PEELR	2068.9338
A0A5F8MPE1	ET(0.013)EIT(0.987)PEDGED	1233.4885
Q6ZQ58	ET(0.009)ES(0.679)APGS(0.313)PR	1029.4727
B2RQQ5	ET(0.017)EVS(0.389)KGS(0.509)AES(0.525)PDEGIT(0.18 7)T(0.187)T(0.187)EGEGECEQTPEELEPVEK	4006.7485
Q3UH99	ETISAIDT(0.048)S(0.952)PK	1160.5925
Q99JF8	ET(0.042)NVS(0.946)KEDT(0.011)DQEEK	1650.7221
Q91XV3	ETPAAS(0.835)EAPS(0.144)S(0.021)AAK	1315.6256
A2ARP8	ET(0.001)S(0.998)LDIS(0.001)SK	978.48696
A0A668KLC6	ET(0.016)S(0.983)PET(0.001)SLIQDEVALK	1758.8887
F6TZK4	ET(0.231)S(0.726)PIS(0.019)S(0.023)HPVTWQPSK	1779.8792
A2ARP8	ET(0.005)S(0.894)PT(0.101)RGEPVPAWEGK	1739.8479
Q8C1D8	ETTVAS(0.001)DS(0.999)EEEAGKEESSVK	2110.939
D3YWW9	EVCES(1)PR	875.38072
A0A0H2UH20	EVEDKES(1)EGEEEDEDEDLSK	2338.9296
Q61361	EVGGET(0.064)GS(0.936)PELSGVPR	1569.7635
Q61361	EVGGET(0.995)GS(0.005)PELSGVPR	1569.7635
A0JNY3	EVHDELEDLPS(1)PPPPLS(0.986)PPPT(0.413)T(0.36)S(0. 24)PHK	2812.3919
Q8VEH5	EVLPDHVGVLLEGIDLS(0.927)PEIT(0.073)R	2287.206

Q3UWL2	EVS(0.153)ADGKS(0.588)VT(0.649)VT(0.61)FFNGDVKQ VMPDER	2854.3807
Q810U6	EVS(0.5)ADVS(0.5)EEENFLTDFK	1957.8793
A0PJ91	EVS(1)DDEAEEKEEK	1535.6475
E9Q784	EVS(1)PEVVR	913.4869
Q8BX70	EVS(0.5)T(0.5)PQDVHTTQGVPAAR	1891.9388
P08553	EVTKES(1)PKEEK	1302.6667
Q6PB94	EWS(0.007)LES(0.007)S(0.003)PAQNWT(0.982)PPQPK	2080.9854
Q6NVE8	EYVSNDATQS(1)DDEEK	1728.6962
E9PV14	FAS(1)PPGLQR	971.51886
Q5DTT2	FCSEGDCAIS(1)PPR	1494.6231
Q5DTT2	FCS(0.999)EGDCAIS(0.001)PPR	1494.6231
Q8C0J6	FCTGDS(1)PPLEAK	1320.602
D3Z5N5	FDDS(0.5)DT(0.5)EQIAEEGDDNLAK	2110.8815
D3Z5N5	FDDS(0.999)DT(0.001)EQIAEEGDDNLAK	2110.8815
Q9Z1T6	FDDS(0.81)DT(0.19)EQIAEEGDDNLANSASPSK	2654.1104
Q8BTE0	FDS(1)LEDSPEER	1322.5626
Q64511	FDS(0.999)NEEDT(0.001)ASVFAPSFGLK	2059.9375
Q6P2L7	FFDENES(1)PVDPQHGSK	1831.8013
A0A0R4J065	FFDS(1)EDEDFEILSL	1704.7407
B2RWX7	FGEAVVVGRPGS(0.996)GDGDS(0.003)DQS(0.001)R	2090.9617
B2RWX7	FGEAVVVGRPGS(1)GDGDSDQSR	2090.9617
Q3U9Y8	FGGS(0.997)GS(0.003)QVDSAR	1166.5316
Q8BPN8	FGNVDADS(0.999)PVEET(0.001)IQDHSAALK	2271.0655
A0A0N4SWB9	FGS(1)ADNIPNLK	1174.5982
Q99J36	FIDKDQQPS(1)GS(1)EGEDDDAEAAALKK	2592.1827
F6Z700	FLES(0.01)AAADV(S(0.99)DEDEDEDTDGR	2284.9091
F6Z700	FLESAAADV(S(1)DEDEDEDTDGR	2284.9091
P63101	FLIPNAS(0.914)QPES(0.086)K	1329.6929
P63101	FLIPNAS(0.5)QPES(0.5)K	1329.6929
Q9CTF6	FQEQUECPPS(0.998)PEPT(0.002)R	1700.7464
P68181	FRGS(0.476)GDT(0.519)S(0.005)NFDDYEEEIR	2264.9458
Q3TLF2	FSDDDS(1)DDDFVQPR	1541.627
Q3TLF2	FS(0.001)DDS(0.999)DDDFVQPR	1541.627
Q569Z6	FSGEEGEIEEDDES(0.997)GT(0.003)ENREEK	2384.9728
K3W4L0	FSHSYLS(0.04)DS(0.919)DT(0.04)EAK	1585.6896
Q8BLC4	FSIGS(1)DEDDSPGLPVK	1661.7784
Q8BLC4	FSIGS(0.999)DEDDDS(0.001)PGLPVK	1661.7784
A0A668KM74	FS(1)LEGSR	794.39227
A0A668KM74	FS(0.978)LEGS(0.022)R	794.39227
Q9QYX7	FS(1)PIQESR	962.48214
A2A690	FS(1)PPPVGQSK	1099.5662
Q8BU75	FS(1)PVLGR	774.43882

Q3US10	FS(0.555)T(0.445)PPGELDGGISGR	1488.7209
Q3US10	FS(0.5T(0.5)PPGELDGGISGR	1488.7209
Q8CFX0	FSVQS(1)PNK	905.46068
Q9CY64	FTAS(1)PLEEEK	1149.5554
B7ZNV9	FTQGLEDQLS(1)PPGNR	1657.806
F6SWQ9	FVS(0.999)FTS(0.001)R	842.42865
F6SWQ9	FVS(1)FTSR	842.42865
Q60771	FYY(0.03)S(0.029)S(0.812)GS(0.411)S(0.182)S(0.481)PT(0.056)HAK	1517.6787
Q3TPF9	GAAEEADS(1)EDS(1)DAEEKPVK	1975.8494
Q9D0B6	GADS(1)GGEKEEGANR	1375.5964
E9PW07	GAGDEVSELPAPARS(1)PPR	1804.9068
Q571B1	GAGS(0.997)PT(0.003)PLPTK	1024.5553
Q571B1	GAGS(1)PTPLPTK	1024.5553
P46660	GANES(1)LER	874.41446
A2A4P4	GAQADHFTE SPLS(1)PGSQVQVR	2210.0716
Q3TIT6	GAS(1)DDEIKR	989.47779
Q80W47	GAYVPS(0.711)S(0.25)PT(0.039)R	1033.5193
Q80W47	GAYVPS(0.991)SPT(0.009)R	1033.5193
Q3US10	GCS(1)PGESASGGLSK	1292.5667
Q3UHD8	GCS(1)QDDEC VSLR	1424.566
D3YZZ4	GCVS(0.002)S(0.007)PCS(0.992)PR	1105.4645
Q3UFL8	GDAAGDKLELS(0.538)EDS(0.448)PNS(0.014)EQELDK	2446.0983
Q3UT19	GDDDEES(1)DEEAVKK	1564.6377
Q8BK03	GDGGSTPTPGDSLQNPD TASEAL S(0.987)EPES(0.012)QR	2999.3228
Q3TE28	GDNAS(1)PS(0.999)PS(0.001)GTPLVR	1453.7161
Q3TE28	GDNAS(1)PS(1)PSGTP LVR	1453.7161
P48962	GDQALS(1)FLK	977.5182
A0A140LJ04	GDQEEELDRPVS(0.634)S(0.366)PGAEQK	2198.9927
A0A140LJ04	GDQEEELDRPVS(0.5)S(0.5)PGAEQK	2198.9927
Q62261	GDQVSQNGLPAEQGS(1)PR	1738.8234
P98191	GDS(1)DVPEVPPSSDR	1455.6478
Q3UJA1	GDS(0.002)IEEILADS(0.998)EDEDEEEER	2307.935
F6RK07	GDS(1)PELKPR	997.51926
E9Q3M9	GDT(0.96)PPPET(0.018)IT(0.011)DT(0.012)NLET(0.035)PS(0.76)DT(0.203)ER	2385.082
P28667	GDVTAAEAGAS(1)PAK	1372.647
Q9QYI5	GEAAKLS(0.094)PS(0.877)S(0.029)EEK	1331.6569
B2RQQ5	GEAEQS(1)EEE GEEEDKAEDAR	2235.8887
P26645	GEATAERPGEAAVASS(0.999)PS(0.001)K	1813.8806
P26645	GEATAERPGEAAVASS(1)PSK	1813.8806
P08553	GEDS(0.5)S(0.5)DDKVVVT K	1377.6624
Q9JIS5	GE GAQDEEEGGAS(0.99)S(0.99)DAT(0.02)EGHDEDDEI YEGEYQGIPR	3840.5267

Q9JIS5	GEGAQDEEEGGAS(0.661)S(0.661)DAT(0.661)EGHDED DEIY(0.016)EGEY(0.001)QGIPR	3840.5267
P58871	GEVGS(0.95)QVGPGT(0.051)PPAPES(1)PR	1817.8908
B1ARW6	GEHS(1)PDDNIFFK	1517.7151
D3Z7E5	GEPNVS(0.963)Y(0.037)ICSR	1280.5819
D3Z7E5	GEPNVS(0.077)Y(0.922)ICS(0.001)R	1280.5819
C9K0Z8	GEPQCS(1)PEGPAR	1283.5564
A2ARP8	S(1)PEQEVR	1893.9221
Q80TU6	GES(1)DDEKPR	1031.452
A5CVE4	GES(0.5)PVTADVS(0.5)R	1116.5411
A5CVE4	GES(0.999)PVTADVS(0.001)R	1116.5411
A5CVE4	GES(1)PVTADVSR	1116.5411
P28667	GEVAPKET(1)PK	1054.5659
Q4FJX4	GFGFGQGAGALVHS(1)E	1432.6735
A0A0G2JDX6	GFHKFS(0.449)S(0.551)GIES(1)K	1322.6619
A0A0G2JDX6	GFHKFS(0.005)S(0.995)GIES(1)K	1322.6619
D3Z0Q8	GFKEEGS(1)PDR	1120.5149
A2ARP8	S(1)PPCEDFSVTGESEK	1999.8833
B2RRX2	GFS(1)PQHK	799.39769
Q8BV62	GFSQYGVS(0.001)GS(0.795)PT(0.204)K	1313.6252
Q49S98	GGAPLPPS(0.755)GS(0.245)K	966.51345
Q49S98	GGAPLPPS(1)GSK	966.51345
Q49S98	GGAPLPPS(0.827)GS(0.173)K	966.51345
E9QKE4	GGFS(1)PFGNTQGPSR	1407.6531
Q62376	GGGGS(1)GQDNGLEGLGSDGR	1688.735
A0A571BEW4	GGGS(1)ES(1)EQS(1)EEEDEKK	1723.702
Q3V113	GGGT(1)PDANSLAPPKG	1337.6575
Q9JIS5	GGLS(1)DGEGPPGGR	1154.5316
B2RY58	GGLS(1)PPGHSPGPPR	1311.6684
Q5RL55	GGNVFEALIQDDS(1)EEEEEEENR	2666.1104
B1AZA5	GGPAEAPS(1)PR	937.46174
G5E8T6	GGPCS(0.995)PT(0.005)K	802.36434
Q2TJI9	GGQEPAAGAGS(1)PS(1)PPEDR	1607.7176
Q9Z2D6	GGS(1)LESDGCPKEPAK	1530.6984
B7ZNF6	GGS(1)PLTTT(0.003)QGGS(0.763)PT(0.234)K	1387.6943
B7ZNF6	GGS(1)PLTTT(0.237)QGGS(0.763)PTK	1387.6943
Q3UMU9	GGS(0.986)S(0.014)EELHDS(1)PR	1269.5586
Q3UMU9	GGS(1)S(1)GEELEDEEPVKK	1688.7741
Q99K08	GGT(1)PSAFDR	906.41954
E9Q4D5	GHAGGQRPEPS(0.113)S(0.887)PDGPAPPTR	2066.9882
Q8N7N5	GHGHS(1)DEEDEEQPR	1620.6401
Q8CIJ3	GHPGAGAEEEGGS(1)DGS(1)AAEAEPR	2166.905
Q8CIJ3	GHPGAGAEEEGGS(1)AAEAEPR	2166.905

A0A087WNU5	GHS(0.995)PEDDWT(0.005)EFSSEEIR	2019.8446
Q6NY00	GILAADES(0.877)T(0.118)GS(0.004)IAK	1331.6933
Q6ZPY3	GIS(1)ALLLNQGNGDK	1398.7467
D6RG95	GIS(1)PIVFDR	1002.5498
A0A5F8MPE1	GIS(0.927)QT(0.073)NLIT(0.002)T(0.026)VT(0.972)PEKK	1728.9622
A0A5F8MPE1	GIS(0.927)QT(0.073)NLITVT(1)PEKK	1728.9622
E9PW51	GKAS(1)PFEEDQNR	1376.6321
Q8BR89	GKDS(0.5)S(0.5)GEVLSSV	1163.567
E9Q3Y7	GKET(0.907)PEPLVEEGPQS(0.519)PEGES(0.573)QPWL TDDADQR	3420.5594
Q3TBZ3	GKGS(1)PGPQGAK	982.51959
A2AG47	GKHPDGEEDGNS(0.998)DQS(0.002)QASEATGGR	2428.0123
A2AG47	GKHPDGEEDGNS(0.999)DQSQASEATGGR	2428.0123
Q5SUR3	GKT(1)PEEIRK	1056.5928
B1AUY8	GLAAEDS(0.982)GGDS(0.018)K	1105.4887
A0A0N4SVB5	GLAS(0.001)S(0.998)PTGGALRPR	1338.7368
Q8BZJ5	GLEDAPS(0.994)PS(0.006)K	999.48729
A0A0N4SUJ0	GLFS(1)DEEDSEDLFSSQSSKPK	2418.0711
Q542S9	GLGPPS(1)PPAPPR	1141.6244
Q62079	GLS(1)ATVTGGQK	1017.5455
Q80TA2	GLS(0.199)DHAS(0.801)LDGQELGAQSR	1839.8711
Q8CD23	GLS(1)EDTTEETLK	1321.6249
E6Y2W9	GLS(1)LTETELEELR	1488.7672
Q3UYG8	GLS(1)PPHK	734.40752
O08553	GLYDGPVCEVS(0.004)VT(0.996)PK	1619.7865
Q3U8P5	GNDS(1)DGEAESDDPEK	1563.5809
Q9WV69	GNS(1)LPCVLEQK	1243.6231
Q3UX26	GNS(1)PVTAK	772.40792
Q5M9P7	GNVVPS(1)PLPTR	1135.635
Q9QZM0	GPAAAPGAAS(1)PPAEPK	1387.7096
H3BIW0	GPAGS(1)PCEEGDDVEEDGTSDLR	2290.9132
F6WMY5	GPAHLVT(0.015)S(0.985)L	893.49707
F6WMY5	GPAHLVT(0.821)S(0.179)L	893.49707
F6WMY5	GPAHLVT(0.5)S(0.5)L	893.49707
Q1HL33	GPGAAGPGAS(0.216)GS(0.784)GHGEER	1549.6869
Q1HL33	GPGAAGPGAS(0.5)GS(0.5)GHGEER	1549.6869
Q1HL33	GPGAAGPGAS(0.999)GS(0.001)GHGEER	1549.6869
A2AB60	GPGDVVS(0.004)IEILPGAAAT(0.864)PS(0.132)GDDAQ APR	2560.2769
A0A571BEW4	GPGS(1)EEAATAALPAR	1396.6947
G5E8J2	GPPET(0.001)GS(0.999)PK	868.42905
Q7TSV8	GPQFGS(1)EVELR	1217.6041
Q8BTI8	GPSPEGS(0.004)S(0.014)S(0.012)S(0.049)ES(0.567)S(0.35 4)PEHAPK	1852.8075

E9QAQ7	GPS(0.998)PS(0.479)PVGS(0.507)PAS(0.015)VAQS(0.001) R	1579.7954
A0A076FSX1	GPS(0.999)PVS(0.001)SEGIK	1056.5451
Q9WTP5	GPS(0.094)S(0.906)PEPDFSVFR	1420.6623
E9PV14	GPSSQEDESGGLEDS(1)PDR	1860.761
Q8CFL4	GPT(0.003)S(0.997)PSTPR	898.45084
H3BIV5	GPVAAS(1)PQKER	1138.6095
E9Q706	GQGT(0.597)AS(0.401)PGS(0.002)VSDLAQTVK	1701.8533
E9Q706	GQGT(0.697)AS(0.301)PGS(0.002)VSDLAQTVK	1701.8533
Q2PMX7	GQQPPS(0.125)RY(0.875)VPPR	1380.7262
Q2PMX7	GQQPPSRY(1)VPPR	1380.7262
Q7TSJ2	GQS(1)PTAPGPTK	1039.5298
Q9CQV4	GQTPLT(0.031)EGS(0.969)EDLDGHS(1)DPEESFAR	2573.1154
Q9CQV4	GQTPLT(0.011)EGS(0.989)EDLDGHS(1)DPEESFAR	2573.1154
Q9CQV4	GQT(0.01)PLT(0.499)EGS(0.499)EDLDGHS(0.988)DPEES (0.003)FAR	2573.1154
Q3UZP2	GRGS(1)EEDRAPR	1228.5909
P63017	GRLS(1)KEDIER	1201.6415
Q3U3F6	GRLS(1)PVPVPR	1076.6455
A1L3S7	GRLT(1)PS(1)PDIIVLSDNEAS(0.237)S(0.763)PR	2223.1495
A0A5F8MPF3	GRS(1)EEELEASK	1233.5837
Q8BTI8	GRS(1)PS(1)PKPR	980.55156
E0CXA0	GS(0.002)AEGS(0.998)S(1)DEEGKLVIDEPAK	2016.9488
E0CXA0	GS(0.002)AEGS(0.999)S(0.999)DEEGKLVIDEPAKEK	2274.0863
B2RQQ5	GS(0.664)AES(0.279)PDEGIT(0.155)T(0.146)T(0.33)EGE GECEQT(0.426)PEELEPVEK	3333.4202
Q5EBQ4	GSAGNEVIDLSDPASNS(0.002)T(0.013)NLS(0.985)PDG K	2444.1303
A0A668KLC6	GS(1)AQESLDTISPK	1331.6569
Q3UHC9	GS(0.432)AQS(0.567)PQET(0.016)GEIS(0.646)RPQS(0.31 4)PES(0.023)DR	2342.0735
K4DI58	GS(1)DDAPDADTAIINAEGGQSGGDDKK	2503.0946
E9QMX4	GS(1)DDSVPVISFK	1249.619
A0A1D5RLW4	GS(0.66)DEENLDS(0.109)ET(0.109)S(0.109)AS(0.006)T(0 .007)ESLLEER	2397.0303
D3YXM8	GS(0.002)DGAS(0.998)PPASPSIIPR	1507.7631
Q3TDX2	GSDS(1)DSEGDNPEKK	1463.6012
Q5XJE5	GSDS(1)EDEVLR	1105.4887
D3Z589	GS(0.999)DS(0.001)ESDLPHR	1198.5214
Q6A0E5	GSEDS(1)PPK	815.36611
B9EKC3	GSEEDPLLS(0.999)PVET(0.001)WK	1685.8148
B9EKC3	GSEEDPLLS(0.846)PVET(0.154)WK	1685.8148
B9EKC3	GSEEDPLLS(0.748)PVET(0.252)WK	1685.8148
Q8K232	GS(1)EENLDETR	1148.4946
Q80YA9	GSES(1)PNSFLDQEYR	1627.7114
P31650	GS(0.991)ET(0.009)LGGGGGGAAAGTR	1303.6117

Q5GH67	GS(1)GAGSAALCLR	1118.5502
P68181	GS(0.983)GDT(0.017)SNFDDYEEEEIR	1961.7763
Q6ZPE2	GS(1)GEGQQGQILQR	1228.616
Q4JG03	GSGTAS(1)DDEFENLR	1496.6379
Q3TAB8	GS(0.991)GVAQS(0.009)PQQQPQQQPPQQPTPPK	2762.3736
O88935	GSHSQS(0.002)S(0.551)S(0.448)PGALTGR	1540.7594
P98203	GSLGS(1)LDR	803.41373
Q0VDP2	GS(0.022)NYHLS(0.978)DNDASDVE	1621.6492
A5CVE4	GS(1)PECVGLTETK	1276.5969
Q9JL04	GS(1)PGEEWVPEVVEEASQR	1884.849
Q9JL04	GSPGEEWVPEVVEEAS(1)QR	1884.849
Q3TXP6	GS(1)PGFTPEDLDR	1289.5888
A2AJH3	GS(1)PGGDLGAK	857.4243
S4R2F3	GS(1)PIVQEPEEASEPK	1595.7679
S4R2F3	GS(1)PIVQEPEEAS(0.006)EPKEES(0.525)S(0.469)PR	2281.071
Q3UHE1	GS(1)PPLLDAPAS(1)PPQAPR	1669.8788
A2A7S8	GS(0.991)PS(0.009)GGSTAETSDTASIR	1679.7598
Q8BLC4	GS(0.77)PS(0.23)GLAPILR	1066.6135
S0DHL8	GS(0.799)PS(0.201)PAAPGPPAGPLPR	1524.8049
Q3UPB2	GS(0.671)PT(0.317)GS(0.01)S(0.002)PNNASELSSLASLTE K	2146.039
E9PWE8	GS(0.999)PT(0.001)RPNPPVR	1176.6364
Q8R336	GS(0.997)PVRHS(0.993)PPELS(0.01)QEEFGESFADPGSS R	2885.3216
Q8QZV4	GSSAAAPPS(0.872)S(0.128)PPPGR	1334.6579
Q8QZV4	GSSAAAPPS(0.772)S(0.228)PPPGR	1334.6579
A0A087WSE3	GS(0.004)S(0.996)AESALPR	973.48287
Q3UUK5	GSSDSLDS(0.001)LS(0.999)PR	1219.5681
S4R2F1	GS(0.909)S(0.091)EASPSR	876.39372
E9Q6P5	GS(0.004)S(0.996)LLDR	746.39227
Q8C489	GS(0.5)S(0.5)PTHSAATPVHTSV	1463.7005
Q6ZWS7	GS(0.038)T(0.03)ES(0.174)CNT(0.634)T(0.101)T(0.024)ED EDLK	1785.7211
Q8CBI1	GSVISEGSPLTEQEES(0.922)S(0.075)PS(0.003)HDR	2327.0513
Q9Z0V2	GS(1)VQELSTIQIR	1329.7252
Q9Z0V2	GSVQELS(1)TIQIR	1329.7252
Q4FJL2	GS(1)VS(1)EDELIAAIK	1330.698
Q543Y7	GSVS(0.001)S(0.999)YDR	869.38791
Q543Y7	GSVSS(1)YDR	869.38791
Q8R464	GS(0.145)Y(0.004)LT(0.145)HEAS(0.705)GLDEQGEAR	1918.8657
Q14C38	GTDDS(1)PKNSQEDLQDR	1803.7871
A8DUQ5	GT(0.002)FAS(0.963)LS(0.036)ELHCDK	1463.6715
Q04447	GT(0.93)GGVDT(0.07)AAVGGVFDVSNADR	1963.9235
Q9Z268	GT(1)PTEEQVR	1015.4934

Q5DTJ4	GT(0.019)S(0.981)PGSELPPPK	1165.5979
A0A5F8MPF3	GT(0.009)S(0.573)QVS(0.017)S(0.4)PSQPPEK	1427.6892
A0A0G2JEA0	GVAPADS(1)PDAPR	1151.5571
E9QMX4	GVDLLLEGVQGES(0.715)S(0.257)PT(0.028)R	1755.9003
E9QMJ1	GVFPVSVHILS(1)D	1415.7449
A0A286YDE4	GVGVPS(0.019)S(0.981)PVR	953.52943
A0A7N9VS33	GVIT(0.987)MNEY(0.746)ET(0.267)R	1440.6555
Q1JUQ7	GVQVETIS(1)PGDGR	1313.6575
A2AWA9	GVS(1)DEDTDEEKETLK	1693.753
A0A0A6YY91	GVTASSS(0.034)S(0.932)PAS(0.034)APK	1245.6201
P70175	GVTSNT(0.004)S(0.975)DS(0.02)ES(0.001)SSK	1384.5954
P08553	GVVTNGLDVS(1)PAEEK	1513.7624
P97427	HAAPAPS(0.009)AKS(0.986)S(0.929)PS(0.077)K	1334.6943
H3BIY7	HAELS(0.001)GS(0.999)PLK	1037.5506
Q8VDP4	HDLS(1)PYR	886.42972
Q3THQ5	HDS(1)PEDVKR	1081.5152
Q8R149	HDTPDLS(1)PPRR	1289.6476
Q8R149	HDTPDPS(1)PPR	1117.5152
Q62261	HDT SAS(0.003)T(0.016)QS(0.979)T(0.975)PAS(0.02)S(0.06)R	1531.6863
B9EIX2	HEDGTQS(0.984)DS(0.016)EDPLAK	1627.6962
Q8K070	HEGFS(1)PK	800.3817
A0A5F8MPE1	HEGKT(0.991)DS(0.009)ER	1057.4789
S4R2F3	HEGLAET(0.213)PET(0.885)S(0.885)PES(0.011)LS(0.004)FS(0.001)PK	2142.0117
S4R2F3	HEGLAET(0.113)PET(0.885)S(0.885)PES(0.111)LS(0.004)FS(0.001)PK	2142.0117
Q04447	HEKFS(1)EVLK	1115.5975
A0A0G2JDN3	HELS(1)PPQKR	1090.5883
O88939	HFKDEEEDEEEAS(0.995)PDGS(0.005)GR	2161.8672
Q3UYK7	HGAGDDY(0.001)FIPS(0.999)QEFLEAER	2179.9811
Q8BHL3	HGAPAAPS(1)PPPR	1153.5992
F6TGJ2	HGGGGIVANLS(1)EQSLK	1565.8162
Q68FF6	HGS(0.999)GADS(0.001)DYENTQSGDPLLGLEK	2446.0884
Q3UGY7	HGS(0.228)S(0.737)PS(0.025)T(0.008)GAS(0.001)SR	1129.5112
Q8C1Y8	HIEPELAGRDS(1)PVR	1574.8165
Q6DFW4	HIKEEPLS(1)EEEPCTS(0.001)T(0.003)AVPS(0.996)PEKK	2721.3167
A0A1D5RM97	HLGS(1)EDDETNDEESSTEIPQFSSCSHR	3092.2537
A0A1D5RM97	HLGS(0.937)EDDET(0.063)NDEESSTEIPQFSSCSHR	3092.2537
B2RWX7	HLLS(1)PDVSR	1022.5509
Q9WV69	HLS(1)AEDFSR	1060.4938
Q9WV69	HLSAEDFS(1)R	1060.4938
A0A6I8MWZ0	HNQDSQHCS(0.002)LS(0.998)GDEEELFK	2373.9768
A0A6I8MWZ0	HNQDSQHCSLS(1)GDEEELFK	2373.9768

Q9D7X1	HNS(1)VEDAEQGK	1212.5371
Q8CAF8	HPPT(1)PPDPSSGLPR	1423.7208
S4R2F3	HPPVS(1)PGK	817.44464
E9PUL5	HPS(1)S(1)QLAGPGVEGGEQTQKPR	2088.0348
P19246	HPTDIRPPEQVKS(1)PAK	1798.969
Q3UC70	HRS(1)EEENQVNLPK	1578.775
Q5D0A4	HSAILAS(1)PNPDEK	1377.6888
Q8R4E6	HS(0.007)APS(0.992)PPVS(0.277)VGS(0.723)EEHHS(0.0 01)VLK	2177.0865
E0CX32	HSGGS(1)PEHLQK	1175.5683
A0A0U1RNN2	HSLDS(1)DEEDDDEEGSSK	1892.7032
A0A0U1RNN2	HSLDSDEEDDDEEGS(1)SK	1892.7032
A0A0U1RNN2	HSLDSDEEDDDEEGSS(1)K	1892.7032
G3X9H5	HS(0.998)LS(0.002)CTK	831.39089
B2RQQ5	HS(1)PTEDDESAK	1214.5051
A2A8V9	HS(1)PTPQQSNR	1150.5479
S4R2F3	HS(1)PVFSGKPEK	1211.6299
S4R2F3	HS(1)PVSSLK	853.46577
Q3U237	HS(0.094)S(0.9)LPT(0.006)ES(1)DEDIAPAQR	1851.8599
A0A1B0GT92	HS(0.016)S(0.984)PHQSEDEEPR	1662.687
E9PVC7	HSSPS(0.046)S(0.046)PT(0.195)S(0.713)PK	1110.5306
B2RQQ7	HSTPSNNSNPS(0.003)GPPS(0.997)PNS(1)PHR	2139.9682
Q9ERU9	HST(0.007)PS(0.991)PT(0.002)K	853.42938
F8VQ11	HS(0.954)T(0.038)S(0.008)DLSDATFSDIR	1650.7485
F8VQ11	HS(0.954)T(0.046)SDLSDATFSDIR	1650.7485
F8VQ11	HS(0.854)T(0.138)S(0.008)DLSDATFSDIR	1650.7485
Q9QYX7	HSWHDEDDETDFDES(1)PELK	2214.8978
Q811L7	HTGPNS(1)PDTANDGFVR	1683.7601
Q68FE6	HT(0.011)S(0.891)S(0.098)PEVVAEDR	1325.6212
Q3UGH4	HVPS(1)PLNLEEVQK	1488.7936
Q6NWV5	HY(1)GGLTGLNK	1058.5509
A0A2L2P590	HYS(1)PVECDK	1133.4812
P05202	IAATILT(0.609)S(0.391)PDLR	1269.7293
Q3URA2	IACDEEFS(1)DS(1)EDEGEGGRR	2156.8553
Q58E49	IACEEEFS(1)DS(1)DEEGEGGRK	2142.8648
Q3UF10	IALNLEGCAL(0.997)PT(0.003)S(0.001)QEPR	1954.9782
Q3UF10	IALNLEGCAL(1)PTSQEPR	1954.9782
H3BKV3	IAVDLS(1)DQEETAGK	1603.7577
H3BKV3	IAVDLS(0.999)DQEET(0.001)AGK	1603.7577
Q8CCJ4	ICLEAGS(1)PTGSGDQSSR	1720.7686
E0CZ78	ICS(1)FEEAK	982.44298
Q60668	NEEDEGHSNS(0.744)S(0.256)PR	1970.8566
Q6P6P5	IDDIPGLS(0.001)DT(0.207)S(0.79)PDLS(0.001)S(0.001)R	1786.8585

Q3UG84	IDIGRLS(1)PEAK	1197.6717
Q3UR37	IDIS(1)PSALR	970.54475
Q569Z6	IDIS(1)PSTFR	1034.5397
Q569Z6	IDISPS(1)TFR	1034.5397
Q8C1D8	IDS(1)DDDEEKEGDEEK	1751.6857
Q9WTK7	IDS(0.953)T(0.047)EVIYQPR	1319.6721
Q3UVL4	IDVFS(1)PVEFNK	1293.6605
Q3U234	IEDT(0.003)EIIS(0.997)PVAERPGER	1909.9745
Q71LX8	IEDVGS(1)DEEDDS(1)GKDJK	1864.8174
Q3UEX8	IEIS(1)CALAT(1)EAS(1)RR	1575.8039
E9QAQ7	IELLPS(1)R	826.49125
E9PWW9	IES(1)DEEEDFENK	1482.5998
E9Q0U7	IES(1)PKLER	970.54475
Q4W8U9	IETQTQEEVRDS(1)K	1561.7584
Q60668	IFVGGLS(0.998)PDT(0.002)PEEK	1487.7508
Q60668	IFVGGLS(1)PDTPEEK	1487.7508
Q3TI10	IGDFGLT(1)KAIET(1)DK	1506.793
Q9Z0H8	IGFPST(0.015)S(0.985)PAK	1003.5338
D6Q0F4	IGHDS(1)ELENQEK	1397.6423
A0A0R4J1B6	IGQGKY(1)EPGFFPK	1466.7558
A2AIS0	IGS(1)DPYLGQR	1104.5564
A0A0A0MQC7	IGS(0.987)T(0.013)ENLK	860.46035
B9EHN0	IHVS(1)DQELQSANASVDDSR	2069.9614
Q8BJ42	IIES(1)PERK	970.54475
Q8CDA1	IIPS(0.999)PDDS(0.001)K	970.49713
Q3UGS6	IKES(0.998)PS(0.002)EQGSR	1216.6048
F7CN67	ILDTSLLTQS(0.001)APAS(0.832)PT(0.167)NK	1829.9371
A2AA85	ILGS(0.071)AS(0.923)PEEEQEKPILDRPT(0.006)R	2364.2285
Q3UH99	ILS(1)DEQLLSTER	1402.7304
Q6PNC0	ILS(1)PFSQK	918.51747
Q3UGY4	ILS(1)PVDSGNK	1028.5502
Q3UGY4	ILS(0.864)PVDS(0.136)GNK	1028.5502
Q9QXV0	ILTGS(0.909)S(0.091)EPEAAPAPR	1494.7678
Q5UAK0	INS(0.575)S(0.575)GKES(0.575)PGS(0.172)S(0.103)EFFQ EAVSHGK	2408.1244
A0A0A0MQC7	IPAKT(0.158)T(0.842)PS(1)PK	1038.6073
A0A140LJD2	IPSELGS(0.999)PT(0.001)LTSQAK	1656.857
E9QJU8	IPRPLS(0.933)PT(0.067)K	1007.6128
P63141	IPS(1)S(1)PDLKK	983.56515
E9QAQ5	IQAAAS(1)PPANATAASDTNAGDR	2068.9774
Q99LG1	IQQQAGTVPHS(0.007)QEEDS(0.993)QEEEEDVSSR	2941.2809
Q8CBH9	IQQTGNT(0.047)S(0.953)PR	1100.5574
Q80ZX8	IQVQEVDGS(0.985)S(0.985)DEEPERPAEAS(0.012)AT(0. 014)S(0.006)APAR	2925.3588

Q8C1D8	IS(0.979)DS(0.861)ES(0.161)EELPKPR	1485.7311
Q80TU6	IS(1)EDETER	977.43017
Q8C996	IS(0.648)ES(0.352)GQFSDGLEDR	1538.6849
Q8K0A3	IS(1)LNDDEEEK	1190.5303
E9PUC5	ISNS(0.97)S(0.029)EFS(0.001)AK	1068.5088
Q8CHE4	ISPAPSDSSPGELFAGGPGS(1)PPR	2179.0546
Q8CHE4	ISPAPSDSS(1)DSSPGELFAGGPGSPPR	2179.0546
Q8CHE4	ISPAPSDSS(1)PGELFAGGPGSPPR	2179.0546
Q8CHE4	IS(1)PAPSDSSPGELFAGGPGSPPR	2179.0546
Q8CHE4	ISPAPSDS(0.999)SPGELFAGGPGS(0.001)PPR	2179.0546
Q8CHE4	ISPAPSDSSPGELFAGGPGS(1)PPR	2179.0546
Q8CFL4	IS(1)PGDQR	771.38752
G5E8X1	IS(0.965)PQS(0.035)NWDFDLTLR	1603.8206
Q6R0H7	IST(0.002)AS(0.998)GDGR	862.41446
Q8BP77	IST(1)EEAIR	917.48181
A0A668KLC6	IST(1)PERK	829.46577
O08553	IS(0.5)VGS(0.5)DADLVIWDPDSVK	1914.9575
Q69ZW3	ITEIVNQLNALS(0.367)S(0.633)LDEDQDDCIK	2632.2538
Q8BYI9	ITFT(0.001)PS(0.171)S(0.806)GIS(0.017)S(0.005)EVTVPR	1776.9258
Q3URA7	IT(0.789)S(0.736)ES(0.736)T(0.736)REMVGKPS(0.003) QR	1903.9786
F8VQN6	IT(0.049)S(0.951)PVLVGEENNHHNQK	1976.0327
Q8BI41	IT(0.001)S(0.999)VIY(1)PHKDR	1327.7248
A0A5F8MPF0	IVEGQQQS(0.002)S(0.003)EVIS(0.995)PPEEVNR	2153.06
A0A5F8MPF0	IVEGQQQSS(0.003)EVIS(0.997)PPEEVNR	2153.06
C0HKD9	IVEPEVVGES(0.828)DS(0.172)EVEGDAWR	2201.0124
Q8K005	IVHS(0.779)S(0.22)PS(0.001)SDGR	1140.5523
Q8BIQ9	IYAS(0.01)S(0.128)S(0.859)PPDT(0.003)GQR	1377.6525
A0A087WS76	IY(1)DEENFLT(1)S(1)NEK	1600.7257
A0A5F8MP96	IYQFPDCDS(1)DEDEDFFK	2021.7837
Q61158	IYQY(1)IQSR	1069.5556
Q9DBR1	KAEDS(1)DS(1)EPEPEDNVR	1815.7759
Q91XV3	KAEGAGT(1)EEEKT(1)PK	1402.6576
Q3UR37	KAEQEPQEES(1)PLK	1440.7096
B1AQX6	KAES(1)EELEVQKPQVK	1740.9258
P08553	KAES(1)PVKEK	1014.571
Q3UYK7	KAESSPNAEPS(1)DEGNSR	1773.7765
Q6A018	KAPLVAS(0.006)DS(0.022)S(0.082)S(0.082)S(0.082)GGS(0.569)DS(0.156)EDDEK	2166.94
Q64511	KAS(0.986)GS(0.014)ENECDYNPGR	1579.6863
Q3TJS8	KAS(0.956)LT(0.044)HEQQQSAR	1482.7539
Q8R3Y8	KAS(1)PEPEGETAGK	1299.6307
Q8K3X4	KAS(1)PEPPDSAESALK	1525.7624
Q8K3X4	KASPEPPDS(1)AESALK	1525.7624

Q8K3X4	KAS(1)PEPPDSAES(1)ALK	1525.7624
Q8K3X4	KAS(0.999)PEPPDSAES(0.001)ALK	1525.7624
Q6IR43	KAS(1)S(1)S(1)DDEGGPR	1204.532
A0A087WRY3	KDDSHSAEDS(1)EDEKDDHK	2085.8359
Q8CCJ3	KDEDS(1)DDESQSSHGGK	1719.682
A2AVJ7	KDGS(1)PSQAK	916.46141
Q3UEX8	KDPSQTS(1)PLGTPR	1382.7154
Q9JJ28	KDS(1)AQDVQAK	1088.5462
E9PV14	KDS(1)EDSLLAPSLGDR	1601.7897
P15920	KDS(1)EEEVSLGNQDIEEGNSR	2347.0775
Q3UVT8	KDS(0.999)EEGEES(0.001)FSSVQDDLSK	2114.9128
Q3UGC1	KDS(0.996)EGYS(0.004)ESPDLFEYADTDK	2424.0129
Q9QYX7	KDS(0.836)FS(0.164)QES(0.001)S(0.001)PS(0.098)S(0.841) PS(0.059)DLAK	1895.8749
B1AQX6	KDS(1)GSSSVFAESPGGK	1538.7213
Q3UJU9	KDS(1)LDDVEAASSPAAAALeeddssgr	2718.2468
A0A1D5RM41	KDS(1)PIS(0.999)PHFT(0.001)R	1283.6622
F6WMJ3	KDS(1)VPQVLLPEEK	1609.8563
D6RIL4	KDT(1)PPPLVPPAAR	1357.7718
Q8CD23	KEDS(1)DEDEDEEDEDDS(1)DEDEDDEEEDEFEPPIVK	4059.468
E9Q679	KEEEDCS(1)S(1)WKK	1424.6242
Q6ZPJ3	KEEKPEVQS(1)PVK	1396.7562
Q9CYT6	KEEPS(1)PSR	928.46141
P08551	KEES(1)AGEEQVAK	1303.6256
P99027	KEES(0.004)EES(0.996)DDDMGFGLFD	1948.752
Q58E35	KEES(0.026)EES(0.974)EDDMGFGLFD	1962.7677
Q8BU14	KEETPGT(1)PK	985.50803
B9EJA2	KEFDVDT(1)LS(1)K	1180.5976
P06837	KEGDGSATTDAAPATS(1)PK	1702.801
D6Q0F4	KEPVQDDS(1)DLDR	1415.6529
P26645	KES(1)GEGAEAEATAEGAK	1690.7646
B2RQQ5	KES(1)KEETPEVTK	1403.7144
E0CX94	KES(1)LSESR	934.47197
Q4KL59	KES(1)PPT(1)PDQGAASR	1439.7005
D3Z589	KETDDIDS(1)PKR	1302.6416
A0A087WN5	KETES(1)DQDDEAEK	1522.6271
A2A8V9	KET(1)ES(1)EAEDDNLDDLER	2006.8553
Q8BTI8	KET(1)PS(1)PR	813.43447
P19246	KET(1)PTEKPK	1056.5815
A0A668KLC6	KET(0.477)S(0.477)PET(0.523)S(0.523)LIQDEVALK	1886.9837
Q3UR37	KEVQS(1)PEQVK	1170.6245
A0A338P684	KFS(1)GDVVLAAR	1161.6506
Q9WV69	KGAEeeeeedds(1)EEEIK	2237.8819

Q5RKP3	KGDS(0.023)S(0.977)AEELK	1062.5193
Q6PFZ4	KGDVEGS(0.036)QS(0.964)QDEGEGSGESER	2165.8945
P08553	KGEDS(0.973)S(0.027)DDKVVVTK	1505.7573
E0CXA0	KGS(0.775)AEGS(0.612)S(0.612)DEEGKLVIDEPAK	2145.0437
Q62018	KGS(1)GS(1)EQEGEEEGER	1792.7347
A0A1W2P6K7	KGS(1)PCDTLASSTEK	1479.6875
F8SLP9	KGS(1)PGLTR	814.4661
D3Z3B8	KGS(1)S(1)DELQAEPEPSR	1628.7642
S4R2F3	KGS(1)S(1)EES(1)VDEDRA	1336.5743
Q8C714	KGS(0.982)S(0.989)GNAS(0.03)EVSVACLTER	1850.8792
Q8C714	KGS(1)S(1)GNASEVSVACLTER	1850.8792
B7ZCJ0	KGS(1)S(0.81)S(0.19)EVFSDAAR	1339.6368
E9PYE2	KGS(1)VDEDAVEVVELLNSR	1957.9956
Q8VDD5	KGT(1)GDGS(1)DEEVDGK	1495.6097
A2AGS6	KHS(1)QTDLVSR	1169.6153
B9EKJ1	KLDPAQS(0.504)AS(0.496)R	1071.5673
A0A0J9YVG0	KLEEALS(0.445)T(0.555)EGAEDTGNSDK	1992.9124
A0A0J9YVG0	KLEEALS(0.5)T(0.5)EGAEDTGNSDKK	2121.0073
O08599	KLNKTDEEIS(0.172)S(0.828)	1262.6354
O08599	KLNKTDEEIS(0.272)S(0.728)	1262.6354
O08599	KLNKTDEEIS(0.372)S(0.628)	1262.6354
O08599	KLNKTDEEIS(0.472)S(0.528)	1262.6354
Q3TS69	KLS(1)EADNR	931.47231
B6YY24	KLS(1)EASDER	1033.504
F6WXQ4	KLS(0.999)LPT(0.001)DLKPDL DVK	1680.9662
Q3TDM8	KLS(1)PTEPR	926.51853
Q3UHE7	KLS(0.973)S(0.025)S(0.002)ESPAPDTGSSAASGEADTSR PGTQQK	3033.4123
Q3UHE7	KLS(0.973)S(0.027)SESPAPDTGSSAASGEADTSRPGTQ QK	3033.4123
D3Z1F2	KLY(1)QADGY(1)AVK	1254.6608
A2AWT3	KMEEMS(1)LS(1)GLDNS(1)K	1567.7222
Q9WUF3	KNS(1)PGVSHSSQK	1254.6317
E9QP01	KNS(0.448)T(0.549)DLDS(0.004)APEDPT(0.107)S(0.893) PK	1800.8378
Q3TWG5	KPAS(0.054)VS(0.602)PT(0.143)T(0.214)PT(0.885)S(0.097) PT(0.002)EGEAS(0.002)	1842.8847
B1AU76	KPEEES(1)PR	970.47197
Q3UYG8	KPES(0.423)S(0.364)KDS(0.385)S(0.825)EDES(0.003)GPE EK	1963.8494
Q61548	KPGNNEGS(1)GAPS(0.981)PLS(0.019)K	1538.7689
C9K101	KPPEFEGGES(0.006)LS(0.945)S(0.046)GS(0.003)LCQR	2063.9582
D3Z0V2	KPS(1)DEEF A VR	1176.5775
Q3U3M5	KPS(1)PQPS(1)PPR	1089.5931
P16054	KQET(1)PDEVGSQR	1372.6583

Q8BPN8	KQS(1)EVEADLGYPGGK	1576.7733
Q9QZC2	KQS(1)QQLELLESELR	1699.9105
Q8BUR4	KQT(0.216)S(0.783)VDS(0.001)GIVQ	1160.6037
Q8BZ15	KQY(1)EILIS(1)QLK	1361.7919
Q9EST5	RET(1)DDEGEDD	1307.5113
Q3UID0	KRS(0.871)PS(0.342)PS(0.771)PT(0.016)PEAK	1380.7361
A2AGR1	KRS(0.997)PT(0.003)ENVNTPVKG	1525.8213
A0A668KM74	KS(1)AS(1)EDSIR	991.49344
A9DA50	KS(1)DAGISSADAPR	1273.6262
S4R2F3	KS(1)EEQIGEAK	1117.5615
A0A668KLC6	KSEVQAHS(0.999)PS(0.001)R	1224.6211
A0A668KLC6	KS(1)EVQAHS(0.5)PS(0.5)RK	1224.6211
A0A668KLC6	SEVQAHS(0.5)PS(0.5)RK	1352.7161
Q8C5G1	KS(1)KS(1)PPLR	911.55525
D3Z3F8	KS(1)PEQESVSTAPQR	1542.7638
E9PUC5	KS(1)PSEGTDKEK	1076.4986
D3YUH8	KS(0.012)S(0.988)CDAVLSR	1121.5499
S4R255	KS(1)S(1)GDGPDLR	1030.5043
A0A1D5RLZ1	KS(0.072)S(0.928)LPNSK	859.47633
A0A0G2JDC3	KS(0.103)S(0.897)PS(0.173)S(0.827)PAVR	1014.5458
A0A338P6P6	KS(0.742)S(0.248)PS(0.009)TGSLDSGNESK	1579.7326
Q9QYX7	KS(0.437)S(0.563)T(0.071)S(0.929)FDDDAGR	1284.5582
A2AUM6	KS(0.001)S(0.999)VEGLEPAENK	1386.6991
Q3UHC9	KT(0.001)DS(0.972)CDS(0.027)GITK	1210.55
Q5DTN3	KTPS(1)PVR	783.46029
Q3TLK3	KT(0.124)S(0.87)DANET(0.006)EDHLESICK	2088.9634
Q7TPE5	KT(0.5)S(0.5)DPDVILCNSVELIR	1958.0143
Q05D44	KT(0.729)S(0.756)FDENDS(0.515)EELEDKDSK	2114.9128
A0A0J9YUE9	KT(0.027)S(0.973)GNQDEILVIR	1471.7995
P43274	KT(0.678)S(0.321)GPPVS(0.002)ELITK	1355.766
S4R2F3	KT(0.389)S(0.611)LVIVESTDDQSQVFER	2180.0961
S4R2F3	KT(0.596)S(0.404)LVIVESTDDQSQVFER	2180.0961
F6QYF8	KT(0.001)S(0.999)PPSV	714.3912
F6QYF8	KT(0.326)S(0.674)PPSV	714.3912
F6QYF8	KT(0.129)S(0.871)PPSV	714.3912
A0A5F8MPF3	KT(0.032)S(0.968)QSEEEEPPR	1415.6529
S4R2F3	KT(0.006)S(0.952)T(0.041)DFSEVIK	1253.6503
S4R2F3	KT(0.587)S(0.352)T(0.061)DFSEVIK	1253.6503
Q8VBT0	VEEEQEADEEDVS(1)EEEAEEDR	2493.0151
A2A8V9	KVELS(0.841)ES(0.159)EEDKGSK	1563.7628
A4FUR1	KVSDVT(0.001)S(0.002)S(0.002)GVQS(0.995)FDEEEGD ANN	2312.9881
P48962	LAADVKGGS(0.46)S(0.54)QR	1187.6258

P16054	LAAGAES(1)PQPAS(0.064)GNS(0.857)PS(0.079)EDDR	2054.9141
A0A0N4SUJ0	LAAQES(0.854)S(0.145)EAEDVTVDR	1718.7959
Q9Z277	LADDEGDS(1)DSESVGQSR	1765.7238
E9PW07	LAEPVASSQVLIVAAAAPT(0.305)S(0.649)PDHS(0.046)PA	2498.3017
G3UZD6	LAGGQTSQLPT(0.001)T(0.03)PLT(0.226)S(0.743)PQR	1838.9486
Q3UNV7	LAIQGPEDS(0.921)PS(0.079)R	1268.6361
Q3TR92	LALS(0.001)DS(0.999)PDGR	1029.5091
Q99KG3	LAS(0.996)DDRPS(0.004)PPR	1209.6102
A2AGR1	LAS(1)DSDAESDSR	1251.5215
Q3UMU9	LAS(0.936)ES(0.064)ANDDNEDS	1365.5168
A0A2X0SSA9	LAS(1)IDEK	774.41233
A0A338P729	LAT(1)PEDKQDIDK	1371.6882
Q04447	LAVEALS(0.159)S(0.836)LDGDLS(0.005)GR	1601.8261
H3BKM2	LCSS(0.046)S(0.032)S(0.762)S(0.155)DT(0.003)S(0.001)PR	1282.5459
Q8VED9	LDDGHLNNS(1)LGS(1)PVQADVYFPR	2413.1662
D3Z5Y7	LDEDAS(1)PNEEKGDVPK	1741.8006
A0A1L1SQP9	LDEGT(1)PPEPK	1081.5292
Q6PBC0	LDGET(0.001)AS(0.996)DS(0.003)ESR	1265.5372
Q8BGT8	LDHALS(0.447)S(0.536)PS(0.319)S(0.699)PCEEIK	1768.8302
H7BX02	LDHLS(0.016)S(0.091)S(0.047)APGS(0.844)PPDLLES(0.01)APK	2117.0641
Q8K0U4	LDLTGS(0.998)GGT(0.002)AVPAR	1313.6939
B9EKJ1	LDPAQS(0.125)AS(0.875)RENLLEEQGSIALR	2396.2296
D3YZP9	LDQPVVSAPP(1)PR	1262.6619
Q3TTT2	LDRLT(0.741)S(0.795)T(0.795)AT(0.669)K	1104.6139
Q6PHC0	LDS(0.998)PS(0.003)RS(0.674)PS(0.318)KVEVT(0.007)EK	1757.9159
Q99KF4	LDS(1)PTLSR	887.47125
Q3U5E1	LDS(0.94)S(0.06)GER	762.3508
F7AMS7	LDS(0.002)S(0.998)PVLSPGNK	1212.635
Q8K224	LDY(1)LGVS(0.602)Y(0.796)GLT(0.602)PR	1452.7613
Q8K232	LEEDLPQEPT(0.188)S(0.812)R	1412.6783
Q8K232	LEEDLPQEPT(0.698)S(0.302)R	1412.6783
Q0VGN2	LEEQLS(1)PR	970.50836
S4R1L5	LEGDSDDLLEDS(0.972)DS(0.028)EEHSR	2146.8774
P55258	LEGNS(1)PQGS(0.457)S(0.543)HGVK	1395.6743
A2API9	LEPAAS(0.005)S(0.06)LS(0.935)PDHK	1350.6779
A2API9	LEPAASS(0.006)LS(0.994)PDHK	1350.6779
E9PY55	LEPV(1)PPS(1)PPHADPELELAPSR	2334.1856
Q9D8S9	LEQALS(1)PEVLELR	1495.8246
Q68FG2	LEQSNVPEGPGS(0.972)GT(0.027)GDESSGPR	2155.9618
C0HKD9	LEREDS(1)S(1)EEEEEEIDDEEIER	2608.0784
H3BJU7	LES(1)FESLR	979.49746

Q3TYS2	LES(1)PSER	816.39775
Q8BGU5	LESYRPDT(0.002)DLS(0.998)R	1450.7052
Q8BGU5	LESYRPDTDLS(1)R	1450.7052
Q8BGU5	LESYRPDT(0.265)DLS(0.735)R	1450.7052
Q8BGC0	LFDDS(1)DEKEDEEDTDGK	1985.7862
Q8BGC0	LFDDS(1)DER	995.4196
B2RRX2	LFEVGGS(0.62)PANT(0.38)R	1246.6306
Q6PFA7	LFIGGLS(0.998)FET(0.002)TDDSLR	1769.8836
Q6P1F1	LFSSSS(0.036)S(0.964)PPPAK	1203.6136
Q3UY58	LGAPENSGIS(0.199)T(0.801)LER	1442.7365
Q3UY58	LGAPENSGIS(0.001)T(0.999)LER	1442.7365
Q80YA9	LGDS(1)LQDLYR	1178.5932
Q61189	LGEES(0.039)KEPPS(0.955)DEDEEDNDDIEPIS(0.006)EF R	3119.3215
Q8BHE3	LGGAVEDS(0.15)S(0.208)S(0.637)PPS(0.004)T(0.001)LN LSGAHR	2151.0556
B2RQQ5	LGGDV(S(0.922)PT(0.078)QIDVSQFGFSFK	1980.9793
Q8BK08	LGPGGGGS(1)R	756.38785
O54825	LGPGLPQDG(S(1)DEEDEEWPTLEK	2440.0918
A0A0A0MQC7	LGS(0.997)EEEVDEDLT(0.433)VDES(0.068)S(0.062)QDS (0.413)PPS(0.026)QAS(0.001)LTPGR	3273.4644
Q0KL01	LGSLTPEIVS(0.003)T(0.014)PS(0.063)S(0.921)PEEEDK	2114.0267
D6RI30	LGS(1)PAGS(1)PV LGISGR	1366.7569
Q3UBL3	LGSQHS(1)PGR	937.47298
Q3UPB2	LGS(0.024)S(0.975)PTSSCNPTPTK	1532.7141
Q3TYJ0	LGT(0.001)GGGGS(0.999)PDKS(0.994)PS(0.006)AQELK	1784.8905
A0A0R4J119	LGT(1)PQQIAIAR	1166.6772
E9Q663	LGT(0.001)S(0.999)DGEEER	1091.4731
H3BIW0	LGVSVS(0.999)PS(0.001)R	900.50288
Q62277	LHQVY(1)FDAPSCVK	1562.7551
Q9R1Z7	LHS(0.985)PS(0.015)LSDEENLR	1495.7267
B2RY58	LIAAEGDAS(1)PGEDR	1399.6579
F7AB82	LIDLED SADVGEQPGEVGY(0.029)S(0.19)GS(0.776)PAE APPS(0.005)K	3013.404
Q4VBF8	LIDLES(0.999)PT(0.001)PESQK	1455.7457
Q4VBF8	LIDLES(0.371)PT(0.618)PES(0.011)QK	1455.7457
Q924Z4	LIEDERS(1)DR	1131.552
Q6ZPJ3	LIHG EDS(1)DS(1)EGDDDGR	1715.6871
Q3UDW8	LINSELGS(0.927)PS(0.073)R	1171.6197
F6SMY7	LISGDAEPT(1)PEQEEK	1641.7734
Q3V0V7	LKDEHGLEPAS(1)PR	1447.7419
F7AYW2	LKFS(1)DDEDEEDVVKDGR	1994.9069
Q5DTJ4	LKFS(1)DEEDGRDS(1)DEEGAEGHK	2348.9993
Q8R344	LKGQEDSLASAVDAT(0.002)T(0.002)GQEACDS(0.997) D	2467.0657

M0QWE5	LKS(0.152)DDS(0.848)DDDTL	1222.5201
Q3UXJ3	LKTEEGEIVY(0.007)S(0.991)AEES(0.002)ENR	2081.9753
Q9QXZ0	LLDAEDVDVPS(1)PDEK	1640.7781
E9Q9X1	LLDPEDVDVS(0.621)S(0.379)PDEK	1656.773
Q80TA6	LLEMMEEVQS(1)LQEK	1705.8267
Q68FH0	LLGLNELDDLLGKES(0.745)PS(0.255)K	1940.0466
Q3TS63	LLHEDLDDES(1)DDDVDEK	1885.8065
Q80UU9	LLKPGEEPSEYT(1)DEEDTK	2078.9532
A0A0A6YX02	LLLDPSS(0.038)T(0.933)PT(0.029)K	1170.6496
A0A5F8MPN1	LLLPGSSPS(0.021)S(0.979)PEDEVKDR	1924.9742
Q8BSI5	LLQGS(1)PEQGEAVTR	1483.7631
Q3V3U0	LLS(1)LVDDEAFIR	1389.7504
D3Z6I8	LLS(1)NELK	815.47527
Q9Z0R4	LLS(1)PGTSK	801.45962
P52479	LLS(1)PTHEK	923.50763
A4FU75	LLS(1)PVAAASAAR	1125.6506
Q80VE7	LLWT(0.648)T(0.704)S(0.648)RVLK	1215.7339
G3X920	LLY(0.002)LLQQET(0.75)S(0.75)S(0.75)T(0.75)ELK	1764.9509
G3UY33	LMKVQY(1)EEVAEK	1465.7487
Q3UN10	LNATAS(1)LEQDK	1188.5986
Q6P5F6	LNETELTDLEAQQES(1)PPK	2040.9851
E9PUF4	LNHS(1)PPQSSSR	1208.5898
Q3UU71	LNINS(1)S(1)PDEHEPLLR	1732.8744
O08599	LNKTDEEIS(0.5)S(0.5)	1134.5404
Q5BKS5	LNQS(0.001)DS(0.031)IEDPNS(0.968)PAGR	1698.7809
B2RRE3	LNQSS(1)PDNLTDK	1431.6842
Q9QXZ0	LNS(0.999)QES(0.999)DEEPQIS(0.002)DVPHISK	2251.0604
Q9ER47	LNT(0.004)AS(0.995)EDNLT(0.001)SLLK	1517.7937
Q3U3F6	LPAPQEDTASEAGT(1)PQGEVQTR	2281.0822
Q3UJQ2	LPATSAESESAVIS(1)DGEH	1798.8221
Q9Z0R4	LPEEPS(0.001)S(0.999)EDEQQPEK	1740.769
Q6PI72	LPLPDDHDLS(1)DR	1391.6681
Q8BT99	LPPS(0.976)PT(0.024)R	766.43374
Q99P72	LPS(1)DTEKEDR	1188.5622
F6RK07	LPS(1)PTPENK	981.51311
E9PV14	LPSSPAS(1)PS(1)PK	1066.5659
F6Q5V4	LPSYGLCESGNT(0.003)S(0.007)S(0.292)S(0.698)PPGPR	2061.9426
E9Q6P5	LPVSS(0.031)S(0.945)T(0.019)S(0.005)NLHVDR	1510.774
H3BJU7	LQDS(0.618)S(0.382)DPDTGSEEEVSSR	1936.8134
H3BJU7	LQDS(0.048)S(0.951)DPDT(0.021)GS(0.345)EEEVS(0.229) S(0.211)RLS(0.142)PPHS(0.053)PR	2808.2798
D3YXA6	LQESFQGAPDVIS(1)PR	1642.8315
Q8C051	LQLY(1)FWKDR	1267.6713

A0A5F8MPY3	LQPQEIS(0.999)PPPT(0.001)ANLDR	1774.9214
A0A5F8MPY3	LQPQEIS(0.698)PPPT(0.302)ANLDR	1774.9214
Q9WV69	LQS(0.707)T(0.204)EFS(0.032)PS(0.037)GS(0.014)EAGS(0 .007)PGLQNGEQR	2519.1524
Q3TES0	LQTS(0.001)QHS(0.999)PK	1024.5302
P48678	LRRLS(0.998)PS(0.288)PT(0.586)S(0.128)QR	1240.6888
A0A087WSH6	LRNS(0.999)LDS(0.001)SDSDSAL	1478.6849
A0A5H1ZRL1	LRPVS(1)PEEIR	1194.6721
G3X957	LSCS(1)LEDLR	1091.5281
Q8CGB3	LSEAT(0.601)QRY(0.399)AEKK	1422.7467
Q8CGB3	LSEAT(0.986)QRY(0.014)AEKK	1422.7467
Q9DAP4	LSECS(0.029)S(0.029)NLRRCMT(0.788)VS(0.155)FR	2101.9819
B1ASC0	LS(1)LDEDEEPK	1173.5401
Q8VDN2	LS(1)LDELHR	981.52434
B9EJA2	LSLGS(1)DDEADLVK	1360.6722
D3YYU7	LSLS(0.989)T(0.011)NCIEK	1163.5856
B2RQQ5	LS(0.158)PAKS(0.789)PS(0.061)LS(0.056)PS(0.067)PPS(0. 869)PIEK	1918.0411
Q9QZA3	LS(1)PQGQQPVS(0.998)PQS(0.002)GSPQQQR	2133.0563
Q9QZA3	LS(1)PQGQQPVS(1)PQSGSPQQQR	2133.0563
A2A8V9	LS(0.114)PS(0.888)AS(0.999)PPR	910.48723
P48678	LS(0.015)PS(0.984)PTSQR	971.50361
P48678	LS(0.128)PSPTS(0.872)QR	971.50361
Q9QYI5	LS(1)PSSEEK	875.42363
Q80XK6	LS(1)PSWNPK	927.48142
S4R2F3	LSPVS(0.993)PS(0.007)AK	884.49673
S4R2F3	LSPVS(0.793)PS(0.207)AK	884.49673
F8WH48	LS(1)QSDEDVIR	1160.5673
Q14BY7	LS(0.103)QS(0.237)S(0.651)LES(0.004)AT(0.005)S(0.001) PSCS	1539.6723
Q3TD41	LSQSSQDS(0.062)S(0.938)PVR	1289.6212
Q3V386	LSQSVHHGASSEGS(0.039)LS(0.936)PDT(0.024)R	2050.9668
Q3TB00	LS(0.002)S(0.018)LT(0.141)APVGEKS(0.791)PDS(0.032)T (0.012)S(0.004)PSYSTR	2366.1601
Q9QXS6	LSS(1)PVLHR	907.52395
Q99P72	LS(0.094)T(0.094)EPS(0.811)PEFSNYSEIAK	1897.8945
A2AJI1	LSTGS(0.001)ELS(0.999)PK	1017.5342
Q80U46	LST(0.008)S(0.991)PAT(0.001)R	831.44503
A0A5F8MPE1	LST(0.001)S(0.999)PVR	758.42865
E0CXD7	LSVQPDT(1)K	886.476
Q80TL4	LTEAPSCSVSISHVGPIADS(0.632)S(0.356)PAAS(0.003)S (0.004)S(0.005)K	2741.3178
Q3U6K8	LTFDSSFS(0.999)PNT(0.001)GK	1399.662
D3YZT5	LTFDTTFS(0.969)PNT(0.031)GK	1427.6933
Q6NS65	LTGPPPS(1)FEGK	1128.5815

A2AMD6	LTLEGLEEDDDDDKVS(0.753)PT(0.247)VLHK	2711.2661
Q8BX70	LT(0.5)QAKVS(0.5)EEIQK	1372.7562
Q9D0I4	LT(0.018)S(0.649)S(0.333)CPDLPSQSDK	1533.6981
Q8R3A1	LVEQANS(1)PK	984.52401
P58501	LVREDENDAS(1)DDEDDDEKR	2263.9313
E9PV14	LVS(1)PEPPPK	962.54368
F6T9T6	LVSQEHLSS(0.162)S(0.838)PEALR	1790.989
F6T9T6	LVS(0.027)QEHLSS(0.973)PEALR	1790.989
Q3UN10	LVS(0.869)S(0.13)ESK	748.39668
S4R1B3	MAALKAGRGANWS(1)LR	1600.862
Q641P0	MAGS(1)LPPCVVDCGT(0.665)GY(0.157)T(0.178)K	1911.8529
E9PVX6	MAS(0.019)S(0.019)AHLVT(0.961)IK	1156.6274
Q99P72	MEDIDQS(0.47)S(0.527)LVS(0.003)S(0.001)S(0.003)ADS(0.996)PPRPPPAFK	2657.2643
A0A0U1RPX0	MEGAKRADANLLT(0.988)DT(0.989)GT(0.396)ES(0.328)S(0.298)PR	2319.1125
F2Z423	MEIQSGPQPGS(1)PGR	1439.6827
Q9ERT9	MEPDNS(1)PRK	1072.4971
Q9Z117	MEQNKT(1)WKMER	1608.7388
Q9Z204	MES(0.538)EAGADD(0.462)AEEGDLLDDDNEDRGD DQLELK	3610.4497
Q9Z204	MES(0.732)EAGADD(0.268)AEEGDLLDDDNEDRGD DQLELK	3610.4497
V9GXU8	MET(0.5)NS(0.5)NNFGELQELK	1752.7989
A0A087WNR0	MIS(0.109)DKS(0.891)PPR	1029.5277
Q8BPN8	MKLDHELS(1)LDR	1355.6867
Q61484	MKMPKFS(0.5)MPT(0.5)LK	1437.7546
F6R5P4	MKT(0.606)FT(0.717)S(0.667)AFGT(0.009)MR	1376.6581
A0A171EBL2	MLMHLVDIY(1)QHR	1554.7799
A2A7U0	MLPAVPGT(1)AVR	1110.6219
G3X8Y3	MPAVS(1)LPPK	938.52592
A2ARS6	MPEKT(1)EK	861.4266
Q5FW83	MS(0.262)IVFT(0.739)RRS(0.999)PR	1348.7398
E0CYW8	MS(1)RLILT(1)EEEK	1347.7068
P61092	MS(0.203)RQT(0.33)AT(0.465)ALPT(0.022)GT(0.611)S(0.369)K	1548.793
Q1LZK3	NAELKT(1)QIEELK	1414.7668
Q3TYD6	NAGFTSALLES(1)PQR	1489.7525
D6RCX5	NAS(1)VPNLR	869.47191
Q5DTN9	NAT(1)GLILR	856.51305
Q9QXS1	NDESQLS(1)PATR	1216.5684
Q80TN1	NDGVKES(0.742)S(0.742)ES(0.742)T(0.742)NT(0.022)T(0.009)IEDEDTK	2297.9983
P58501	NDS(1)EEEER	1006.3839
Q8CB99	NDS(1)GEENVPLDLTR	1557.7271
F7BC60	NDSIVTPS(1)PPQAR	1380.6997

Q60668	NEEDEGHS(1)NS(0.174)S(0.826)PR	1456.5815
Q3UNN4	NEEPVRS(1)PERR	1367.6906
S4R2F3	NEKLS(1)PVS(0.688)PS(0.312)AK	1255.6772
Q9Z204	NEKS(1)EEEQSSASVK	1550.706
Q5DTN9	NENVATLS(0.033)VS(0.614)S(0.353)LER	1517.7686
Q9JJA9	NFTQS(1)PEQQR	1233.5738
Q3TQ33	NFY(0.003)ES(0.997)EEEEEEKEK	1817.7479
Q3TQ33	NFYES(1)EEEEEEKEK	1817.7479
A6H5Y3	NGSIEERLEY(1)ALVK	1619.8519
Q9QXW9	NHPGS(0.054)DT(0.202)S(0.743)PEAEAS(0.275)S(0.726) GGGGVALK	2123.972
F8SLP9	NHS(1)LEEEFER	1288.5684
E9Q524	NILVQTPES(0.619)ES(0.24)PQS(0.141)R	1683.8428
Q5U3K5	NIS(0.999)LS(0.648)S(0.353)EEEAEGLAGHPR	1894.9021
F6W2Q5	NIT(0.003)GS(0.109)S(0.888)PVADFSAIK	1505.7726
Q3UR53	NKEES(1)S(1)EDEEKES(1)EEEQPPK	2376.0089
Q99JF8	NLAKGVT(0.001)S(0.008)T(0.52)S(0.619)DS(0.851)EDE DDQEGER	2450.0569
Q99JF8	NLAKGVT(0.12)S(0.106)T(0.406)S(0.448)DS(0.921)EDE DDQEGER	2578.1518
Q8BPN8	NLAS(1)PEGTLATLGLK	1483.8246
Q3TNV4	NLEQILNGGES(1)PK	1397.7151
Q3UZ06	NLGS(1)INTELQDVQR	1585.806
Q6PHC0	NLGT(0.999)PTSSTPR	1129.5728
A0A0A6YY66	NLLEDDS(1)DEEEDFFLR	1984.8538
Q8BGT8	NLS(1)LEAIQLCDRDGNK	1844.9051
Q63ZW9	NLS(1)PGAVESDVR	1242.6204
Q3UGH4	NLS(0.999)S(0.001)EEVAR	1003.4934
G3UZD6	NNES(0.004)QWKDS(0.979)PLAT(0.017)R	1644.7856
A0A0A6YW54	NNPS(0.5)QDS(0.5)PCGLPEEGTLSETDR	2402.0292
Q80V79	NNS(1)FVNEIISR	1291.6521
Q14AX6	NNS(1)PAPPQPAPVK	1315.6884
Q6KCD5	NNTAADTEDEES(1)DGEDR	1866.6988
A2A4N9	NPDGS(1)LS(0.692)QAAMMQS(0.308)ALAK	1818.8604
A0A0A6YY91	NPPEAATAPAS(1)PK	1249.6303
H3BJZ1	NPPPQDY(0.071)ES(0.802)DDES(0.11)Y(0.017)EVLDLT EYAR	2844.225
G1UCX4	NPS(0.733)PPPPT(0.47)CGS(0.797)EDEEDLGGGDR	2281.9393
Q5U1V1	NQEIHLS(1)PIAR	1276.6888
Q7TSJ2	NQS(1)PVVLGPIK	1150.671
Q3UZN6	NSAT(0.001)CHS(0.002)EDS(0.997)DLEID	1691.6581
A0A1D5RM41	NS(1)DENSSIGR	1077.4687
A0A5F8MPN1	NSDLFT(0.005)VLS(0.995)R	1150.5982
Q3UNH4	NSELVS(1)PVKPER	1353.7252
Q3TUT3	NSGATADAGS(0.376)IS(0.623)PR	1302.6164

Q80U72	NS(1)LESISSIDR	1219.6044
A0A494B8X6	NSLET(1)VGT(0.005)PDS(0.995)GR	1331.6317
A0A494B8X6	NS(0.037)LET(0.799)VGT(0.165)PDS(1)GRGR	1544.7543
Q8C6R5	NS(1)LPQIPTLNLEAR	1564.8573
A0A1W2P6K9	NS(1)LTGEEGELVK	1274.6354
A0A1W2P7T9	NS(1)PEKEER	987.46214
A0A1B0GRX5	NS(1)PGAVGGLSNAPGTPR	1550.7801
Q9D898	NS(1)PINTK	772.40792
E9QKG6	NS(1)PLDCGSASPNAK	1345.5932
Q8R051	NS(1)PNNISGISNPPGTPR	1720.8493
A2A7T3	NS(0.97)PS(0.03)AASTSSNDSK	1351.5852
A0A087WRY3	NSQEDS(1)EDS(1)EEKDVK	1737.7177
Q5SVI0	NS(0.001)S(0.907)AIT(0.019)S(0.074)PK	903.46616
Q5SVI0	NSSAIT(0.671)S(0.329)PK	903.46616
Q5SVI0	NSSAIT(1)SPK	903.46616
Q5SVI0	NSSAIT(0.874)S(0.126)PK	903.46616
Q3UHJ0	NS(1)S(0.994)GS(0.006)SESSLNLAR	1504.7118
Q80TV8	NSSNTGVGS(1)PSNTIGR	1546.7336
Q8K314	NSS(1)PPPSPNK	1023.4985
Q8K3X4	NS(0.001)S(0.17)S(0.828)PVS(0.001)PASVPGQR	1468.727
Q6ZQ56	NS(0.003)S(0.997)VQPR	786.39842
A0A1B0GT26	NST(0.451)LS(0.549)EEDYIER	1454.6525
E9Q0A3	NSVLSDPGLDSPQT(0.561)S(0.439)PVILAR	2165.1328
A0A1D5RM83	NS(0.992)WDS(0.008)PAFSNDVIR	1606.7376
A0A0G2JE71	NTASLNS(1)R	861.43044
E9Q784	NTEEPS(0.748)S(0.252)PVRK	1242.6204
Q8BLM1	NTS(0.001)AS(0.999)DEDER	1122.4425
Q8BJH1	NTT(1)PPSLAR	955.50869
Q6A018	NVPGLAAPS(0.005)S(0.973)PT(0.022)QK	1365.7252
Q9CT07	NVPQEES(0.997)LEDS(0.003)DVDADFK	2035.8858
Q8BXF0	NVT(0.135)AS(0.865)DEEEGAGLFDSAGK	1895.8385
Q91XU0	PAAAAAAAGS(0.646)AS(0.354)PR	1096.5625
Q9QUN9	PAFVGGS(0.001)HDHS(0.996)EES(0.003)QLPR	1891.8813
Q9QUN9	PAFVGSHDHS(1)EESQLPR	1891.8813
Q9JKC6	PAPTVPAAPS(0.018)S(0.976)PDAT(0.005)S(0.001)EPK	1818.9
A2ARP8	PAS(0.982)PALS(0.004)EGS(0.004)S(0.004)S(0.004)EAT(0 .001)TPVISSVAER	2429.1922
Q3UHX9	PAS(1)PLSGPR	880.47667
Q3UHD3	PAVS(0.991)S(0.009)PK	684.38064
Q8BKS6	PES(0.002)EKPIIS(0.998)ENMDAFEKVR	2105.0099
Q8BKS6	PESEKPIIS(1)ENMDAFEKVR	2105.0099
A0A5F8MPH8	PEVLGS(0.11)AADGS(0.89)LIVS(1)LDGLR	1968.0528
Q04447	PFS(1)NSHNTQK	1158.5418

Q04447	PFSNSHNTQK	1158.5418
Q9CQS8	PGPTPSGTNVGS(0.157)S(0.105)GRS(0.567)PS(0.171)K	1768.8704
Q9D2H3	PGS(1)PVPGSER	981.48796
Q9D2H3	PGSPVPGS(1)ER	981.48796
A0A0G2JGY9	J	2377.1761
S4R2F3	PGT(0.006)S(0.994)PTR	714.36605
S4R2F3	PGTS(0.984)PT(0.016)R	714.36605
Q3UI81	PHPSISEEDEGFDCCLS(0.189)S(0.811)PER	2286.9699
O88569	PHS(1)IDGR	780.38785
Q8BR92	PLSDTTEPS(0.017)S(0.983)PEGK	1443.6729
F6RIS8	PLSGVHEEKLT(0.944)LT(0.628)KS(0.428)K	1652.9097
Q3UYB4	PLS(0.013)S(0.987)PPGR	809.43955
Q9CRG8	PLTS(1)PESLSR	1085.5717
Q5DTJ4	PLT(0.006)S(0.994)PLR	782.46504
Q5DTJ4	PLT(0.016)S(0.984)PLR	782.46504
C9K0Z8	PLVGPLALGS(1)PR	1175.7026
Q8K3H0	PNQAGSEGQLVLS(0.002)S(0.002)S(0.002)QS(0.989)EES (0.005)DLGEEGK	2761.2526
P19246	PPAEAKS(1)PEK	1052.5502
Q8R1I3	PQES(1)DQPT(0.594)S(0.594)QGS(0.459)VT(0.353)K	1587.7376
A0A5F8MP96	PQS(1)PDLCDDDVFR	2525.1857
Q3UVJ2	PQT(0.019)S(0.978)PS(0.003)PK	840.43413
Q3UVJ2	PQT(0.019)SPS(1)PK	840.43413
Q8BJY7	PREIVDAAEDY(1)AK	1475.7256
A0A0S3CWK3	PSAPDLS(0.911)PT(0.089)R	1039.5298
A0A0S3CWK3	PSAPDLS(0.999)PT(0.001)R	1039.5298
C4TGC3	PSEVPAQS(0.936)PT(0.064)R	1167.5884
E9Q1W7	PTGLLTVP(1)PQI	1221.6969
Q3TRJ1	PTTQQS(1)PQDEQEKE	1514.6849
Q3ULI5	PVDS(1)PGDPNQLTR	1394.679
A4PI84	PVSPSPSVLS(1)EGR	1310.683
A4PI84	PVSPS(1)PSVLSEGR	1310.683
P06837	QADVPAAVTDAAAT(0.5)T(0.5)PAAEDAATK	2255.0917
E9QNQ4	QAEDT(0.202)IS(0.206)NAS(0.328)S(0.123)QLS(0.068)S(0.074)PPT(0.103)S(0.767)PQS(0.097)S(0.032)PR	2571.2049
P60469	QAQS(1)PGGVSSVEVLF	1613.8261
F7CYX4	QAQS(1)PSGVSSVEVLF	1643.8366
O88737	QASAT(0.002)APGRES(0.998)PR	1326.664
O88737	QASATAPGRES(1)PR	1326.664
E9QMJ1	QAS(0.803)EDS(0.803)NDLT(0.301)PT(0.093)LPET(0.001)PVPLPR	2376.1809
S4R2S6	QAS(1)LDGLQQLR	1227.6571
E9PW51	QAS(1)PTEVVER	1114.5619
A0A140LI84	QCEGIT(0.019)S(0.966)PEGS(0.015)K	1291.5714

Q3UH26	QDIS(1)PTR	815.41373
Q3UH26	QDIS(0.998)PT(0.002)R	815.41373
A0A338P6W3	QDS(1)DEMPFGCIKVK	1652.7538
A2AHC4	QDS(0.774)DS(0.226)DVVDVEDTEQDFIGEDHPVVIPR	3154.4215
E9PV45	QEAEDLSLSAPSSPEIS(0.981)PQS(0.014)S(0.005)PR	2411.1452
Q9QYX7	QEDSQGS(1)GEDED FIR	1710.6969
Q9QYX7	QEDS(1)QGSGEDED FIR	1710.6969
Q3UN28	QEEEEEEERLS(1)R	1690.7282
A0A494BAF3	QEEKT(1)KT(1)AEAIQK	1502.794
A0A3B2W7I6	QEES(0.363)ES(0.636)PVDRPLTENPPNK	2165.0237
A2ARP8	QEPEPGPNVEPS(0.072)FT(0.928)PPAVPPR	2241.1066
Q62018	QESDEDS(0.8)DS(0.2)DQPSR	1593.6027
Q62018	QES(0.001)DEDS(0.999)DSDQPSR	1593.6027
O35691	QES(1)DPEDDDVKKPALQSSVVATSK	2572.2504
Q80YA9	QEVTGSSAVS(1)PIR	1329.6888
Q80YA9	QEVTGS(1)SAVSPIR	1329.6888
I7ENE7	QFLS(0.004)ET(0.121)EKLS(0.875)PEDR	1677.821
Q9EPN1	QFS(1)PGPR	787.39769
Q7M759	QFVS(1)QELVNL	1175.6186
D3YYN7	QGAIVAVTGDGVNDS(1)PALK	1810.9425
A2AWA9	QGDETPST(0.005)NNGS(0.994)DDEK	1692.6711
A2AWA9	QGDETPSTNNNGS(1)DDEK	1692.6711
D6RJ29	QGDNIS(1)DDEDEVR	1490.6121
B2RQQ5	QGFDPDRES(0.972)PVS(0.024)DLT(0.003)S(0.001)TGLYQ DK	2439.1554
F7CG54	QGGGDHQIHS(0.533)AS(0.467)DDEIPR	1917.8565
A0A494BAS2	QGGS(1)PDEPD SK	1115.4731
A0A494BAS2	QGGS(0.974)PDEPD SK(0.026)K	1115.4731
Q9R0L6	QGLAET(0.002)S(0.758)S(0.239)PVAISLR	1527.8257
Q9QXZ0	QGS(1)FSEDVISHK	1332.631
F6TZK4	QGS(1)PTQSPPADTSFGSR	1718.786
B2RQQ5	QGVDDIEKFEDEGAGFEES(0.925)S(0.925)ET(0.141)GD Y(0.008)EEK	3138.2949
E9PVU7	QHEVEIPS(0.764)PT(0.236)QK	1391.7045
E9PVU7	QHEVEIPS(0.864)PT(0.136)QK	1391.7045
A2A690	QIAS(0.042)DS(0.959)PHAS(0.999)PK	1236.6099
Q3TUU1	QIS(1)EDVDGP DNR	1343.5953
Q3UR37	QKS(1)PEIHR	993.53558
B1AU60	QLABELQS(0.591)RS(0.737)T(0.673)MQK	1617.8508
Q8BPN8	QLDHES(1)DDADREDEER	1957.7886
Q6P9L5	QLDT(1)Y(1)APFPGKK	1363.7136
Q80T68	QLHIEGAS(1)LELS(0.97)DDDT(0.025)ES(0.005)K	2085.9702
P08553	QLS(1)DIEER	988.48254
E9Q9X1	QLS(1)LLDSR	930.51345

E9Q9X1	QLS(0.999)LLDS(0.001)R	930.51345
Q5RL55	QLS(0.5)VPAS(0.5)DEEDEVPAPIPR	2048.0062
B1AWC8	QNDVEIPS(0.95)PT(0.05)QK	1354.6729
E0CZF8	QNS(1)DPTSENPPLPTR	1651.7802
Q8BXR1	QNSEALIANDELDCS(1)PE	1903.8106
Q3UHH0	QNS(0.032)S(0.968)PPSSLNK	1157.5677
Q91VC7	QPGFPQPSPS(0.001)DDPS(0.787)LS(0.212)PR	1907.9014
B2RQQ5	QPGIQS(1)PSR	968.50394
A0A0U1RPR0	QPLLLS(1)EDEEDTKR	1671.8315
A0A0U1RPR0	QPLLLS(0.967)EDEEDT(0.033)KR	1671.8315
Q9WV69	QPLT(0.3)S(0.698)PGS(0.001)VSSSR	1301.6575
A0A087WNU5	QPPS(0.116)PQGS(0.564)PEDDT(0.319)LEQVSFLDSSGK	2644.214
O88935	QPQRDAS(1)PGR	1110.553
Q62048	QPS(1)EEEIK	1071.5448
E9PVB7	QPTVAS(0.002)S(0.005)AES(0.994)DEENR	1618.7071
Q8JZR7	QPWAEPEEMS(1)EEK	1588.6715
Q8BN38	QQAS(0.001)S(0.009)DS(0.595)PCS(0.396)LR	1334.5885
A0A668KM74	QQEEAQAAAAAAS(0.993)AES(0.007)R	1687.7762
Q05C56	QQGLDDAEQGS(0.375)LS(0.409)DDAAS(0.101)VS(0.109)QIQS(0.019)QT(0.047)QS(0.904)PQS(0.036)VPER	3685.6939
E9QAF9	QQGPPPAPANDS(1)DNEEDAPASSLK	2434.0884
A0A0G2JGY9	QQGVLQS(0.876)S(0.124)PK	1070.572
A0A3B2WBH9	QLAAHS(1)KR	1037.573
E9QKK4	QQLQRS(0.524)KQS(0.768)S(0.707)R	1344.7222
D3Z4K9	QQS(1)EEDVLR	1102.5255
Q5DTJ4	QRGS(0.753)ET(0.204)GS(0.04)ET(0.002)HESDLAPSDK	2129.9461
B7ZWK9	QSAGPNS(0.993)PT(0.006)GGGGGGGGSGGTR	1714.7619
B7ZWK9	QSAGPNS(0.999)PT(0.001)GGGGGGGGSGGTR	1714.7619
Q8BTI8	QSCS(0.001)GS(0.83)S(0.169)PR	964.40324
S4R2T7	QS(0.636)DS(0.365)NAS(0.999)FLR	1123.5258
Q61687	QSEES(1)PADDGELR	1431.6114
Q8BWK1	QSELSAEES(1)PEK	1332.6045
Q8K3W3	QS(1)GDGQESTEPVENK	1603.6962
E9Q9Q7	QLGES(1)PR	872.43519
F6Y CJ0	QS(0.004)LS(0.498)S(0.498)ADNLEPDVQGHQVAAR	2221.0723
Q99JF8	QS(0.055)NAS(0.979)S(0.966)DVEVEEK	1420.6318
Q5DTY9	QS(0.998)PDEFCHS(0.002)DFEDASQGSDTR	2413.9353
Q921F2	QS(1)PDEPLR	940.46141
G3X9K3	QS(1)PPHGEAK	949.46174
D3YTP3	QS(1)PQLLPR	937.53451
A2A8V9	QS(1)PSPSTR	858.41954
A2A8V9	QSPSPS(1)PSTR	858.41954
A2A8V9	QSPSPS(1)TR	858.41954

Q3TB96	QSQIQVFEDGADT(0.044)T(0.051)S(0.899)PET(0.006)PD SSASK	2624.1726
A0A0R4J1Y6	QSS(1)CESITDEFSR	1544.6413
S4R1C4	QS(0.128)S(0.87)VT(0.002)SQSQDVASLS(0.099)S(0.757) PS(0.144)R	1949.929
E9QLQ9	QSVGS(0.023)GS(0.977)PVQTVGLETR	1700.8693
D3YYR9	QSYGESPQLLS(0.97)PT(0.029)PT(0.001)EGDQDDR	2419.0775
B1AXS4	QT(1)IIRPPVVR	1078.6611
A0A3B2WBH9	QTLINIPALNDS(1)DS(1)EVEDISEIESNR	2900.3887
A0A1W2P6P4	QTLPS(0.012)S(0.891)PT(0.076)T(0.015)T(0.006)K	1159.6085
Q91ZA5	QTPQAPQS(1)PR	1108.5625
D3YWB4	QT(0.003)S(0.997)IETDR	948.45124
F7A043	QTS(0.001)S(0.008)S(0.992)PEGCGVEIK	1477.6719
A0A5F8MPF3	QVGVFS(1)PAR	959.51886
Q61301	QVQEAIAGIS(0.001)S(0.002)AAQAT(0.28)S(0.531)PT(0. 187)DEAK	2272.1183
Q3TQI7	RADS(1)ESEEDEQESEEVR	2022.825
Q3TQI7	RADSES(1)EEDEQESEEVR	2022.825
E0CXA0	RAGDVLEDS(1)PK	1185.599
F6Q8D3	RAS(0.737)DS(0.263)LSAR	961.49411
F6Q8D3	RAS(0.832)DS(0.168)LSAR	961.49411
F6Q8D3	RAS(0.619)DS(0.381)LSAR	961.49411
Q8R4E6	RAS(1)GEEQECLD	1292.5303
D3Z1Z8	RAS(1)GQAFELILS(1)PR	1543.8471
A5CVE4	RAS(0.983)GS(0.017)AGAAASPSAAAAGER	1714.8347
A2A8V9	RAS(1)PS(1)PPPKR	1091.62
F6TZK4	RAS(0.942)QS(0.477)S(0.534)LES(0.035)S(0.009)S(0.002) GPPCIR	1817.869
F6TZK4	RAS(0.842)QS(0.477)S(0.634)LES(0.035)S(0.013)SGPPCI R	1817.869
F6TZK4	RAS(0.942)QS(0.377)S(0.534)LES(0.035)S(0.109)S(0.002) GPPCIR	1817.869
P31324	RAS(1)VCAEAYNPDEEEDDAESR	2411.9772
Q9QYX7	RAS(0.896)YDS(0.104)VEDSSESENS(1)PVAR	2183.9567
A0A1B0GR85	RDES(1)DEEPPRVER	1612.7441
Q05DI3	RDPS(1)LEEIQK	1213.6303
C9K0Z8	RDS(0.996)AS(0.996)PGAAS(0.008)GLDPLDSAR	1841.8868
Q5SSM3	RDS(1)EEEESTAL	1351.5739
Q5SSM3	RDSEEESES(1)TAL	1351.5739
A0A2R8W6N3	RDS(1)ETEVEELR	1361.6423
A0A5F8MQ17	RDS(1)LDLASDFLPPKI	1685.8988
Q3UXP3	RDS(1)LEEGERL	1202.5891
A2A699	RDS(0.333)LT(0.333)S(0.333)PEDELGAEVGDEAGDK	2289.0244
A2A699	RDS(0.95)LT(0.569)S(0.481)PEDELGAEVGDEAGDKK	2417.1194
P28028	RDS(0.984)S(0.016)DDWEIPDGQITVGQR	2173.0036
Q0VAW6	RDS(0.891)S(0.87)ES(0.239)QLASTESDKPTTGR	2151.004

Q0VAW6	RDS(0.36)S(0.409)ES(0.231)QLAS(0.204)T(0.679)ES(0.11 3)DKPT(0.002)T(0.002)GR	2151.004
Q3UWI3	RDS(1)VGGEGDR	1046.4741
P11881	RDS(1)VLAASR	973.53049
E9PV14	REDDAES(1)GGR	1090.4639
Q6PB44	REEGEAVEAGDT(1)PEELR	1885.8654
Q8BTI8	REIS(0.816)S(0.676)S(0.356)PT(0.003)S(0.149)K	1090.5619
A2AGR1	REPS(0.803)S(0.197)PQGR	1012.505
A2AGR1	REPS(1)SPQGR	1012.505
A1A4C2	RES(1)DESGESAPEGEGAR	1947.8042
Q3TRJ1	RES(0.998)PES(0.002)EGPIY EGLIL	1787.8941
Q3TRJ1	RES(1)PESEGPIY EGLIL	1787.8941
Q3TRJ1	RES(0.785)PES(0.215)EGPIY EGLIL	1787.8941
A0A3B2WCD2	RES(1)PGEWGADVPR	1454.6902
A0A5F8MPF2	RES(1)PPSAER	1027.5047
A2A8V9	RES(1)PSPAPK	967.50869
A2A8V9	RESPS(1)PAPK	967.50869
Q99K30	RES(1)QDEEPR	1144.5109
Q9CQG9	RES(0.99)QT(0.01)ALVVNQR	1399.7532
Q9CQG9	RES(0.257)QT(0.743)ALVVNQR	1399.7532
B2RQQ5	RES(1)VVS(1)GDDR	1118.5316
Q69ZX8	RFS(0.998)S(0.002)GGEEEDFDR	1529.6383
A2A8V9	RGAS(1)AS(1)PQGR	985.50534
Q9D6K2	RGFS(1)EEQLR	1120.5625
O35295	RGGGS(1)GGGDES(1)EGEEVDED	1836.6882
Q5SX A5	RGIEFPMADLDALS(0.981)PIHT(0.019)PQR	2363.2056
Q5SX A5	RGIEFPMADLDALS(1PIHTPQR	2363.2056
P60469	RGS(1)ALGPDEAGGELER	1612.7805
Q7TPM6	RGS(0.825)AT(0.165)S(0.009)S(0.001)SNTSLT	1267.6004
Q9QXZ0	RGS(0.787)DAS(0.211)DFDLLET(0.001)QSACSDTSESS AAGGQGSSR	3335.408
Q9QXZ0	RGS(0.999)DASDFDLLET(0.001)QSACSDTSESSAAGG QGSSR	3335.408
B1AQX6	RGS(1)DELT VPR	1128.5887
Q2NKI4	RGS(1)DELYAIK	1150.5982
Q8CC95	RGS(0.969)DT(0.031)DVR	904.43626
Q8CC95	RGS(0.798)DT(0.202)DVR	904.43626
Q9D4F2	RGS(0.878)FPLAAS(0.122)GPAQAAPAPPEDAR	2330.1767
A0A0G2JEF6	RGS(0.995)GDT(0.003)S(0.001)S(0.001)LIDPDTSLSLR	2105.0237
A0A0G2JEF6	RGS(1)GDTSSLIDPDTSLSLR	2105.0237
E9Q6I9	RGS(0.5)GS(0.5)AEGEVEASQLR	1631.7863
Q99P72	RGS(0.787)GS(0.787)VDET(0.426)LFALPAASEPVIPSSA EK	2714.3763
E3VVQ8	RGS(1)LELGNPSAAHLGDELK	1963.0123
G5E8J9	RGS(0.921)LT(0.079)LEEK	1031.5611

A2AIS0	RGS(1)PEEATER	1130.5316
Q3TDM2	RGS(1)QESELR	1060.5261
D9J303	RGS(1)QGDIK	859.45118
A0A0N4SVB5	RGS(1)QPDAELDGAGTSLLR	1841.9232
B7ZNA3	RGS(0.995)S(0.971)PGS(0.035)LEIPK	1226.6619
Q80TL4	RGT(1)VEGSVQEVAEEK	1673.822
Q80TL4	RGT(1)VEGS(1)VQEVAEEK	1673.822
Q80TL4	RGT(0.5)VEGS(0.5)VQEVAEEK	1673.822
Q3KQQ1	RHS(1)GQDVHVVLK	1373.7528
Q3UGY7	RHS(0.996)T(0.004)EGEEGDVSDVGSR	1815.7983
B2RW11	RHS(0.802)T(0.198)EGPEDPPPWAEK	1831.8489
B3Y5T0	RIS(0.98)ET(0.019)S(0.001)EDQTLVDR	1647.8064
A0A0S3CWK3	S(1)EPAVGPLR	1208.699
A0A087WSB8	RKS(1)PENTEGK	1144.5836
E9Q9P4	RLEDEQPPTLS(1)PK	1508.7835
Q3V159	RLETEDTSGS(0.999)PSR	1433.6746
E9PV14	RLPS(0.001)S(0.002)PAS(0.998)PS(1)PK	1222.667
Q921Q7	RLS(1)ADGSLGR	1030.552
A0A5F8MPE1	RLS(0.984)ES(0.016)LAPIK	1112.6554
Q91XU0	RLS(0.904)ES(0.06)S(0.036)ALK	989.55056
Q9ER47	RLS(1)FESEGEKDFSK	1657.7948
Q3URG1	RLS(1)LES(1)EGANEATAAPELSALEEAFR	2817.3781
Q3UN16	RLS(0.996)LGS(0.004)PDSR	1086.5782
Q920R0	RLS(1)LPGLLS(0.007)QVS(0.993)PR	1521.8991
A2A8V9	RLS(1)PS(0.519)AS(0.481)PPR	1066.5883
P05063	RLS(1)QIGVENTEENR	1643.8227
Q3UHD3	RLS(0.5)RT(0.5)NEELLWK	1543.8471
A0A338P6W3	RNS(0.539)DS(0.461)AGPFAVPDHLR	1737.8547
Q91XU0	RPAAAAAAGSAS(1)PR	1252.6636
F7A063	RPAS(1)GDDLSAK	1115.5571
Q8CCJ4	RPDS(1)PGQDASR	1184.5534
Q8CI75	RPGLEKAS(1)DEEPED	1570.7111
H3BIW0	RPLS(1)PQSK	911.51886
Q3TV86	RPNEDS(1)DEDEEK	1461.5856
Q3TQP0	RPES(1)PPIVEEWSNR	1791.8904
Q62261	RPPS(1)PDPNTK	1107.5673
A0A1D5RM58	RPPS(1)PDVIVL(S(0.902)DS(0.107)EQPS(0.521)S(0.47)PR	2162.0968
Q6IR43	RPS(1)ES(1)DKEEEELDK	1560.7267
Q8VDP4	RPS(0.508)S(0.492)GGEEEKK	1203.5368
D6RJ71	RPS(0.786)S(0.214)PAPGPSR	1107.5785
D6RJ71	RPS(0.686)S(0.314)PAPGPSR	1107.5785
E9Q6E5	RPTEAVS(1)PK	983.53999

A0A1W2P8E9	RQES(0.561)GS(0.218)S(0.218)LEPPS(0.002)GLALEDGA HVLR	2504.2619
Q8BTI8	RQPS(1)PQPSPR	1148.6051
D3Z3A8	RQS(0.971)GT(0.029)DLQEDVIVR	1614.8325
F7BQ55	RQS(1)IPEEFR	1160.5938
A0A5F8MPE1	RQS(1)PEEDDTQK	1331.5953
S4R1C4	RQS(0.64)S(0.353)VT(0.007)SQSQDVAS(0.016)LS(0.249) S(0.726)PS(0.009)R	2106.0301
B2RUG7	RRDS(1)DGVDGFEAEGK	1636.7441
A2A8V9	RRT(1)PS(1)PPPR	1062.6047
E9PV14	S(1)EAEEGEVRT(0.999)PT(0.001)K	1587.7853
Q8K2P7	S(0.988)LT(0.012)NSHLEK	1183.6309
Q8BUT2	RS(1)PPPS(0.973)PT(0.021)T(0.006)QR	1222.6418
B7ZBV7	RS(0.792)PS(0.208)ADQSLDDSPSK	1588.7329
A2A8V9	RS(0.918)PS(0.081)LSSK	860.47158
Q99M28	RS(0.992)PS(0.829)PKPT(0.179)K	996.57163
A2A8V9	RS(1)PS(1)PPPAR	963.52501
Q3USW3	RS(0.372)PT(0.628)HEMNPR	1223.5829
Q8CIP4	RS(0.892)PT(0.094)S(0.007)T(0.007)GDT(0.001)ELK	1290.6416
B2RXW8	S(0.164)S(0.835)DGS(0.001)LSHEDLAK	1500.7168
E0CX50	RS(0.066)S(0.895)DT(0.04)EEESR	1194.5113
Q3UN16	RS(0.095)S(0.905)LDGSESAK	1135.5469
Q3UN16	RS(0.015)S(0.985)LDGSESAK	1135.5469
Q8CDV2	RS(0.033)S(0.956)LNS(0.011)INSSDAK	1377.6848
Q9R0L6	RS(1)S(1)LVDEAPEEEFEQK	2006.9069
A0A5F8MPK0	RS(0.651)S(0.349)LVITTK	1003.6026
A2AJI1	RS(0.219)S(0.762)QPS(0.019)PTTPASDSPPAK	1908.9541
Q8BTI8	RS(0.023)S(0.976)RS(0.666)S(0.332)PELT(0.003)R	1274.6691
Q8BTI8	RS(0.986)S(0.947)S(0.055)ELS(0.012)PEVVEK	1445.7362
F7CGP0	RS(0.093)S(0.908)S(0.999)PAELELK	1215.6459
A0A2I3BRL8	RS(0.5)T(0.5)PSGPVR	955.51993
Q3UGH4	RS(0.641)T(0.358)PTPELTSK	1215.6459
H3BJZ0	RTNS(0.996)S(0.004)EQER	1105.5112
Q80U23	RT(0.093)S(0.907)PPVSVR	997.56688
Q3UHB8	RT(0.045)S(0.97)PS(0.985)PPAR	967.51993
P54731	RT(0.5)S(0.5)PVQTR	943.51993
Q8CI08	RT(0.007)S(0.958)S(0.036)EDLR	962.47812
Q8BN01	RT(0.091)S(0.76)T(0.149)QENVHLSQAK	1597.8172
A2A9P8	RVS(1)ADGQPFQR	1259.6371
Q3U2I0	RVS(1)GDGAQDLDR	1287.6167
A2A8V9	RVS(1)HS(1)PPP	1003.5563
F8VQK5	RVS(1)QDLDVEKPDASPTSLQLR	2353.2238
F6WJB7	RVS(0.981)S(0.921)DEEHT(0.098)VDS(0.001)CIGDIK	2045.9324
A0A3Q4EIA3	RVS(0.988)S(0.012)GSCFALE	1211.5605

A0A0A6YX73	RVS(1)VCAETNPDEEEEDNDPR	2507.0507
Q3ULT0	RY(1)VENQPLGK	1202.6408
P56399	S(1)AAES(0.995)IS(0.005)ESVPVGPK	1456.7409
Q8BI72	SAAQQENS(0.032)S(0.808)PS(0.16)R	1260.5695
H9KV01	SAAS(1)PVVISIPER	1324.7351
P70441	S(1)ADAAAGEPLPR	1153.5728
A2APL8	S(0.999)ADCS(0.001)VEEWPWKR	1591.6937
Q9ESN6	S(1)ADVS(0.998)PT(0.002)TEGVK	1189.5826
Q9ESN6	S(1)ADVS(1)PTTEGVKR	1345.6838
F8VQ11	S(1)AEALGPGALVSPR	1323.7147
D3Z5T2	S(1)AEDLTGSYDDILNAEQLKK	2324.102
B1AQD9	S(0.001)AEPT(0.004)REPGAESAES(0.825)GS(0.825)ES(0.3 45)EPEPGPGPR	2706.2005
A0A286YCI8	S(1)AESLLESTK	1063.5397
Q5PRF0	SAEVDDGAS(1)EK	1106.4728
Q9Z0R4	SAFTPATAT(0.002)GS(0.013)S(0.01)PS(0.974)PVLGQGE K	2089.0328
Q2KHK7	S(1)AGGA VPPPNNPA VSFPAPR	1884.9846
Q3TXY0	SAGRPAVGLPCPGGSEDTASDVSEPS(0.001)GS(0.001) AVS(0.22)S(0.777)PGDR	3527.5707
A0A3B2WCL5	SAGS(0.065)S(0.407)S(0.527)PEAGEDS(1)DHEDGNYCP PVK	2591.0354
P61264	S(1)AKDS(1)DDEEEVVHVDR	1828.8075
Q80VM8	SALPAADSPGNLEDS(1)DQDGPPENPAK	2551.131
Q9ERR1	S(1)APSS(1)PTLDCEK	1290.5762
P16054	S(1)APT(0.001)S(0.999)PCDQUELK	1331.6027
F6Z1P8	S(0.002)AQDGNNAS(0.717)PS(0.208)HT(0.065)AS(0.008) QPNAQDPK	2418.0796
Q8BGU5	SAS(1)ADNLILPR	1155.6248
B7ZNF6	S(0.008)AS(0.992)APAS(1)PR	842.42463
Q99N73	SAS(1)EPSLHR	982.48321
P28028	SAS(1)EPSLNR	959.46722
D6RI64	S(0.166)AS(0.834)PDDDLGSSNWEADLGNEER	2434.0157
A2BE92	SAS(1)PGLPK	755.41775
Q5U4C3	S(1)AS(1)PGPPPAR	935.48248
D3Z1F6	SAS(1)PSNIK	802.41848
Q6PA03	S(0.005)AS(0.993)QS(0.05)S(0.952)LDKLDQUELK	1647.8315
P70441	SASSDTSEELNSQDS(1)PKR	1936.861
Q9DD18	S(0.75)AS(0.698)S(0.552)GAEGDVSSER	1337.5695
Q9DD18	S(0.006)AS(0.993)S(0.001)GAEGDVS(0.931)S(0.069)ERE P	1563.6649
Q9JKC6	SAS(0.112)S(0.888)PKPDTK	1016.5138
Q9JKC6	S(0.025)AS(0.526)S(0.433)PKPDT(0.016)KVPQATAEAK	1911.9902
Q8BTI8	SAS(0.015)S(0.988)S(0.997)PEIR	932.45632
E9Q9D6	SAS(0.987)T(0.013)DLGTADVVLGR	1460.7471

Q3UH26	S(0.64)AS(0.64)T(0.472)ES(0.121)GFHNHT(0.121)DT(0.0 06)AEGDVLAAR	2443.1
A0A140LHI9	SAS(1)TGAQTFQSADAR	1496.6855
Q8VDN4	SAT(0.037)GQHS(0.963)PAR	1010.4894
A0A0A6YW88	S(1)AT(1)PATDGR	874.41446
Q3U931	S(0.5)AT(0.5)PPPAEPASLPQEPPK	1812.9258
Q3U931	S(0.074)AT(0.926)PPPAEPASLPQEPPK	1812.9258
A0A087WSE3	S(0.985)AT(0.013)S(0.002)DLELR	990.49819
Q3UR37	SATSGDIWPGLSAYDNS(1)PR	1992.9177
B7ZNA3	SATTT(0.003)GS(0.986)PGT(0.011)EK	1135.5357
Q3UHJ0	SAT(0.025)T(0.187)T(0.072)PS(0.077)GS(0.639)PR	1060.5149
Q3UHJ0	SAT(0.009)T(0.929)T(0.048)PS(0.005)GS(0.009)PR	1060.5149
Q8BTI8	SAVRPS(1)PS(1)PER	1181.6153
F8VQ11	S(1)CDDGLNTFR	1183.4928
Q6PDZ4	S(1)CDLAGVETCK	1238.5271
E9Q4D5	S(1)CHDLSVL	929.42767
Q9Z140	SCS(0.002)S(0.998)PVFSR	1025.46
Q91XV3	S(0.002)DAAPAAS(0.46)DS(0.532)KPS(0.193)S(0.747)AE PAPS(0.032)S(0.034)K	2056.9549
Q3U6E4	S(1)DAAVDTSSSEITTK	1423.6678
Q5SUC3	S(1)DAEEDGVTGGS(1)QDEEDSKPK	2121.8822
Q5SUC3	SDAEEDGVT(0.861)GS(0.139)QDEEDSKPK	2121.8822
Q5SUC3	SDAEEDGVT(1)GSQDEEDSKPK	2121.8822
Q8BPN8	S(1)DAFLSK	766.38612
Q8BPS5	SDANTDLIGGS(1)PK	1273.615
B2FDH7	S(1)DDESPSTSSGSSDADQR	1826.7038
A0A0A6YW88	SDDIAS(1)ADR	948.41485
A0A2X0SSA9	S(0.012)DDS(0.191)KS(0.644)S(0.576)S(0.576)PEPV T(0.01)HLK	1712.8217
Q6PNC0	S(1)DEELDDGVDDLK	1448.6155
Q8BQY0	S(1)DESLPDGLSPK	1243.5932
A0A140LJ08	S(1)DFDEFER	1043.4196
Q3TD71	S(0.933)DFDS(0.067)NPFA DPDLNNPFKDPSVTQVTR	3022.3945
Q8BJC1	SDFS(1)DLEQSVK	1253.5776
Q3UH26	S(1)DGESDSPEK	1049.4149
Q3UH26	S(0.001)DGES(0.553)DS(0.446)PEKEAEFAPYPR	2109.9127
Q9R0L6	S(0.999)DGS(0.001)ENLCTPQQSR	1577.674
Q8C5F9	SDGS(1)LDDGDGIHR	1342.5749
Q6PHC0	S(0.001)DIS(0.533)ERPS(0.466)VDDVESETGSTGALETR	2636.2049
B2RQQ5	S(1)DIS(1)PLT(1)PR	984.52401
A0A5F8MPC5	SDKENDPEHDES(1)DNEVLGK	2155.9142
P52479	SDLIEDEELEDT(0.003)GKGS(0.997)EDEWEQVGPK	2933.2938
A7YQ68	S(1)DNALHLASER	1211.5895
Q8CIN4	S(1)DNGELEDKPPAPPVR	1719.8428

P08553	S(1)DQAEEGGS(1)EK	1135.4629
Q8BT45	S(1)DQEAKPSTEDLGDK	1618.7322
A2ACC7	S(0.004)DS(0.996)APPTPVNR	1139.5571
A2ACC7	S(0.001)DS(0.999)APPTPVNR	1139.5571
D3Z5I4	S(0.281)DS(0.714)CS(0.004)DFTAILPDKPNR	1921.884
Q6NXJ0	SDS(1)DSSTLAK	1009.4564
E9PVU7	SDSDYDLS(1)PK	1125.4826
Q9CZQ8	S(1)DS(0.998)EEES(0.002)QDR	1180.448
P62137	S(0.803)DS(0.197)EKLNLDSIIGR	1545.7999
Q3UWC4	S(0.961)DS(0.039)ELEVKPSESLLR	1687.8628
P31324	S(0.529)DS(0.471)ENGEEEAAEAGAFNAPVINR	2505.0892
P49442	S(0.001)DS(0.998)ET(0.002)QTENSDR	1367.5437
P62996	S(0.002)DS(0.998)GEQNYGER	1240.4956
P62996	S(0.996)DS(0.004)GEQNYGERES(1)R	1612.6714
A3KGC3	S(0.039)DS(0.961)LDNEEKPPAPPLR	1763.869
Q5DTN3	SDS(1)LILDHQWELEK	1711.8417
A0A0R4J0S1	S(0.001)DS(0.999)LLSFR	923.47125
D3Z589	SDSLS(1)PPR	857.4243
S4R2F3	S(0.986)DS(0.014)NASFLR	995.46722
Q8BVL3	S(0.132)DS(0.586)QQAVKS(0.282)PPLLES(0.98)PDAS(0.02)R	2111.0495
Q8BVL3	S(0.152)DS(0.566)QQAVKS(0.282)PPLLES(0.98)PDAS(0.02)R	2111.0495
Q8BVL3	S(0.132)DS(0.686)QQAVKS(0.182)PPLLES(0.98)PDAS(0.02)R	2111.0495
F7AMS7	SDSVLPASHGHPQAGS(1)LER	2057.029
S4R1L5	SDS(1)VTGHTSQK	1145.5313
E9Q743	S(0.816)DT(0.184)EENPLEESR	1404.6005
Q3TAP5	S(1)DVEENNFEGRES(1)R	1666.7183
Q8BJ42	SDVETATDS(0.981)DT(0.018)ES(0.001)R	1511.6223
Q8BJ42	SDVET(0.133)AT(0.867)DS(0.974)DT(0.024)ES(0.001)R	1511.6223
F8WIH0	SDVIHAPLPS(1)PVDK	1473.7827
Q9R0L6	SDVS(1)DQEEDEESER	1652.6285
Q5SZA3	S(1)EAAPAAPAAAAPPAEK	1447.7307
E9PV14	SEAAEGEVRT(1)PTK	1431.6842
Q8BTI8	SECDS(1)S(1)PEPK	1134.4499
Q8BTI8	SECDS(0.5)S(0.5)PEPK	1134.4499
D3Z379	SEDDAAS(1)GEHDIQIEGVR	1926.8555
D2JZZ6	SEDS(1)DEDEPCAISGK	1637.6363
Q9QYB8	SEDTVPEAAS(1)PPPSQGQHYFDR	2414.0775
Q9Z204	SEEEQS(0.008)S(0.017)AS(0.974)VK	1179.5255
Q9Z204	SEEEQS(0.006)S(0.012)AS(0.982)VK	1179.5255
F6QU81	S(1)EEKEAGEI	990.45057
A0A140LHW2	S(1)EESLSSQASGAGLQR	1605.7594

A0A140LHW2	S(0.897)EES(0.103)LSSQASGAGLQR	1605.7594
A0A140LHW2	S(0.597)EES(0.403)LSSQASGAGLQR	1605.7594
I7HFI3	S(1)EESLTSLSAHDGDSK	1673.7744
Q3UZP2	S(1)EESQER	863.36209
A0A0R4J2D3	SEFGS(1)LDR	909.41921
D3YUV1	S(1)EGESQTVVSSGSDPK	1592.7166
Q3UMU9	S(1)EGLSLER	889.45051
Q5DTJ4	S(1)EGSEYEEIPKR	1422.6627
E0CX32	SEGS(1)PEHTK	970.43559
E0CZF8	SEGS(1)PVLPHEPSK	1362.6779
F8VQN6	SEGVQDAQEPQS(0.004)LVGS(0.753)PS(0.121)T(0.121)R	2070.9818
F8VQN6	SEGVQDAQEPQS(0.304)LVGS(0.453)PS(0.121)T(0.121)R	2070.9818
Q9D0J8	S(1)EKS(1)VEAAAELSAK	1418.7253
D3Z1T4	S(1)ELEQLR	873.4556
P59648	SELPS(0.5)S(0.5)APGGGGV	1113.5302
A0A140LHY3	SELQAYIEQCQDS(0.818)PT(0.15)S(0.032)GK	2039.9106
Q8CCV2	SENAFDQAVDS(1)D	1296.5106
Q9QYE6	S(1)EPDDELLFDLNLSSQK	1982.9109
G3UZU0	SEPQPEEGS(1)PAAGQK	1510.69
Q571D4	S(0.001)EQPEEVLS(0.999)S(0.998)EEET(0.001)AGVEHVR	2340.0717
Q8BTI8	SEQPLSQVLPS(0.157)LS(0.842)PEHK	1874.9738
Q9QXS6	S(0.366)ES(0.634)EVVEAAAIQRPDNPR	2181.0662
A0A0G2JG07	S(0.002)ES(0.998)GYGFNVR	1114.5043
Q80Y83	S(0.461)ES(0.539)IITQAEEK	1233.6089
E0CY19	SES(1)LDEEKLELQR	1703.8214
E9PZP8	SES(1)LTAESR	978.4618
H3BKV4	S(0.007)ES(0.993)PCLRDS(1)PDRR	1573.7267
H3BKV4	S(0.307)ES(0.693)PCLRDS(1)PDRR	1573.7267
B2RQQ5	SES(1)PFEGK	879.39741
Q3U7F3	S(1)ES(1)PKEPEQLR	1298.6466
A0A087WNZ7	S(0.002)ES(0.998)PPAELPSLR	1281.6565
Q53TY6	SES(1)PPPLSEPK	1166.5819
S4R1M2	SES(1)PSTR	762.3508
Q9D3X9	S(0.163)ES(0.825)PT(0.012)ADSDASSLHEQPQQIAIK	2438.1561
P59648	SES(1)PTCK	807.34327
S4R294	S(0.922)ES(0.078)S(0.001)DFEVVPK	1222.5717
B2RRE3	SESVEGFLS(0.958)PS(0.042)R	1293.6201
P43274	S(0.877)ET(0.123)APAAPAAPAPAEEK	1477.7413
P43274	S(1)ETAPAAPAAPAPAEEK	1477.7413
P43274	S(0.646)ET(0.354)APAAPAAPAPAEEK	1477.7413
Q3U292	S(0.932)ET(0.068)APAAPAAPAPVEK	1505.7726
Q1WWK3	S(1)ETAPAETAAPAPVEK	1567.773

Q1WWK3	SETAPAETAAPAPVEKS(1)PAKK	2079.0848
P43275	S(0.856)ET(0.144)APVAQAASATEKPAAK	1999.0222
Q91WF5	SET(0.001)LVNAQQT(0.999)PLGT(1)PK	1682.8839
E9QNQ4	SET(0.254)S(0.746)PVAPR	942.47706
A0A571BED8	SETSSNPS(0.003)S(0.997)PEICPNK	1732.7574
P48722	S(1)FDDPIVQTER	1305.6201
A2ATQ5	SFDFEGS(0.155)LS(0.845)PVIAPK	1592.8086
Q8BQG3	S(1)FDHLISDTK	1161.5666
Q3UXS8	S(1)FDYNYR	963.40865
A0A1W2P6Z1	S(1)FES(1)DAEDHKPLK	1501.7049
Q8C078	S(1)FGNPFEGR	1096.4938
B1AUD3	S(1)FGNPFEQAR	1248.5887
Q8CAC4	SFGS(1)PNR	763.3613
E9PZY8	SFLSEPS(0.776)S(0.224)PGR	1162.5619
B9EKJ3	SFQEILQIVS(1)PVR	1514.8457
A2AHW8	SFS(1)DVLPEPK	1204.5976
A0A1Y7VM80	S(0.915)FS(0.085)EDAVTDSSGSGTLPR	1811.8174
A0A1Y7VM80	S(0.615)FS(0.385)EDAVTDSSGSGTLPR	1811.8174
A0A1Y7VM80	S(0.415)FS(0.585)EDAVTDSSGSGTLPR	1811.8174
H9KV01	S(0.999)FS(0.004)IS(0.979)PS(0.018)R	879.44503
H9KV01	S(0.999)FS(0.002)IS(0.999)PVR	891.48142
Q8R2V4	S(0.002)FS(0.998)KEVEER	1109.5353
G5E8A0	SFS(0.001)LAS(0.001)S(0.006)GNS(0.979)PIS(0.014)QR	1536.7532
A0A3B2WBH9	SFS(1)PEER	850.3821
Q8C993	SFS(1)PGDFR	911.41373
A1A4C2	S(0.577)FS(0.423)PLQPGAAPQGR	1411.7208
A1A4C2	S(0.8)FS(0.2)PLQPGAAPQGR	1411.7208
Q3TXH9	S(0.001)FS(0.999)QPGLR	890.46102
Q8BTI8	SGAGS(1)PPGKR	912.47773
P48678	SGAQAS(0.003)S(0.008)T(0.059)PLS(0.687)PT(0.244)R	1358.679
Q8BIZ6	S(1)GDALTTVVVK	1088.6077
A0A494BAG5	S(1)GDEEFRGEDDLCDSR	1885.7384
A0A087WRY3	S(1)GDEGEDEAS(0.196)S(0.804)GED	1469.4914
Q00PI9	S(1)GDET(1)PGS(1)EAPGDK	1345.5634
A0A0R4J119	S(0.001)GDGES(0.193)T(0.806)PVEHVR	1368.627
Q6DD95	S(1)GDNSSSLGDVVTGTR	1637.7493
Q05BN2	S(1)GEDEQQEQTIAEDLVVTK	2117.9964
Q3UDN8	S(1)GEGEVSGLLR	1102.5619
E9QN14	S(1)GGDT(0.004)HS(0.996)PPR	1009.4577
A2AW14	S(1)GGGEQPDILSVGILVK	1667.9094
D3Z7E5	S(1)GGGPSGGPGGSGR	1142.5065
A4PI84	S(0.001)GGGS(0.017)GGGAARPVS(0.885)PS(0.099)PS(0.109)VLS(0.89)EGR	2125.0512

A0A087WRY3	S(0.009)GKNS(0.991)QEDS(1)EDS(1)EEKDVK	2009.8662
A0A5F8MPF0	SGLS(1)LEELR	1002.5346
Q3UJC3	SGLS(1)PANDTGAK	1116.5411
A0A0R4J0J0	S(0.048)GPQCS(0.317)S(0.317)PT(0.317)CQEETEDVR	2065.8317
A0A0J9YUE9	SGQAS(0.967)PS(0.032)RPES(0.001)PRPPFDL	1923.9439
Q4W8U9	S(1)GQLGLPDEENR	1313.6212
Q5DTM8	S(0.013)GS(0.013)ALLQS(0.377)QS(0.376)S(0.606)T(0.605)EDPKDEPT(0.01)ELK	2446.1711
G5E8J2	S(0.036)GS(0.964)DPAADAATSFLR	1464.6845
Q62018	S(0.5)GS(0.5)EQSDNESVQSGR	1565.6554
Q0VF54	SGS(1)FQGAVR	907.45118
REV__Q8R1X0	S(0.993)GS(0.007)IISGR	775.41882
A0A0A6YXT6	SGSIS(0.004)S(0.135)S(0.791)PS(0.069)R	963.46214
G3X9H5	S(0.125)GS(0.875)IVELLAGGGS(0.001)S(0.003)CS(0.994)PVLS(0.001)R	2032.0259
P0C192	S(0.623)GS(0.377)KENVQETQI	1318.6365
Q9CY64	S(0.621)GS(0.379)LEEVPNNGVNK	1427.7256
A0A1B0GR11	S(0.846)GS(0.154)PVKR	729.41334
A0A1B0GR11	S(0.999)GS(0.001)PVKR	729.41334
A0A1B0GR11	S(1)GSPVKR	729.41334
Q8BNW9	S(0.064)GS(0.936)RPQS(0.675)PS(0.325)GDAESR	1516.6866
Q8BTI8	SGS(0.999)S(0.001)PGLR	759.38752
P70698	S(0.038)GS(0.205)S(0.878)S(0.878)PDS(0.001)EITELK	1435.6678
Q3USH9	S(0.001)GS(0.998)T(0.001)DSLNPRL	1032.4836
Q3UGY8	S(0.046)GS(0.918)T(0.033)GS(0.003)SLSVSVR	1222.6153
D3Z0V2	SGTLKS(1)PPK	913.52328
D3Z0V2	S(1)GTLKSPPK	913.52328
D3Z483	S(0.995)GT(0.005)NNVAQAR	1016.4999
D3Z483	S(0.769)GT(0.231)NNVAQAR	1016.4999
Q5DTN3	SGT(0.266)S(0.734)QEELR	1005.4727
Q61823	SGVAVPT(0.016)S(0.984)PK	941.5182
Q6PHU5	S(0.001)GYHDDS(0.999)DEDLLE	1493.5794
A0A0A0MQC7	SGYS(0.003)S(0.996)PGS(0.001)PGTPGSR	1392.627
A0A0A0MQC7	S(0.286)GY(0.632)S(0.076)S(0.045)PGS(0.955)PGT(0.006)PGSR	1392.627
D3Z1Z8	S(1)HEAEVLK	911.47125
B7ZMR0	SHGAEGGGGS(1)PEK	1168.5109
B7ZMR0	S(1)HGAEGGGGSPEK	1168.5109
B1APX2	SHS(1)ANDSEEFFR	1424.5957
Q3UGS6	SHSEEGLDFKPS(0.977)PPLS(0.023)K	1853.9159
Q8BTI8	S(0.013)HS(0.987)GSSPEVDSK	1215.5368
Q3UHB8	SHS(1)LDSLSR	1000.4938
Q3UHD8	S(0.001)HS(0.999)LEGPSK	940.46141
Q3TWW8	S(1)HS(1)PLPAPPSK	1116.5928

Q8BTI8	S(0.004)HS(0.36)PS(0.658)S(0.978)PER	982.44682
E9PUC5	S(0.088)HS(0.867)S(0.044)PS(0.001)LNPDAS(0.979)PVT(0.021)AK	1693.8271
Q3UGC5	S(0.902)HT(0.098)GEAAAVR	997.49411
Q3UGC5	S(0.131)HT(0.869)GEAAAVR	997.49411
A2ARP8	SHWDDGTNDS(1)DLEK	1617.6543
P21447	S(1)ICGPHDQDR	1183.504
A0A0N4SVB5	S(1)IDAALFR	891.48142
E9QKK4	S(1)IDTQTPSVQER	1359.663
E9PXE6	S(1)IEDLHR	868.44028
P08553	S(1)IELESVR	931.49746
B1AZ85	S(1)IEVENDFLPVEK	1517.7613
Q8K0A3	SIFTPVS(0.822)S(0.178)K	964.52295
Q99NU3	S(1)IIIHTSEDGK	1198.6194
Q99NU3	SIIIHTS(1)EDGK	1198.6194
D3YYE6	SINDDGS(0.195)S(0.805)DPR	1161.4898
D3YYE6	SINDDGS(0.001)S(0.999)DPR	1161.4898
P97427	S(1)IPHITSDR	1024.5302
A2AP93	S(0.73)IQDLT(0.264)VT(0.006)GTEPGQVSSR	1873.9381
Q99PT1	S(1)IQEIQELDKDDESLR	1916.9327
P05213	S(1)IQFVDWCPTGFK	1583.7442
Q5BLJ8	S(0.998)IQKNMVY(0.505)T(0.498)CHRDK	1778.8556
Q9JL04	SIQT(0.026)S(0.968)PT(0.006)EEGR	1203.5731
Q9JL04	SIQT(0.687)S(0.305)PT(0.007)EEGR	1203.5731
O35691	SIS(0.998)ES(0.002)SR	764.36645
E9Q2E4	S(0.002)IS(0.975)GT(0.023)PAETPACK	1317.6235
A0A0U1RQB6	S(0.01)IS(0.99)PSALQDLLR	1298.7194
Q8R1P3	S(1)KEEQELHDIHSTR	1707.8176
A0A087WRY3	SKEKT(1)PS(1)PK	1000.5553
Q3US81	S(1)KEQLNSYT	1068.5088
Q8BPS5	S(1)KES(1)LQEAGK	1075.551
A2AJT3	S(0.006)KFDS(0.994)DEEDEDAENLEAVS(0.002)S(0.034)GKVT(0.963)R	2756.2261
Q00PI9	SKPAGS(1)DGERR	1158.5741
Q542V3	SKPNVPAES(1)R	1083.5673
Q8C714	S(0.024)KS(0.976)DNQISDK	1120.536
Q8C714	S(0.001)KS(0.999)DNQISDK	1120.536
S4R2F3	SKS(1)ESDASSLDK	1323.6154
O35326	S(1)KS(1)PASVDR	945.48796
Q62093	S(1)KS(1)PPKS(0.996)PEEEGAVS(0.002)S(0.002)	1614.7737
O88737	S(0.002)KT(0.008)PPS(0.78)NLS(0.21)PIEDAS(0.95)PT(0.05)EELR	2267.1281
Q6PCN6	SLAVS(1)DEEEAEEEAEK	1763.7585
D3YUW8	SLDAEPSVPSAAKPS(0.163)S(0.837)PEK	1895.9476

D3YUW8	SLDAEPSVPSAAKPS(0.015)S(0.985)PEK	1895.9476
O35245	S(0.032)LDDS(0.965)EEEDDEDS(0.002)GHSSR	2007.7413
Q8K070	S(1)LDEDEPPPSPLAR	1521.7311
F6TZK4	S(1)LDEIHPTR	1066.5407
Q80WQ4	S(1)LDESTLR	919.46108
A0A571BEG4	S(1)LDGAAAAESTDR	1262.5739
A2AUK8	S(1)LDGAESR	980.45632
A2AUK8	S(0.608)LDGAEFS(0.374)RPAS(0.547)VS(0.471)ENHDA GPDGDKR	2713.2328
E9PV14	S(1)LDGEFSR	909.41921
D0VYV6	S(1)LDGEVGTGQYATTK	1525.726
S4R1L5	S(1)LDGLSR	746.39227
A0A2R8VHB6	S(1)LDGVSENHDAGPDGDKR	1867.8296
G3FEZ6	S(1)LDIAEAHPQFSK	1441.7201
A0A1B0GRY7	S(1)LDIQCEQLSDAR	1533.7093
V9GXD9	S(1)LDLPSIGGSSVGK	1315.6983
B2RTB0	SLDS(1)DESEDEDQQDYQQK	2016.7556
Q3UHD8	S(1)LDSLDPAGLLTSPK	1512.8035
B1AS06	S(1)LDSVDR	790.3821
E9QN14	S(1)LEAEALAAE DIEK	1416.6984
Q8K394	S(1)LEAIPEK	885.48075
Q8CFP9	S(1)LECQDALETAAR	1462.6722
S4R294	S(1)LEDVKPR	942.51345
V9GXI9	S(1)LELNGAGEPVEGAPR	1594.7951
E9Q0A3	S(1)LENPT(1)PPFTP K	1326.682
Q6PGJ3	S(1)LES(1)DNEEK	1049.4513
E9PZ19	S(0.009)LES(0.985)PLS(0.008)S(0.034)GKVS(0.921)PES(0 .043)IR	1771.9316
A8IP73	S(1)LGDASP SAPESVGAR	1499.7216
A0A1D5RM83	SLGGQQGS(1)PK	957.48796
D3YXG2	SLGLS(0.001)LS(0.999)GGEQEDAVR	1616.8006
D3YXG2	SLGLS(0.006)LS(0.994)GGEQEDAVR	1616.8006
Q8C9Y1	S(0.027)LGS(0.972)EEINPVHT(0.001)DNFQER	2070.9607
P97492	S(1)LGSGESESES RPGK	1505.6958
E9QNQ4	S(0.7)LGS(0.299)LS(0.001)QGSANATVLDVAQTGGHK	2297.1612
M0QWD1	S(1)LKDDDSGDHDQNEENSTQK	2260.9316
B2RQQ5	S(0.001)LMS(0.999)S(1)PEDLT K	1206.5802
Q9CRX5	S(1)LNANTDITSLAR	1374.7103
F2Z3U3	SLPAS(0.001)GT(0.04)PQS(0.959)PPAVK	1435.7671
A0A286YDH6	S(1)LPEIDGLSK	1057.5655
E9PV14	S(1)LPELDR	828.43413
P97492	S(1)LPLGVEELGQLPLAEGPCGR	2191.1307
A2AJW4	SLPT(0.019)S(0.981)PERR	1041.5567
E9Q453	S(1)LQEQA DAAEER	1345.611

B9EKJ1	S(1)LQQLAER	1072.5513
E9Q226	SLS(1)ADNFIGIQR	1319.6834
Q8VDN4	S(0.001)LS(0.999)APLHPEFEEVYR	1772.8733
Q8VDN4	S(0.123)LS(0.877)APLHPEFEEVYR	1772.8733
Q8VDN4	S(0.354)LS(0.646)APLHPEFEEVYR	1772.8733
Q8VDN4	S(0.007)LS(0.993)APLHPEFEEVYR	1772.8733
B9VU63	S(1)LSDLTSQK	977.50294
O88737	S(0.08)LS(0.919)DPKPLS(0.001)PTAEESAK	1755.8891
Q9DCC5	S(0.001)LS(0.999)DSESDDSK	1168.4732
Q3B7Z2	SLS(1)ELESLK	1004.539
Q8BTI8	S(1)LS(1)GSSPCPK	1018.4753
B7ZN48	SLSGST(0.001)NT(0.095)VS(0.909)S(0.989)EGVT(0.006) K	1552.758
E9Q9X1	SLS(1)GTLTELDDK	1277.6351
Q8K031	S(0.024)LS(0.976)IESLCPDEGR	1461.677
F6S5Z6	SLS(1)LESTDRL	1006.4931
V9GXD9	SLS(1)LGDK	718.38612
A0A0U1RNK7	S(0.101)LS(0.358)NS(0.443)NPDIS(0.048)GT(0.215)PT(0.2 41)S(0.594)PDDEVR	2186.9927
O35691	S(0.138)LS(0.862)PGKENINSQEVEKESEEK	2360.1343
Q80TU6	S(1)LS(1)PGVSR	801.43447
E9PV14	SLS(1)PIIGK	813.496
Q69ZA1	S(1)LS(1)PLGGR	785.43955
Q80TU6	SLS(1)PLSGTTDTK	1205.6139
B1AZ46	SLS(1)PPQSQSK	1057.5404
E9Q784	S(0.07)LS(0.929)PSHLTEDR	1240.6048
P58871	S(0.004)LS(0.157)S(0.144)GFS(0.695)PEEAQQQDEEFK K	2399.0765
Q68FF6	SLS(0.004)S(0.996)PTDNLELSAR	1488.742
Q68FF6	S(0.005)LS(0.332)S(0.332)PT(0.332)DNLELSAR	1488.742
G5E8T0	S(0.002)LS(0.869)T(0.126)S(0.003)GESLYHVLGLDK	1804.9207
Q8BTI8	S(0.006)LS(0.992)Y(0.004)S(0.998)PVER	1036.5189
A0A0G2JGY9	S(0.991)LT(0.009)DLNQDPSR	1244.5997
A0A0N4SVB5	S(0.006)LT(0.994)EVCLR	976.50117
Q8K0I9	S(0.004)NS(0.996)LPHPAGGGK	1120.5625
Q8R0J5	S(0.27)NS(0.73)LPHSAVSNAASK	1468.727
A0A087WNU5	SNS(1)PENR	802.35694
A0A0G2JGY9	SNS(1)PENTR	903.40462
Q3UH26	S(0.051)NS(0.949)QENVEASHPSQDGK	1812.7874
P97825	SNS(1)SEASSGDFLDLK	1555.7002
F6XRZ6	S(0.055)PS(0.899)S(0.045)S(0.001)TGSIASSR	2338.1248
F7AYY9	S(0.032)NS(0.936)T(0.032)EYLNPWFK	1484.6936
A0A1B0GT92	S(0.002)NS(0.002)VDT(0.002)GPS(0.002)S(0.002)S(0.002) LS(0.002)T(0.002)PT(0.002)EPLS(0.714)PT(0.212)S(0.053) S(0.004)LGEERN	3032.4058

Q6PB99	S(0.011)NS(0.989)VEKPVSSLLSR	1501.81
P19246	S(1)PAAVKS(1)PGEAK	1140.6139
P0C7M9	S(1)PAEAEAR	829.393
P19246	S(1)PAEAKS(1)PAAVK	1154.6295
P19246	S(1)PAEAKS(1)PAEAKS(1)PAEAK	1767.9003
P19246	S(1)PAEAKS(0.998)PAT(0.002)VK	1767.9367
P19246	S(1)PAEAKS(1)PAEVKS(1)PGEAK	1781.9159
P19246	S(1)PAEAKS(0.999)PAT(0.001)VK	1184.6401
P19246	S(1)PAEAKS(1)PEKAK	1241.6616
Q3UEX8	S(1)PAEEELTPSAVVR	1483.7518
P19246	S(1)PAEPKS(1)PAEAKS(1)PAEPK	1819.9316
P19246	S(1)PAEVKS(1)PAEAKS(1)PAEVK	1823.9629
P35831	S(1)PAEVTDIGFGNR	1361.6575
Q8K327	SPAGS(1)PELK	884.46035
S4R1L5	S(0.999)PAT(0.02)S(0.98)PISSNSHR	1339.648
P19246	S(1)PATVKS(1)PGEAK	1170.6245
Q9QYB8	SPAVENTPS(1)PSK	771.41267
Q9QYB8	S(1)PAVS(1)PSKTSEDTK	1432.7046
Q9QYB8	S(0.032)PAVS(0.968)PS(0.005)KT(0.602)S(0.393)EDTK	1432.7046
Q9QYB8	S(0.032)PAVS(0.968)PS(0.005)KT(0.702)S(0.293)EDTK	1432.7046
B2RQQ5	S(1)PCDSGYSYETIEK	1634.677
E9QAF9	SPCETIS(0.508)S(0.344)PS(0.043)S(0.043)T(0.062)LES(0.001)K	1708.7825
A0A0G2JGX4	S(1)PDCTHDNPLETR	1540.6576
Q5FW97	S(1)PDDPSR	772.33515
F6W8Y8	S(0.982)PDEVT(0.01)LT(0.007)S(0.001)IVPTR	1513.7988
Q8VDN2	S(1)PDFTNENPLETR	1518.6951
Q3TAB8	S(1)PDLGHSTQIPR	1306.663
Q3TN48	S(1)PDSDSVSPGPQRPPPSSQR	2076.9825
A0A571BDA2	S(1)PDSGLDCGSEEEESR	1752.6745
A0A087WSQ1	S(0.999)PDS(0.001)TANVR	945.45157
Q9D074	S(0.999)PDS(0.001)TLR	774.38718
P19246	S(1)PEAQI(1)PVQEEAK	1412.6783
Q1WWN0	S(1)PECSTVDGGSQVR	1477.6467
Q8CB77	S(0.999)PEEDQEPIIS(0.001)HQKPGK	1917.9432
Q6PGG9	S(1)PEEFNPK	946.43961
A0A1L1SSS4	S(1)PEESTER	933.40395
Q9QYI5	S(1)PEEVFR	862.41848
P19246	S(1)PEKAKS(1)PVK	1069.6132
P19246	S(1)PEKEEAK	916.45018
Q3U237	S(1)PEKEGLVGLVEK	1270.6769
D3Z589	S(1)PEPEATLTFPFLDK	1690.8454
E9Q3M9	S(1)PEQPGTKPPLPR	1402.7569

Q8R0W2	S(1)PEQSPPAR	967.47231
A0A140T8R7	S(0.631)PES(0.184)S(0.184)IKIPEEEDEAASVLDVR	2399.1704
A0A140T8R7	S(0.731)PES(0.084)S(0.184)IKIPEEEDEAASVLDVR	2399.1704
A0A140T8R7	S(0.6)PES(0.2)S(0.2)IKIPEEEDEAASVLDVR	2399.1704
Q80XK6	S(1)PGADVTCSLPR	1258.5976
Q3TPH3	S(1)PGASNFSPLPK	1204.6088
Q9JMG7	S(1)PGDEDDKDCKEENK	1893.7534
P19246	S(1)PGEAKS(1)PAAVKS(1)PAEAK	1723.9105
P19246	S(1)PGEAKS(1)PAEAKS(1)PAEAK	1753.8846
P19246	S(1)PGEAKS(1)PAEPKS(1)PAEAK	1779.9003
P19246	S(1)PGEAKS(1)PAEPKS(1)PAEPK	1805.9159
P19246	S(1)PGEAKS(1)PGEAKS(1)PAEAK	1739.869
P19246	S(1)PGEAKS(0.985)PS(0.015)EAK	1186.583
A0A0J9YUF2	S(1)PGESQSEDIEASR	1490.6485
Q8CD55	S(1)PGGPGPLTLK	1022.576
A0A3B2WCD2	S(1)PGHEGEGGGEWPGISGER	1893.8242
Q99PP2	S(1)PGLCSDSSLEESLR	1635.741
B2RSY3	S(1)PGLPIR	738.43882
Q9ESN6	S(1)PGSGHVVK	767.3926
Q9QZA3	SPGS(1)PQLSR	927.47739
A0A5F8MPF3	S(0.977)PGT(0.023)EEAKS(0.998)PLAT(0.002)K	1414.7304
A0A5F8MPF3	S(0.877)PGT(0.123)EEAKS(0.998)PLAT(0.002)K	1414.7304
Q8K232	S(1)PGT(1)PAGEGSGSPPK	1324.6259
B1AQX6	S(1)PGVLFLQFGEETR	1578.8042
E9Q3F7	S(1)PGVPDAEDDDER	1400.5692
P19246	S(1)PIEVKS(1)PEK	1112.6077
Q9R1L5	S(1)PITIQR	813.47085
Q8C5G1	S(1)PIVNER	813.43447
Q80TT3	SPLPPILGS(0.859)PT(0.141)K	1205.702
Q542T4	S(1)PLPSHAR	863.46135
Q569Z6	S(1)PLQSVVVR	983.57638
S4R2F3	S(0.449)PLS(0.554)PDT(0.689)PS(0.157)S(0.149)EEVS(0.0 01)Y(0.001)EVTPK	2148.011
B1AXV1	SPLS(1)PGAK	755.41775
Q3KQQ1	S(1)PNELVDDLFK	1275.6347
Q330P7	SPNPSDGGGDT(0.001)PLAQS(0.997)DEEDGDDGGAEP GPCS(0.001)	3086.1803
B1AQX6	S(1)PNTAILIK	955.57023
Q569Z6	S(1)PPATGSAYGSSQK	1336.6259
F8WGR0	SPPDQS(0.003)AVPNT(0.964)PPS(0.516)T(0.517)PVKLE EAGDGCAK	2848.3549
Q8K232	SPPDQSAVPNT(0.168)PPS(0.867)T(0.964)PVKLEEDLPQ EPTSR	3212.5837
Q8VC91	S(1)PPEEPPDFCCPK	1558.6432
Q8CI71	S(0.995)PPES(0.005)LNDLGAFESLR	1730.8475

Q8CI71	S(0.895)PPES(0.105)LNDLGAFESLR	1730.8475
Q8C996	S(1)PPPGPVPRPPPR	1309.7255
Q3UH83	S(1)PPGPPGSR	850.42972
B2RQQ5	S(1)PPLLGSESPYEDFLSADSK	2138.0055
Q6PCN6	S(1)PPLPAVIK	920.5695
Q3UFL8	S(1)PPPPP PPPR	1037.5658
Q8BUT2	S(1)PPPSPTTQR	1066.5407
Q9D2P8	S(1)PPRPAKPR	1004.5879
S0DHL8	S(1)PPSPATDQR	1054.5043
Q3TBZ3	S(1)PPVSVNR	854.46102
Q3TDD8	S(0.816)PPY(0.009)T(0.174)AFLGNLPY(0.001)DVTEDSI K	2326.1369
Q3TDD8	S(0.716)PPY(0.009)T(0.274)AFLGNLPY(0.001)DVTEDSI K	2326.1369
S4R2F3	S(1)PQGLELPLPNR	1319.7197
P28028	S(1)PKQPIVR	923.55525
H3BIW0	S(1)PQPPSR	767.3926
B7ZBV7	S(0.029)PS(0.971)ADQSLDDSPSK	1432.6318
Q3UNH4	S(0.89)PS(0.11)AEAAAPPPGPR	1303.6521
A0A1W2P8E9	S(0.001)PS(0.999)DNSLNTTGIICR	1633.773
O70161	SPS(1)DTSEQPR	1102.4891
F1DGF6	SPSDYSNFDPEFLNEKPQLS(0.433)FS(0.567)DK	2790.2661
P19246	S(0.404)PS(0.596)EAKS(1)PAEAKS(1)PAEAK	1783.8952
A0A3B2WCL5	S(0.953)PS(0.047)ESAETHTLEEK	1672.7428
Q14AX3	S(0.047)PS(0.953)GGAAGPLLTPSQSLDGSR	1953.9756
Q9Z2C9	S(0.998)PS(0.002)GGEHAPSEDSGK	1440.6117
A0A3Q4L393	S(0.007)PS(0.993)GS(1)PHR	823.39366
B7ZNF6	S(1)PS(0.999)IDS(0.001)IQK	973.50803
Q6PHC0	S(0.999)PS(0.001)KVEVTEK	1102.587
B2RQQ5	S(0.024)PS(0.976)LSPSPPS(1)PIEK	1421.7402
A2A8V9	S(0.914)PS(0.086)LSSK	704.37047
A2A8V9	S(1)PS(1)PAPPPPPPPPPPR	1583.846
D3YVH4	S(1)PS(1)PEPIYNSEGK	1403.6569
A0A1W2P7T9	S(1)PS(1)PLQAPEK	1052.5502
A0A3Q4EBK4	S(1)PS(1)PPPDGSAPAATPEIR	1674.8213
A0A0S3CWK3	SPS(1)PPPR	736.38679
A7TU71	S(1)PS(1)PQFAPQK	1085.5506
Q3UID0	S(0.998)PS(0.986)PS(0.016)PTPEAK	1096.5401
F6RUK9	S(0.995)PS(0.994)PT(0.011)LGESLAPR	1310.683
Q8VHK1	S(0.001)PS(0.999)QESIGAR	1030.5043
Q9Z2C9	S(0.386)PS(0.455)QGDEDS(0.159)ALILTQDNLK	2029.9804
A4FU75	S(0.896)PS(0.104)QQEILLR	1169.6404
Q6PB94	S(0.99)PS(0.008)S(0.002)DSWTCADASTGR	1683.6795
Q8BG40	S(0.999)PS(0.003)S(0.997)EDDRDER	1291.5277

Q6ZQ92	SPS(1)SEEIER	1032.4724
Q7TT84	SPSSLSANVT(0.01)S(0.094)S(0.896)PK	1360.6834
B9EHT4	S(0.773)PS(0.227)SPSLGSLQQR	1342.6841
F7AYY9	S(0.993)PS(0.007)S(0.001)S(0.894)T(0.1)GS(0.005)IASSR	1222.579
Q8CI71	S(0.887)PS(0.113)VSPSK	787.40758
Q8BTI8	S(0.849)PS(0.151)VSSPEPTEK	1243.5932
D3YZ06	S(0.003)PS(0.997)WEPFR	1004.4716
B1AXF3	S(0.308)PT(0.692)AGDKDGPTLPSKPR	1722.8901
Q6KAP6	S(0.927)PT(0.073)DFLELEQPR	1430.7042
A2AGR1	S(0.114)PT(0.886)ENVNTPVKG	1241.6252
E9QLQ9	S(0.86)PT(0.14)GNTPPVIDSVSEK	1626.8101
Q80TV8	S(0.1)PT(0.899)GSTASR	862.41446
Q3UGS4	S(0.509)PT(0.491)NSSEIFTPAHEENVVR	2013.9392
Q3UGS4	S(0.411)PT(0.589)NSSEIFTPAHEENVVR	2013.9392
A2A8V9	S(0.002)PT(0.027)PS(0.855)LS(0.116)PAR	1011.5349
I7HFI3	S(0.057)PT(0.943)QLQLGK	970.54475
Z4YLT8	SPTSDDISLLHES(0.5)QS(0.5)DR	1885.8654
A0A0U1RPX0	S(1)PVCSLR	817.41162
F8SLP9	S(1)PVDSSVLEGVK	1215.6347
P08553	S(1)PVVEVKPKPEAK	1436.7875
D3Z5P0	S(1)PVFSFSPEPGAGDEAR	1748.8006
P19246	S(1)PVKEDIKPPAEAK	1507.8246
P19246	S(1)PVKEEVK	914.5073
P08553	S(1)PVKS(1)PEAK	941.5182
H7BX84	S(0.005)PVPS(0.993)PPGS(0.002)PR	1076.5615
Q3U5J8	S(1)PVVELSK	857.48583
Q6ZPK7	SPVVS(0.244)GDS(0.756)PR	999.49852
A0A0A0MQC7	SPVVSGDT(0.002)S(0.998)PR	1100.5462
F6QYF8	S(1)PVYLTVLK	1018.6063
O88737	S(0.763)QAS(0.237)EEES(0.043)PVS(0.957)PLGRPR	1824.8966
H3BKM2	SQDAT(0.061)VS(0.934)PGS(0.005)EQSEK	1548.6904
H3BKM2	SQDAT(0.058)VS(0.012)PGS(0.187)EQS(0.181)EKS(0.542) PGPIVS(0.02)R	2342.135
H3BIW0	S(1)QDQDSEAHELRS	1500.6441
Q80TV8	S(1)QEDLNEPIKR	1327.6732
Q0VGU4	S(1)QEEAPGHR	1009.4577
E9Q852	S(1)QEELREEK	1146.5517
E9Q1U6	S(1)QEIEELER	1131.5408
A0A2I3BRF4	SQEPI SNDQKVS(1)DDDKEK	2060.9498
Q9QYX7	S(1)QESEELVVAGGGGLR	1586.79
Q9QYX7	S(0.939)QEVT(0.061)DFLAPLQTSSR	1777.8846
A0A1L1SQ76	S(0.999)QGDS(0.001)NPAAIPHAAEDIQGDDR	2263.0101
A0A1L1SQ76	S(0.9QGDS(0.1)NPAAIPHAAEDIQGDDR	2263.0101

Q99JP6	S(0.001)QS(0.999)ADTPGPTER	1244.5633
Q5XG69	SQS(0.001)EEQS(0.666)EAS(0.666)S(0.666)EHLEQFTQS AEK	2595.1209
Q68FF6	SQS(0.003)ELDDQHDYDS(0.016)VAS(0.904)DEDT(0.07 6)DQEPLPSAGATR	3477.4564
Q3TSE2	S(0.037)QS(0.847)ES(0.071)S(0.044)DEVT(0.001)ELDLSH GK	1946.8705
Q3TAP5	S(0.999)QS(0.001)KS(0.999)PT(0.001)GTPAR	1215.6208
F7AMS7	S(0.008)QS(0.992)LQDQPTR	1158.5629
Q3TDD8	SQS(0.018)S(0.982)DTEQPS(0.985)PT(0.014)S(0.001)GGG K	1648.7176
A0A1B0GT26	SQT(1)PQDTNR	1045.4789
B7ZNA3	S(0.011)QT(0.989)PS(0.997)PS(0.002)TLSR	1159.5833
Q8BTI8	S(0.71)RAS(0.289)PAT(0.001)HR	981.51043
Q8BTI8	S(1)RAS(0.999)PVS(0.001)R	858.46716
B9EHJ3	S(0.992)REDLS(0.008)AQPVQTK	1457.7474
Q569Z6	S(1)REEEWDPYEYTPK	1664.7318
E9Q9N6	S(0.058)RNS(0.942)PLLDR	1056.5676
Q64369	S(1)RPLNAVSQDGK	1270.663
C9K101	S(0.838)RPS(0.564)S(0.535)DLNNS(0.052)T(0.01)LQS(0.0 1)PAHLK	2051.0396
A0A0H2UH20	SRPS(0.5)S(0.5)PAVR	955.51993
A0A0U1RNJ1	S(0.015)RS(0.949)DT(0.036)SLK	892.46141
A0A3Q4L393	S(1)RS(0.998)GS(0.002)IIGSR	1018.552
Q8C5G1	S(1)RS(1)PLLNDRR	1212.6687
Q62093	S(1)RS(1)PPPVSK	953.52943
Q8BP78	S(0.642)RS(0.358)PPSEEASK	1173.5626
A2A8V9	S(1)RS(0.519)PS(0.411)HT(0.071)RPR	1179.6221
A2A8V9	S(1)RS(1)PS(1)PAPEK	1054.5407
Q62093	S(1)RS(0.997)RS(0.985)PPPVS(0.017)K	1196.6626
Q9QYG0	S(1)RT(1)AS(0.998)LT(0.002)SAASIDGSR	1578.7962
Q8BTI8	S(1)RT(1)PLTSR	916.50903
Q8BTI8	S(1)RT(1)PPAIR	896.5192
Q8BTI8	S(0.638)RT(0.361)PPS(0.001)APSQR	1269.6426
Q8BTI8	S(0.118)RT(0.882)PPSAPSQR	1269.6426
Q8BTI8	S(0.997)RT(0.033)S(0.969)PVT(0.001)R	902.49338
Q8BTI8	S(0.018)RT(0.67)S(0.312)PVTR	902.49338
Q61301	S(0.288)RT(0.862)S(0.825)VQT(0.025)EDDQLIAGQSAR	2061.0087
B7ZC24	S(0.5)S(0.5)ADSLPGELR	1130.5568
Q91W39	S(0.5)S(0.5)ADSLPGPISR	1185.599
O08599	S(0.5)S(0.5)AS(0.001)FSTTAVSAR	1270.6153
Q8BPN8	S(0.019)S(0.981)DDIDYR	969.40395
B2RXW8	S(0.5)S(0.5)DGSLSHEDLAK	1344.6157
F7ADT6	S(0.906)S(0.094)DIVSSVR	948.48762
F7ADT6	S(0.999)S(0.001)DIVSSVR	948.48762

Q8R0J5	S(0.5)S(0.5)DKLNLVTK	1103.6186
F6TZK4	S(0.5)S(0.5)DSDVSDVSAISR	1423.6427
A0A1Y7VLD6	S(0.002)S(0.002)DWS(0.997)S(0.999)EEEFPVRK	1663.7326
Q68FG2	S(0.775)S(0.225)EAAHGATLPTR	1296.6422
O55201	S(0.5)S(0.5)EAEEAEVEEDQR	1606.6595
Q9D898	S(0.5)S(0.5)EIEQAVQSLDR	1460.7107
E9Q9N6	S(0.5)S(0.5)ELEGDTITLKPR	1544.8046
E9QNZ4	S(0.022)S(0.978)FLNAK	765.4021
B0R0E3	S(0.364)S(0.636)GGAEDDIPQGER	1416.6117
B0R0E3	S(0.5)S(0.5)GGAEDDIPQGERK	1544.7067
E9Q9Q7	S(0.903)S(0.097)GREEDEEELLR	1547.7063
E9Q9Q7	S(1)SGREEDEEELLR	1547.7063
P58871	S(0.021)S(0.021)GS(0.161)LS(0.796)PGLETEDPLEAR	1843.88
A0A1B0GT26	SSHCD(1)PPR	1041.4298
Q9EPM7	S(0.5)S(0.5)HETLNVVEEK	1370.6678
Q9EPM7	S(1)S(1)HETLNVVEEK	1370.6678
A0A1W2P762	S(0.5)S(0.5)HGNDSLFLR	1116.5676
A0A1W2P762	S(1)S(1)HGNDSLFLR	1116.5676
Q9JL04	SSILES(1)PKK	987.56006
E9PXA8	SSILPFT(1)PPVVK	1283.7489
H3BLB0	S(0.312)S(0.312)KS(0.312)DKCFT(0.087)HQIHL(0.98)IH QGIHT(0.997)EEK	2946.4406
Q3TDU7	S(0.007)S(0.008)LAET(0.031)LDS(0.461)T(0.514)GS(0.978) LDPQR	1775.8537
Q6PD32	S(0.215)S(0.785)PQLDPLRK	1302.5939
A0A1D5RM83	S(0.5)S(0.5)LETGSSLSTDR	1338.6263
A2ARP8	SSLLLDT(0.006)VT(0.158)S(0.77)IPS(0.033)S(0.033)R	1574.8516
Q8CDV2	S(0.5)S(0.5)LNSINSSDAK	1221.5837
A0A0R4J0D3	S(0.001)S(0.001)LNS(0.913)S(0.556)PWS(0.388)GLMALG NS(0.142)R	1862.8945
Q3UYC0	S(0.5)S(0.5)LPNGEGLQLK	1241.6616
Q3UHH0	S(0.469)S(0.515)LY(0.016)EGLEKPESR	1493.7362
Q9D066	S(0.5)S(0.5)PADLVTVDQK	1359.6882
Q3UT39	S(0.5)S(0.5)PALAAPDASVDPK	1424.7147
Q61548	S(0.37)S(0.63)PATTVT(0.002)S(0.998)PNSTPAK	1544.7682
Q61548	SSPAT(0.003)T(0.84)VT(0.008)S(0.145)PNS(0.004)TPAK	1544.7682
A0A1D5RLB2	S(0.058)S(0.942)PCLDR	833.37015
E9QMX4	S(0.5)S(0.5)PDQFLFSSLR	1382.683
S4R2F3	S(0.5)S(0.5)PEDVVVTNSSNR	1489.7009
A0A087WRM8	S(0.5)S(0.5)PEIQEPIKPLEK	1593.8614
O88852	S(0.5)S(0.5)PERDEGTPVPDSR	1627.7438
E9Q852	SSPNVANQPPS(1)PGGK	1435.7056
E9Q6E5	S(0.473)S(0.525)PPAPGT(0.206)AGPT(0.194)S(0.554)PS(0 .046)VALT(0.001)NLALR	2261.2016
Q8K2L2	S(0.5)S(0.5)PPASPTIIPR	1221.6717

A0A498WFS2	S(0.124)S(0.124)PPAT(0.752)DPGPVPSSPSQEPPTK	2159.0382
F6RUK9	S(0.5)S(0.5)PPPLPAK	892.50182
A6X919	S(0.481)S(0.481)PPPLS(0.038)GASEVDAGELGSER	2040.96
E9QP01	S(0.5)S(0.5)PPPPLPAEERPGTK	1658.8628
A0A2I3BPY7	S(0.5)S(0.5)PPVEHPAGTSTTDNDVIIR	2192.0709
A0A0U1RP90	S(0.716)S(0.284)PQLDPLRK	1139.6299
A0A0U1RP90	S(0.516)S(0.484)PQLDPLRK	1139.6299
Q8C8L2	S(0.5)S(0.5)PQPAAAAR	1025.5254
D6RI74	S(0.637)S(0.362)PS(0.001)EVSLAER	1289.6099
B1AZA5	S(0.167)S(0.798)PS(0.035)SPSPTLGR	1171.5833
A0A087WP91	S(0.5)S(0.5)PSSSPSLR	1003.4934
A0A338P6P6	SSPS(0.003)T(0.023)GS(0.344)LDS(0.621)GNES(0.009)K	1451.6376
Q80XK6	S(0.5)S(0.5)PVCSTAPVETEPK	1587.745
Q5NBZ7	S(0.243)S(0.757)PVESLKK	973.54441
F6Y765	S(0.014)S(0.014)S(0.971)AENQEGDPGTDK	1520.6227
E9PVC7	SSSAGKES(1)PK	976.48254
Q8BTI8	SS(0.006)S(0.994)AS(1)PELK	904.45018
Q9Z2D6	SSS(0.001)AS(0.139)S(0.86)PPK	846.40831
B8JJF6	S(0.11)S(0.11)S(0.78)CESLGAQLPAAR	1532.7253
A0A3Q4EHL1	S(0.004)S(0.017)S(0.979)DAQLSR	949.44649
Q9QXZ0	S(0.394)S(0.569)S(0.036)DEETLSER	1238.5263
Q8BTI8	S(0.4)S(0.553)S(0.046)ELS(1)PEVVEK	1289.6351
B7ZN48	S(0.002)S(0.002)S(0.996)IS(0.078)S(0.922)IDKDSK	1252.6147
Q8K124	SS(0.002)S(0.997)LGDLLR	946.50836
O70161	SSS(0.999)LKS(0.651)S(0.349)PSK	1006.5295
Q9WV69	SSS(1)LPSYGR	952.46141
A0A5F8MPN1	S(0.667)S(0.667)S(0.667)PDLSSSSK	1080.4935
A0A2X0SSA9	S(0.002)S(0.003)S(0.995)PEPVTHLK	1180.6088
Q569Z6	SSS(1)PPPR	726.36605
A0A0A0MQL5	S(0.012)S(0.012)S(0.977)PVLVEEEPER	1456.7046
O88568	S(0.007)S(0.038)S(0.955)PVNVKK	944.5291
Q8BTI8	S(0.001)S(0.003)S(0.996)PVTELSTAR	1146.5881
A0A0R4J124	SSS(1)SERPEPQQK	1358.6426
F7CUD4	SS(0.003)S(0.994)S(0.002)GSLNAR	964.45739
A0A5F8MPE1	SSS(0.002)S(0.014)KLS(0.984)R	850.45084
A0A5F8MPE1	SSS(0.402)S(0.014)KLS(0.584)R	850.45084
Q3UR37	SSSSSAS(0.003)PS(0.543)S(0.299)PS(0.056)S(0.099)R	1309.5746
F6WXQ4	SSS(1)VTSIDK	922.46074
F6WXQ4	S(0.388)S(0.528)S(0.084)VT(0.056)S(0.943)IDKESR	1294.6365
O35954	S(0.001)S(0.002)T(0.002)EARPGT(0.009)S(0.009)T(0.029) AGT(0.949)PDGPEAPPGPDas(0.977)PDAs(0.023)FGK	3211.4542
Q544Y7	SST(1)PEEVK	875.42363
Q78WP6	S(0.617)S(0.648)T(0.576)PLPT(0.151)VS(0.006)S(0.001)SAENTR	1632.7955

Q78WP6	S(0.458)S(0.556)T(0.986)PLPTVSSSAENTR	1632.7955
Q8BTI8	S(0.886)S(0.052)T(0.063)PPRQS(0.891)PS(0.108)R	1198.6054
Q8BTI8	S(0.268)S(0.366)T(0.366)PPRQS(0.862)PS(0.138)R	1198.6054
A0A668KLC6	SSVAS(1)PR	702.36605
F6YBV1	STDSEVS(0.001)QS(0.999)PAK	1234.5677
Q6P9T5	S(0.5)T(0.5)EDEEKDDGEPGR	1562.6332
A0A2R8W6N3	STEES(0.012)LS(0.988)EDAFTES(0.002)ELS(0.998)PIRE ELLSSEPR	3266.5314
Q3U8N2	STGDSQNLGSS(0.017)S(0.982)PGR	1448.6492
Q6P1F1	STHPS(1)PEKK	1009.5193
Q9QYB8	S(0.396)T(0.604)PAS(1)PVQS(0.93)PS(0.07)K	1184.6037
Q8BLA0	STPFIVPS(0.004)S(0.911)PT(0.085)EQGGR	1658.8264
Q2WF71	S(0.5)T(0.5)PHLDGAGGAAAGEDGDLGLGSAR	2237.0309
D3Z5P0	STPLPGPPGS(1)PR	1161.6142
G3UW55	STPQPAAPES(0.993)PT(0.007)EGPR	1620.7744
A0A1D5RLS1	STPSHGSVSSLNS(0.056)T(0.109)GS(0.849)LS(0.985)PK	1928.9439
A0A0A0MQC7	S(0.498)T(0.498)PT(0.003)AEDVTAPLVDER	1699.8265
A0A2X0SSA9	STQKS(0.964)PAT(0.036)APK	1114.5982
A0A2X0SSA9	STQKS(0.982)PAT(0.018)APK	1114.5982
Q8BTI8	S(0.499)T(0.499)S(0.001)ADSASSSDTSR	1357.5593
Q8K4P8	STS(0.999)DTDLVTSDSR	1382.6161
Q9Z0R4	S(0.042)T(0.042)S(0.917)IDTGPTESPASLK	1589.7784
Q3UR88	S(0.162)T(0.162)S(0.676)PAPADVAPAQEDLR	1723.8377
Q9WV69	S(0.014)T(0.014)S(0.973)PPPSPEVWAESR	1625.7686
Q9QZA3	STS(0.999)QQGEEPQK	1217.5524
A0A0R4J2D7	S(0.125)T(0.125)S(0.635)S(0.115)GETSSGLDADGHFKPS PQPR	2444.1204
Q14CH0	STVEDFEANT(0.073)S(0.829)PT(0.098)K	1524.6944
E9Q912	SVAQQAS(0.755)LT(0.245)EQR	1316.6684
Q8K004	S(1)VDAYDSYWESR	1476.6157
A0A0R4J093	S(1)VDEVFGEVVK	1206.6132
Q99L69	S(1)VDEVNYWDK	1253.5564
Q3TB04	SVDIS(0.934)PT(0.066)R	873.4556
A0A5H1ZRL1	S(1)VDKSDEELQFPK	1520.7359
A0A1L1SST3	S(1)VEDDKEGHLVCR	1542.7097
Q3TGW2	S(1)VEDLVR	816.43413
P84309	S(1)VELGLEER	1030.5295
D6RI80	S(1)VENLPECGITHEQR	1767.821
Q05D44	SVPTVDS(1)GNEDDDSSFK	1797.7541
A0A589P973	SVQPEVELS(0.006)GGS(0.215)GS(0.779)GGDEGADES	2304.9942
D6RJK7	SVSEINS(1)DDELPGK	1488.6944
A0A2R8W718	S(0.015)VS(0.094)ES(0.105)HT(0.785)PCPS(0.001)ESTGD TVPLQR	2370.0758
A2A8V9	SVSGS(1)PEPAAK	1028.5138

B2RRE3	S(0.001)VS(0.999)NEGTLNNNSR	1389.6848
B2RRE3	SVS(1)NEGTLNNNSR	1389.6848
B2RQQ5	SVSPGVTQAVVEEHCAS(1)PEEK	2239.0427
Q3TPE7	S(1)VS(1)PVAEEHTR	1210.5942
Q5DTP6	S(0.002)VS(0.961)T(0.037)DELGPPGR	1213.5939
Q544I1	S(0.031)VT(0.254)S(0.249)NQS(0.291)DGT(0.346)QES(0.8 17)CES(0.013)PDVLDR	2410.019
Q544I1	S(0.016)VT(0.091)S(0.14)NQS(0.266)DGT(0.468)QES(0.02 4)CES(0.995)PDVLDR	2410.019
S4R1M2	SVVS(1)FDK	780.40177
Q5DTT2	S(1)WDLGGISAPR	1157.5829
H3BKM2	S(1)WESSSPVDRPELEAASPTTR	2301.0873
A0A0R4J2D4	S(1)YEDLTELEDR	1368.6045
P60710	S(0.997)Y(0.003)ELPDGQVITIGNER	1789.8846
S4R2F3	S(0.999)Y(0.001)IETETESR	1213.5463
Q569Z6	S(0.891)Y(0.11)S(1)PAHNR	930.43078
Q5BL18	SYS(1)PDGK	752.33408
Q5BL18	S(0.007)Y(0.012)S(0.981)PDGKES(0.974)PS(0.026)DKK	1523.7104
C9K0Z8	TAAPS(1)PDRR	969.49919
P63101	TAFDEAIAELDT(0.023)LS(0.836)EES(0.14)YK	2130.9845
Q8BX70	TANAS(1)LEIIDK	1302.6667
E0CXR5	T(0.031)AQDPGIS(0.944)PS(0.023)QS(0.001)LCAESSR	1989.9062
Q80TU6	TAQVPS(1)PPR	951.51378
Q05D44	TARPNSEAPLS(0.969)GS(0.031)EDADDSNK	2159.9567
H3BIW6	TAS(1)APTK	674.3599
Q8CGI9	TASAVAGKT(1)PDAS(1)PEPK	1625.8261
F8WHU5	T(0.006)AS(0.963)DS(0.031)DEQQWPEEK	1648.6853
I3PQW3	TAS(1)EGSEAETPEAK	1502.6736
Q80TW3	TAS(1)EPNLK	858.4447
Q545R3	TAS(0.999)GS(0.001)SVTSLEGTR	1351.6579
Q545R3	TAS(0.995)GS(0.005)SVTSLEGTR	1351.6579
Q545R3	TAS(0.975)GS(0.025)SVTSLEGTR	1351.6579
Q9QYG0	TAS(1)LTSAASIDGSR	1335.663
Q9QYG0	T(1)AS(0.999)LT(0.001)SAASIDGSR	1335.663
Q9QYG0	T(0.041)AS(0.135)LT(0.895)S(0.728)AAS(0.196)IDGS(0.0 05)R	1335.663
A0A1D5RM17	T(0.005)AS(0.995)LTSASSVDGSR	1337.6423
A0A1D5RM17	T(0.001)AS(0.999)LTSASSVDGSR	1337.6423
A2A8V9	TAS(1)PPPPP	890.48617
Q80TZ3	TATSASAS(0.983)PT(0.016)LR	1161.599
P52479	T(0.544)CDS(0.456)PQNPVDFISGPVPDSPFPR	2528.1642
Q8VH52	TCFS(1)PNR	880.38614
Q3UXI0	TCS(1)LPDLSK	1019.4957
F6Q8P7	TDDVS(1)EK	792.35013

F6Q8P7	TDDVSEKT(0.016)S(0.984)LADQEEVR	1920.8912
F6Q8P7	TDDVSEKT(0.416)S(0.584)LADQEEVR	1920.8912
Q80Y83	TDEPDS(0.735)PS(0.198)S(0.067)R	1089.4574
B2RWX7	TDGEAS(1)PLKEAETK	1474.7151
Q6P5B5	T(0.011)DGS(0.989)IS(1)GDR	906.40429
Q6P5B5	T(0.007)DGS(0.993)IS(1)GDRQPVTVADYISR	2136.0447
A0A0A0MQC7	TDHGAEIVY(0.998)KS(0.999)PVVS(0.002)GDTSPR	2214.0917
B9EHS3	TDPGS(1)IENLCPGK	1386.6449
A0A1D5RLA4	T(0.44)DRT(0.612)PAT(0.947)PEEDLDETTTR	2046.9342
Q569Z6	TDSEKPFRGS(1)QS(1)PK	1562.7689
B9EKJ3	TDS(1)IGEK	748.3603
A0A5F8MPB7	TDS(1)QSEAVAIQAIR	1487.758
A2AI69	T(0.451)DS(0.513)REDEIS(0.036)PPPPNPVVK	1975.9851
A2AI69	T(0.324)DS(0.673)REDEIS(0.003)PPPPNPVVK	1975.9851
A2AI69	T(0.251)DS(0.713)REDEIS(0.036)PPPPNPVVK	1975.9851
F7DCW4	TDS(0.112)S(0.888)PNQAR	974.44174
F7DCW4	TDS(0.322)S(0.678)PNQAR	974.44174
F7DCW4	TDS(0.164)S(0.836)PNQAR	974.44174
E9QLQ9	TDSTESSGAQS(1)PK	1293.5685
A0A5F8MPE1	TDTAADGETSAT(0.001)ES(0.999)DQEEDAEIK	2411.9936
P70268	TDVSNFDEEFTGEAPT(0.017)LS(0.983)PPR	2308.0495
A0A1Y7VM80	T(0.082)EADS(0.9)T(0.162)S(0.855)EGPEDEAQR	1720.7024
F6R8S6	T(0.019)EARS(0.99)S(0.99)DEENGPPS(0.841)S(0.159)PD LDR	2157.941
A2ARP8	TEATQGLDYVPS(0.007)AGT(0.011)IS(0.981)PT(0.032)S(0.319)S(0.65)LEEDK	2695.2712
A0A3B2W7M7	TECFLPPS(0.112)S(0.112)S(0.639)PS(0.138)EHR	1729.773
F7AVI9	T(0.162)EDGGWEWS(0.838)DDEFDEESEEGR	2502.9208
A0A0A6YY91	TEEERT(1)PNHDGGK	1468.6542
A0A3Q4L314	TEEVEVES(1)EEDPILEHPPENPVK	2644.2392
Q05C56	TEEVLS(1)PDGSPSK	1344.6409
Q05C56	TEEVLS(0.004)PDGS(0.759)PS(0.28)KS(0.887)PS(0.07)K K	1871.9476
E9Q2E4	TEGT(1)PPPPGQPAK	1275.6459
D3YYE6	TEQELPRPQS(0.984)PS(0.016)DLDSLDR	2239.0717
D3YYE6	TEQELPRPQS(0.784)PS(0.216)DLDSLDR	2239.0717
D3YYE6	TEQELPRPQS(0.684)PS(0.316)DLDSLDR	2239.0717
Q543Y7	TEQSVT(1)PEQQK	1273.615
Q4FYJY3	T(0.024)ES(0.976)GETLAGSDFSLKPEK	2009.9429
Q5BL18	TES(1)PAEGK	817.38176
Q9QYB8	TESVT(0.047)S(0.869)GPLS(0.134)PEG(S(0.819)PS(0.131) K	1658.7999
Q9QYB8	TESVTSGPLSPEGS(0.146)PS(0.547)KS(0.27)PS(0.037)K	2058.0117
Q9D0R8	T(0.006)ET(0.994)PPPLASLNVSK	1452.7824
Q5M9P7	TFS(1)ATVR	780.413

A0A3B2W7M7	T(0.163)GEPS(0.837)PPHDVLHEPPDT(0.221)VS(0.779)DDKDHGK	2920.3111
D3Z379	T(0.001)GES(0.152)ARS(0.847)EDDAAS(1)GEHDIQIEGV R	2528.1375
Q9ESN6	T(0.009)GNAY(0.117)LT(0.436)AEELS(0.219)T(0.219)PDG S(0.001)VADGEILDNK	2650.261
Q9Z0H8	T(0.001)GNES(0.998)GS(0.002)NLS(0.91)DS(0.081)GS(0.0 08)VK	1537.6856
B7ZNJ3	T(0.183)GS(0.169)EPS(0.547)PPQGGGS(0.097)LGPS(0.00 4)APPEIWVLR	2701.3348
Q6PNC0	TGS(1)ES(0.397)S(0.603)LKK	935.49238
Q6PNC0	TGS(1)ES(0.497)S(0.503)LKK	935.49238
Q3TDD8	T(0.541)GS(0.458)ES(0.001)SQTGASATSGR	1482.6546
F7CPX0	T(0.002)GS(0.998)PLTVATGASSPAR	1471.7631
Q3UGH4	T(0.045)GS(0.955)PLTVATGNDQAATEAK	1830.8959
Q6P1F1	TGS(0.001)S(0.999)PTQGIVNK	1187.6146
Q8CAF8	T(0.003)GS(0.98)S(0.017)TNNNEEEK	1308.543
Q8CAF8	T(0.735)GS(0.648)S(0.542)T(0.075)NNNEEEK	1308.543
Q8CAF8	T(0.835)GS(0.548)S(0.542)T(0.075)NNNEEEK	1308.543
Q6ZQ55	TGSVQT(0.002)S(0.998)PSSTPGTGR	1518.7274
Q9D2H3	TGTFS(1)PQR	892.44028
A0A668KLC6	TGVIQT(0.002)S(0.917)T(0.081)EQSFSK	1511.7468
S4R2F3	THPAVS(0.996)PS(0.003)SK	1009.5193
B9EKC3	THS(1)DASDDEAFTTSK	1610.6696
Q9CYT6	T(0.003)HT(0.997)PS(1)PT(0.773)S(0.227)PK	1051.5298
Q9CYT6	T(0.033)HT(0.968)PS(0.993)PT(0.92)S(0.086)PK	1051.5298
B2RSY3	THT(0.809)S(0.191)PPR	794.4035
Q8BXV7	T(1)IPGGFR	746.40752
A0A0G2JFM9	TIS(1)DGTISAAC	1062.5557
Q9IVU5	T(1)KNPLDQETK	1172.6037
Q8BTI8	T(0.96)KS(0.04)HT(0.999)PPR	922.49846
Q8BTI8	T(0.385)KS(0.615)HT(1)PPR	922.49846
Q3UEX8	T(0.505)KS(0.495)PAEEELTPSAVVR	1712.8945
B2RQQ5	T(0.002)LEVVS(0.76)PS(0.525)QS(0.208)VT(0.214)GS(0.2 15)AGHT(0.069)PY(0.015)Y(0.011)QS(0.81)PT(0.172)DE K	2964.3989
B9EHS3	TLHS(1)PPLQLR	1160.6666
Q9JMJ6	T(0.004)LNQLGT(0.996)PQDSPELR	1667.8479
E9PV14	TLPHEPPS(0.002)EAS(0.998)PGQVEER	1958.9334
Q4VBF8	TLS(1)DESIYSSQR	1384.647
Q5EBP0	TLS(1)DESVCNSR	1266.551
E9QMJ1	T(0.003)LS(0.997)DPPSPLPHGPPNK	1652.8522
E9QMJ1	T(0.302)LS(0.698)DPPSPLPHGPPNK	1652.8522
E9QMJ1	T(0.202)LS(0.898)DPPSPLPHGPPNK	1652.8522
Q62467	TLS(1)EDDFR	981.44034
Q9D6W8	T(0.04)LS(0.96)GEEEAESVGVSSR	1635.7588

E9Q9Q7	TLS(0.999)PT(0.001)PSAEGYQDVR	1619.7791
Q3UID0	TLTDEVNS(1)PDSDRR	1603.7438
Q8CE89	TLTEGDS(0.003)PS(0.997)PQ	1130.5091
Q8CE89	TLTEGDS(0.317)PS(0.683)PQ	1130.5091
Q8CE89	TLTEGDS(0.103)PS(0.897)PQ	1130.5091
Q5DTY9	TLTS(0.001)GS(0.999)R	720.37662
Q7TSZ9	TMGMSS(0.001)DDAY(0.999)RFVKDR	1877.84
D3Z1L8	TNS(1)LEEK	819.39741
Q3TAB8	T(0.029)NS(0.955)S(0.033)DS(0.619)ERS(0.364)PDLGHST QIPR	2183.0203
Q3TAB8	T(0.029)NS(0.855)S(0.133)DS(0.619)ERS(0.364)PDLGHST QIPR	2183.0203
Q3TAB8	T(0.029)NS(0.955)S(0.233)DS(0.619)ERS(0.164)PDLGHST QIPR	2183.0203
Q8CE19	TPALS(1)PQR	868.47667
Q8CE19	T(0.999)PALS(0.977)PQRPLT(0.011)T(0.011)QQPQS(0.00 1)GT(0.001)LK	2248.2175
Z4YKC4	T(1)PDEVLEAEAEPK	1426.6828
G1JLS7	T(1)PDIAQR	799.41882
S4R2F3	TPDS(1)LEPSPLK	1182.6132
S4R2F3	TPDSLEPSPLKES(1)PCR	1811.8724
B2RQQ5	T(1)PEDGGYTCEITEK	1598.677
S4R2F3	TPEDIS(0.048)T(0.951)PPEGT(0.001)KPCLQTPVTSER	2639.2749
S4R2F3	TPEDIS(0.082)T(0.915)PPEGT(0.073)KPCLQT(0.224)PVT (0.537)S(0.169)ER	2639.2749
S4R2F3	T(0.001)PEDIS(0.177)T(0.827)PPEGT(0.18)KPCLQT(0.78 3)PVT(0.024)S(0.009)ER	2639.2749
B2RQQ5	T(1)PEEGGYSYEISEK	1587.694
Q6NV50	TPEELDDS(1)DFETEDFDVR	2157.8862
Q61301	TPEELEDDDS(1)DFEQEDYDVR	2329.9346
A4GE65	TPEELEDVS(1)DLEDDHEVR	2125.9288
Q8CIW8	T(0.998)PEELT(0.002)ILGETQEEDEILPR	2440.1857
Q80VP1	T(0.475)PES(0.525)FLGPNAALVDLDSLVR	2200.1376
E9Q7S0	T(0.001)PGPPS(0.014)S(0.014)QGS(0.971)PVDTQPAAQK	1948.949
Q9EPN1	TPLENVPGNLS(1)PIKDPDR	1961.0218
Q6W8Q3	TPPAANQAS(1)DPEEK	1453.6685
Q6W8Q3	T(1)PPAANQASDPEEK	1453.6685
A0A0A0MQC7	T(1)PPGSGEPPK	965.48181
Q542T4	T(1)PPPSQGK	810.42357
P04370	T(1)PPPSQGKGGR	1080.5676
Q9QYX7	TPPS(0.001)NLS(0.999)PIEDAS(0.877)PT(0.123)EELR	2052.0011
E0CXZ5	T(0.971)PPS(0.025)T(0.004)PPATANLSADDFQNTDLR	2543.1776
Q8BTI8	T(1)PPVALSSSR	1013.5506
Q3TN35	T(0.001)PS(0.924)AS(0.075)HEEQQE	1241.516
Q3TN35	T(0.001)PS(0.954)AS(0.045)HEEQQE	1241.516
Q3UH86	T(0.001)PS(0.999)EAER	788.36645

P54731	TPS(1)GEFLER	1034.5033
B7ZNF6	TPSIS(1)PVR	855.48142
E9Q9D6	TPS(1)KEDVEK	1031.5135
A0A0A0MQC7	T(0.001)PS(0.999)LPTPPTR	1065.5819
Q9CPS8	T(0.004)PS(0.996)PGEQQVQEVK	1553.7686
Q14DK3	T(0.006)PS(0.994)PPEPEPAGTAQK	1505.7362
Q14DK3	T(0.046)PS(0.954)PPEPEPAGTAQK	1505.7362
A0A1L1SQE2	TPTADD(0.999)DDS(0.001)REK	1435.6063
S4R2F3	T(0.158)PT(0.141)EEGT(0.673)PT(0.014)S(0.014)EQNPFL FQEGK	2336.0808
D3YUV1	T(0.005)PT(0.995)PEPAEVETR	1325.6463
D3YUV1	T(0.205)PT(0.795)PEPAEVETR	1325.6463
P19246	T(1)PVKEGAK	828.47052
B2RQQ5	T(1)PVQDHR	851.42496
F7AAP4	TQDGVALEIQPLNS(0.998)QEGLDS(0.002)EDK	2485.182
H7BX84	TQESCGIAPLT(0.092)PS(0.294)QS(0.613)PKPEAR	2253.1059
O70161	T(0.539)QS(0.794)S(0.667)GQDGRPQEEPHAEDLQK	2336.0629
A0A067XG53	TQSS(0.002)S(0.998)CEDLPSTTQPK	1764.7836
Q91VJ0	TQSSSCERDS(0.955)PS(0.045)T(0.001)SR	1683.7118
Q9QYX7	TQT(1)PSETR	918.44067
E9Q852	TQVLS(0.995)PDS(0.004)LFTAK	1405.7453
E9Q3M9	T(0.587)RS(0.413)PEQPGTKPPLPR	1659.9057
F6RUK9	T(0.557)RS(0.55)PS(0.847)PT(0.046)LGESLAPR	1567.8318
Q61301	TSAT(0.039)S(0.961)PIILK	1029.607
Q99P72	TS(1)KEEK	1035.5084
Q80T68	TSDVN(1)TQPPQS	1416.6005
Q3UYQ4	TSED(0.002)GS(0.998)PPK	1191.5255
Q69ZX8	TSET(0.016)S(0.322)IS(0.659)PPGS(0.001)SIGSPNR	1772.8541
Q64511	T(0.019)S(0.019)FDQDS(0.963)DVDIFPSDFTSEPPALPR	2782.261
Q3UVZ8	T(0.443)S(0.536)FS(0.022)VGS(0.999)DDELGPIR	1578.7526
A0A0J9YUE9	T(0.5)S(0.5)GNQDEILVIR	1343.7045
Q8BR43	T(0.277)S(0.723)INSLR	789.43447
Q62093	T(0.012)S(0.988)PDTLR	788.40283
A0A140LHI9	T(0.5)S(0.5)PEQDLPAEAPTATVQPPR	2104.0437
A0A494BAD8	T(0.5)S(0.5)PQELSEEVSR	1360.647
P49586	T(0.169)S(0.831)PS(0.005)S(0.083)S(0.881)PAS(0.029)LS(0.002)R	1175.5782
D3Z6G3	T(0.001)S(0.998)PTGPK	686.3599
D3YYR9	T(0.373)S(0.453)S(0.173)ES(0.001)IVSVPAS(0.001)S(0.003)T(0.02)S(0.15)GS(0.653)PS(0.173)R	1921.9229
D3Z7E5	TSSFAEPGGGGGGGGGGPGGS(0.08)AS(0.897)GPGGT(0.023)GGGK	2432.0589
Q62261	T(0.625)S(0.678)S(0.694)KES(0.51)S(0.493)PVPS(0.916)PT(0.083)LDR	1686.8424
Q62261	T(0.625)S(0.644)S(0.646)KES(0.631)S(0.631)PVPS(0.79)PT(0.032)LDR	1686.8424

A0A3B2WCL5	TSS(1)LTHSEEK	1117.5251
A0A2R8W6N3	T(0.047)S(0.047)S(0.903)NPGALS(0.002)HETGLSGLETA TK	2157.055
A0A1L1SQP9	TSS(1)PEESIR	1004.4775
Z4YKC4	T(0.001)S(0.001)S(0.998)PTSLPPLAR	1225.6667
E9PXE2	T(0.002)S(0.002)S(0.995)T(0.002)GEEEESLAILR	1620.7843
A0A140T8I9	TSSVSSISQVS(1)PER	1462.7264
A0A140LJ04	TSSVVVEHFQGS(0.477)AS(0.477)PT(0.045)EAATPAAG DR	2601.1943
E9Q852	TSS(1)VVTLEVAK	1132.634
B7ZNF6	T(0.077)S(0.077)T(0.641)APS(0.103)S(0.103)PGVDSVPLQ R	1697.8584
A4FU75	TSTPT(0.002)GHGAS(0.932)PT(0.066)KQDDLVISAR	2238.124
Q80T41	TST(0.023)S(0.977)VTSVNQASTSR	1524.738
Q80T41	TST(0.949)S(0.051)VTSVNQASTSR	1524.738
A2ALU3	T(0.014)S(0.014)VS(0.193)S(0.779)PEHLVKPLR	1548.8624
P19246	TSVS(0.001)S(0.006)VS(0.258)AS(0.644)PS(0.092)R	1163.5782
P09528	T(0.001)T(0.028)AS(0.97)PS(0.001)QVR	945.48796
A2AAE1	TTFSENLS(1)PK	1122.5557
Q6XE40	TTGTLPS(1)PQNFK	1289.6616
Q542T4	TTHYGS(1)LPQK	1130.572
Q8R191	T(0.5)T(0.5)PGPGTAQAGDAAR	1369.6586
Q5NCM6	T(0.067)T(0.067)S(0.866)PDLFESQLTSASSKPSSAR	2383.1503
E9Q4X5	TTS(0.002)S(0.001)ADPT(0.286)S(0.71)PDLGPR	1500.7056
A0A2R8W6N3	T(0.038)T(0.038)T(0.924)PDVAHPK	1065.5455
Q8K2R6	T(0.237)T(0.237)Y(0.198)ANS(0.166)S(0.166)LIKY(0.996) MEK	1647.8178
Q8CGI9	T(0.005)VGT(0.994)PIAS(0.001)VPGSTNTGTVPGSEK	2156.0961
Q3UGH4	T(0.218)VPAT(0.74)PPRT(0.487)GS(0.487)PLT(0.059)VA T(0.01)GNDQAATEAK	2650.3562
Q8CCJ4	TVPLVDS(0.004)EGGS(0.996)GR	1272.631
A0A0R4J124	TVSAS(0.1)S(0.678)T(0.222)GDLPK	1161.5877
G5E884	T(0.002)VS(0.003)ET(0.008)PAVPPVS(0.93)EDEDDEDDDD AT(0.057)PPPVIAPRPEHTK	3722.7435
A0A0A6YVS6	TVS(1)VPVEGR	942.51345
O08553	TVT(1)PASSAK	860.46035
O08553	TVTPAS(0.003)S(0.997)AKT(0.96)S(0.041)PAK	1344.7249
Q5GH67	TVVS(0.001)S(0.001)GS(0.001)AAGEGEVRPS(0.224)T(0. 772)PQR	2071.0294
Q9WV34	T(0.052)Y(0.006)ET(0.946)PPPS(0.99)PGLDPT(0.005)FS(0 .001)NQPVPPDAVR	2778.3501
Q3UGY8	VAAAPS(0.002)S(0.711)S(0.283)PS(0.003)AEAEYWR	1706.79
D3YYN7	VAEIPFNS(0.892)T(0.108)NK	1218.6245
A2ARP8	VAELEEEQS(0.993)QGS(0.455)S(0.491)S(0.059)YS(0.001) DWVK	2257.0023
A0A1B0GSR5	VAENGLES(1)PEKEER	1585.7584
Q9D1T2	VAEPEES(1)EAEEPAEGR	1798.7857

G3UYQ3	VAGGSGS(0.003)ES(0.997)PLLK	1200.635
Q8BZW2	VAGPDPS(0.966)PEDS(0.034)PNQR	1564.7118
A0A668KLC6	VAIIRT(1)PPK	993.6335
A2AJA9	VALAAGS(0.985)PT(0.015)RPPPAP	1459.8259
A0A087WSM1	VALS(1)EEEEEEER	1318.5889
Q8R2R3	VASAESCHSEQQEAPS(0.957)PT(0.043)AER	2198.9498
A2A7T3	VAS(1)DTEDTDR	1107.468
Q3URF1	VAS(1)EEEEVPLVVYLK	1702.9029
Q3URF1	VASLS(1)PAR	799.4552
Q3UMB5	VAS(1)PANVGTLHTLSR	1521.8263
Q68FH0	VASPSQQGVGS(0.086)S(0.086)S(0.827)PK	1414.7052
H3BIW6	VAS(1)VEEGDETLDSPGSQSR	1961.8814
F7CYX4	VAS(0.042)VS(0.958)LEGLNLR	1327.746
A0A0A0MQC7	VAVVRT(1)PPK	965.6022
Q8VDS4	VDENENCS(0.521)S(0.402)LGS(0.073)PS(0.004)EPPQTL DLVR	2642.213
O88704	VDGGGGEEPAGS(1)FEDAEGPR	1931.8133
A0A668KLC6	VDHGAEIITQS(0.99)PS(0.01)R	1508.7583
Q3UNH4	VDIVS(1)PGGDNAGSLR	1455.7318
D3YYN7	VDNS(0.013)S(0.987)LTGESEPQTR	1618.7435
Q6PD32	VDNS(0.343)VEAEVNS(0.585)KS(0.59)S(0.483)LEDEEE PIR	2574.1933
E9PUE1	VDS(1)EGER	790.34571
B2KGP3	VDS(1)FTDR	838.3821
F6UYN4	VDS(1)PTVTTLK	1160.6289
P47856	VDS(0.982)T(0.018)TCLFPVEEK	1523.7178
Q99KI0	VDVS(1)PTSQR	987.49852
A3KFN7	VECGS(1)DPEENSAR	1448.5838
B7ZP47	VEEEDTGDPFGFDS(0.955)DDES(0.045)LPVSSK	2600.0926
A0A2U3TZ49	VEEHS(1)PLER	1094.5356
F8VQN6	VEHHDSLAVAGLQS(1)PDR	1758.8649
A0A2R8VHZ9	VELS(1)EEEELK	1074.5445
B1ATA0	VEPPHS(0.997)S(0.997)HEDLT(0.005)DDLSTR	2033.929
E9Q6P5	VEQALSEVAS(0.163)S(0.788)LQS(0.022)S(0.027)APK	1829.9371
A0A2I3BRL8	VEQAT(0.003)KPS(0.986)FES(0.011)GR	1434.7103
F6TGJ2	VES(1)EES(1)GDEEGKK	1421.6158
Q8BPC7	VES(1)LEQEAANER	1373.6423
Q3UXQ1	VES(1)PPAAR	825.43447
Q6PD32	VES(0.002)T(0.966)S(0.031)GSECENPTK	1523.641
A0A5F8MPE1	VESTSVGSIS(1)PGGAK	1374.6991
Q9JKR6	VES(0.136)VFET(0.726)LVEDS(0.136)PEEES(0.001)T(0.0 01)LT(0.001)K	2367.1217
B7ZMR0	VETAEVCS(0.017)RPQELPQS(0.983)PR	2082.0164
A2A9Q0	VFALNCS(1)WR	1151.5546

Q8BGC0	VFEDNS(1)NEKLFDEEEGPNEK	2368.0343
E9Q3M9	VFS(1)QENVCDR	1252.5506
P05202	VGAS(1)FLQR	876.48175
Q8BK06	VGDEGNES(1)PAER	1258.5426
E9QK48	VGGYAT(0.007)S(0.003)PS(0.216)S(0.775)PK	1149.5666
S4R1Y1	VGLQS(1)PSVETR	1171.6197
Q8BTG3	VGRPHS(0.955)S(0.045)PAR	1062.5683
Q3UHJ0	VGS(0.003)LT(0.997)PPS(0.901)S(0.099)PK	1068.5815
Q3UHJ0	VGSLT(1)PPS(0.376)S(0.624)PK	1068.5815
Q68FH0	VGS(1)PLTLTDAQTR	1357.7201
Q6A018	VGTEGLVDS(0.981)FS(0.019)QGLER	1692.8319
S4R2F3	VGT(1)PTDIHSEK	1182.5881
A8DUQ5	VHLT(1)DAEK	911.47125
A0A286YDH6	VILHPT(0.009)PNS(0.991)PK	1201.6819
Q8C2N9	VIS(0.956)DS(0.035)ES(0.012)DIGGS(0.997)DVEFKPDT K	2224.0383
Q4VA93	VIS(1)PSEDR	901.45051
A8IP69	VISSIEQKT(0.247)S(0.753)ADGNEK	1704.853
A8DUQ5	VITAFNDGLNHLD(1)LK	1755.9155
Q6PDI4	VKLDDDS(1)EEDDEESR	1664.7013
Q8BKB2	VLAPCS(0.95)PS(0.05)EER	1243.5867
Q8BGC0	VLDEEGS(1)ER	1032.4724
Q3UGY4	VLDL(0.026)PLS(0.974)EGDEPTTLPAQR	2038.0219
Q9ET80	VLEKPPS(1)PK	993.58588
F6QYF8	VLGATLS(1)PELIQK	1367.8024
Q8VDD9	VLS(1)DS(1)EEEKDADVPGTSTR	2162.9815
Q91VB8	VLS(1)GEDK	746.38103
B2RQQ5	VLS(0.986)PLRS(0.987)PPLLGS(0.229)ES(0.789)PY(0.009) EDFLSADSK	2803.428
Q3TQY7	VLS(1)PPHTK	877.50215
A0A5F8MPN1	VLTAFLPDS(0.003)S(0.003)VS(0.129)GT(0.129)S(0.736)L	1592.8298
P26645	VNGDAS(1)PAAAEPGAK	1353.6525
A0A3Q4EBK4	VNHEPEPAS(0.001)GAS(0.948)PGAT(0.051)IPK	1857.9221
Q6ZQ92	VNLKS(1)PS(0.925)S(0.075)EEIER	1486.7627
A0A286YDE4	VNS(1)PESER	916.42502
D6RII9	VPAPPGS(1)PCR	1036.5124
Q99JJ9	VPEPESQT(0.049)S(0.95)PK	1197.5877
A0A0N4SUJ0	VPPLLFS(0.998)DEEDS(0.002)EVPSGVKPEDLK	2528.2534
B7ZNJ3	VPLPGPGS(1)PEVK	1175.655
Q9CYG7	VPS(1)AGDVER	928.46141
A2ARP8	VPSAPGQES(1)PVPDTK	1507.7518
A2ARP8	VPS(0.026)APGQES(0.972)PVPDT(0.019)KS(0.186)T(0.64 5)PPT(0.152)R	2147.0859
B2RTE3	VPS(1)PDHR	806.4035

Q8BTI8	VPS(1)PTPVPK	920.53312
Q4W8U9	VPSPVS(0.98)S(0.02)EDDLQEEEQLEQAIK	2469.1759
P58871	VPS(1)S(1)DEEVVEEPQSR	1685.7744
B7ZMZ2	VPVLIS(0.873)PT(0.127)LK	1065.6798
A2AWI7	VPVTYLELLS(1)	1132.638
A0A0R4J0B2	VQDFMEKQEMWT(1)R	1726.7807
A2ACC7	VQHQAS(0.083)S(0.264)T(0.288)S(0.382)PLS(0.242)S(0.734)PNQT(0.004)S(0.001)S(0.001)EPR	2324.0993
A0A3B2WCD8	VQIS(1)PDSGGLPER	1353.6888
B2RQQ5	VQSLEGEKLS(1)PK	1313.7191
A0A0S3CWK3	VQS(0.993)S(0.007)PNLLAAGR	1211.6622
Q3UHJ0	VQT(0.5)T(0.5)PPPTIQGQK	1393.7565
Q3UHJ0	VQT(0.007)T(0.993)PPPTIQGQK	1393.7565
A0A3B2WBH9	VQVAPLQGS(1)PPLSHDDR	1814.9275
A2ARP8	VRT(0.012)ES(0.935)S(0.052)EALK	1118.5932
Q3U5E1	VSALAGPS(0.5)S(0.5)DDENEESKPEKEDEPQEDAK	3258.4172
E9PV45	VSDQNS(1)PVLPK	1182.6245
Q8C1D8	VS(0.406)DS(0.594)ESEDPQKGPAS(0.561)DS(0.435)EAE DAS(0.004)R	2492.0423
Q6ZPZ4	VSEEDQS(1)LENS(1)EADVK	1777.7854
Q60829	VS(0.265)EHS(0.868)S(0.868)PEEEASPHQR	1804.7976
A0A5F8MPF3	VS(1)ENEEKPSDAPK	1557.7158
P58871	VSGAGLS(0.986)PS(0.014)R	929.49304
P08553	VS(0.001)GS(0.994)PS(0.004)S(0.001)GFR	979.47231
Q3UV34	VS(1)PENLVDK	999.52368
A0A0N4SUJ0	VS(0.999)PEVGS(0.001)ADVASIAQK	1556.8046
F6TZK4	VS(1)PPESPR	867.44503
Q6NVE8	VS(0.988)PS(0.012)PSQESLSSSK	1418.6889
Q80U72	VS(1)PTGAAGR	814.42972
E9PUI4	VS(1)PVPSPSQPAR	1220.6513
D3YTR0	VS(0.165)S(0.835)PEDSPAGTPQR	1426.6688
Q71M36	VS(0.001)S(0.999)PHAR	752.39294
Q8BTI8	VS(0.568)S(0.432)PVLETVQQR	1341.7252
Q8BPN8	VS(1)VDS(1)NLFVYSK	1356.6925
A2A8V9	VS(1)VS(1)PGR	700.38679
E9Q284	VT(0.001)GS(0.999)PAEEDEEETK	1519.6526
Q4KL52	VTLQDYHLPDS(1)DEDEETAIQR	2473.1245
Q9QYB8	VTMILQS(0.975)PS(0.025)FR	1277.6802
Q9R0L6	VTNAIS(1)PESSPGVGR	1469.7474
Q05C56	VTQILQS(1)PAFR	1258.7034
S4R255	VTQPLGT(0.978)PT(0.022)K	1040.5866
A0A6I8MWZ0	VT(0.004)S(0.996)LEEELTDLR	1403.7144
E9Q827	VTS(1)PEKAEEAK	1187.6034
A0A087WRY3	VVDYSQFQES(1)DDADEDYGR	2236.9033

A2AAE1	VVFENEQDNNS(0.967)LT(0.033)K	1635.774
Q9D927	VVLASAS(1)PR	898.52362
B9EIX2	VVQT(0.005)S(0.958)PS(0.037)AR	943.50869
Q3UX08	VVS(1)EEHLR	967.50869
P63101	VVS(0.112)S(0.888)IEQK	888.49165
A0A2R8W6N3	VVS(0.999)S(0.001)T(0.001)S(0.999)EEEEAFTEK	1670.7523
Q569Z6	WAHDKFS(1)GEEGEIEDDESGTENR	2636.0899
Q569Z6	WAHDKFSGEEGEIEDDES(1)GTENR	2636.0899
Q768S5	WHQLQNENHVS(0.846)S(0.154)D	1592.6968
A2ARP8	WLAES(1)PVGLPPEEEDKLTR	2165.1004
A2ARP8	WLAES(0.999)PVGLPPEEEDKLT(0.001)R	2165.1004
Q8K2C9	WLDES(1)DAEMELR	1492.6504
A2A8V9	WQS(0.999)PVT(0.001)K	844.4443
A2A8V9	WQS(0.896)PVT(0.104)K	844.4443
B7NZ86	WSDQLS(1)LDEK	1219.5721
Q3UZP2	WTEGGGH(1)R	985.43659
A2AQJ6	WVEENVPSSVTDVALPALLDS(0.999)DEER	2769.3345
Q3UGH4	WVHFS(0.999)DAS(0.999)PEHVT(0.001)PELTPR	2204.0651
Q91X45	Y(0.398)CLRS(0.535)Y(0.398)T(0.669)QS(0.451)GDLY(0.549)R	1780.8203
Q3U931	Y(0.001)EDEVFGDS(0.066)EPELDEES(0.933)EDEVEEE QEDR	3375.307
Q3TD41	Y(0.998)MKS(0.154)QT(0.848)ILR	1138.6169
Q3TD41	Y(0.999)MKS(0.5)QT(0.5)ILR	1138.6169
Q8BHS6	Y(0.009)NDWS(0.989)DDDDDS(0.002)NESK	1803.6344
A0A0H2UH20	YNLDAS(1)EEEDSNK	1512.6216
Q3UGH4	Y(0.009)NS(0.991)PELDEEGYSIRPEEPGSTK	2496.1292
Q80U73	YPSSIS(0.038)S(0.076)S(0.886)PQK	1179.5772
Q3UR88	Y(0.008)QDEVFGGFVT(0.253)EPQEES(0.739)EEEVEEP EER	3215.3579
A0A338P6P6	YSALLS(0.991)PS(0.009)EQEK	1350.6667
P09411	Y(0.391)S(0.609)LEPVAAELK	1218.6496
Q3UR37	Y(0.184)S(0.807)PS(0.014)QNS(0.994)PIHHIPSR	1718.8489
F6SFF5	Y(0.104)T(0.119)DQS(0.769)GEEEEDY(0.008)ESEEQLQ HR	2600.0423

Table S7. Detailed information of phosphorylation sites identified in tau protein from the tryptic digest of mice brain lysate.

No.	Phospho (STY) Probability	Phospho Site
1	IGS(0.987)T(0.013)ENLK	S262
2	VAVVRT(1)PPK	T231
3	S(1)PVVS(0.999)GDT(0.001)SPR	Y394, S396
4	SPVVSGDT(0.002)S(0.998)PR	S404
5	SPVVS(1)GDT(0.261)S(0.739)PR	S400, S404
6	S(1)PVVS(1)GDT(0.813)S(0.187)PR	S396, S400, T403
7	SGYS(0.003)S(0.996)PGS(0.001)PGTPGSR	S199
8	S(0.106)GY(0.151)S(0.881)S(0.863)PGS(0.994)PGT(0.004)PGSR	S198, S199, S202
9	S(0.001)GYS(0.635)S(0.364)PGS(0.999)PGT(0.001)PGSR	S202
10	AEEAGIGDT(1)PNQEDQAAGHVTQAR	T111
11	T(0.001)PS(0.999)LPTPPTR	S214
12	T(0.217)PS(0.783)LPT(1)PPTTR	S214, T217
13	IPAKT(0.157)T(0.849)PS(0.993)PK	T175

Table S8. The phosphopeptides obtained from the tryptic digest of human cerebrospinal fluid enriched by G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposites.

Protein IDs	Phospho (STY) Probabilities	Mass
A0A024R6M5	EKT(0.705)GFS(0.252)VS(0.228)S(0.485)KDS(0.33)K	1398.6991
A0A0A0MSD7	AALGES(1)GEQADGPK	1328.6208
A0A0D9SF30	SPAEEAT(0.139)ALAS(0.861)PK	1212.635
A0A2I2MP51	ES(0.6)S(0.4)QEQQSSVVR	1234.579
A0A2U8KGL5	ATEDEGS(1)EQKYPEATNR	1873.8654
A0A2U8KGL5	ATEDEGS(1)EQKYPEATNRR	2029.9665
A0A669KBG0	HLAQAS(1)QELQ	1123.5622
A0A669KBG0	SRHLAQAS(1)QELQ	1366.6953
A0A7P0T8N8	KLIQES(1)DQHLK	1337.7303
P68871	VHLT(1)PEEK	951.50255
A8K8G0	AGDLLEDS(1)PKRPK	1424.7623
B3KNK9	KGNEAVAS(1)R	930.48829
B3KRX4	AVDAPPS(0.6)S(0.6)VT(0.6)S(0.6)T(0.6)PR	1383.6994
B4DEA7	GEQGEDS(0.923)S(0.077)EEK	2802.0748
B4DEA7	EKS(0.382)S(0.873)QES(0.873)GEEAGS(0.873)QENHPQES KGQPR	2839.2605
B4DEA7	EKSSQESGEEAGS(1)QENHPQESKGQPR	2839.2605
B4DEA7	EKS(0.382)S(0.873)QES(0.873)GEEAGS(0.873)QENHPQES KGQPR	2839.2605
B4DEA7	GEQGEDS(0.923)S(0.077)EEK	1193.4684
B4DEA7	SSQES(1)GEEAGSQENHPQESKGQPR	2582.1229
B4DMA2	IEDVGS(1)DEEDDSGKD KK	1864.8174
B4DQJ6	IESQT(1)QEEVR	1217.5888
B4DQJ6	IESQTQEEVRDS(1)KENIEK	2161.0499
B7Z556	CDS(1)SPDSAEDVR	1336.5201
B7Z556	CDSSPDS(1)AEDVRK	1464.6151
C9JNC3	T(1)EEQMEEY(1)RGR	1426.6147
C9JXF9	AQET(0.095)S(0.905)GEEISK	1177.5463
F5GZ08	GSTEQDAAS(1)PEKEK	1475.674
F6KPG5	TCVADES(1)AENCDK	1497.5712
G5E968	S(1)GELEQEEER	1204.5208
H7C2K7	TEADEDRGQGDS(0.327)S(0.673)EEAPKQDR	2318.9847
I3L0V6	VDPVDTPE(0.002)S(0.113)MLRHT(0.885)AAR	1980.9687
O15240	S(1)QEETPGHR	1039.4683
O15354	GAGISGRS(0.989)QEQS(0.011)VK	1402.7165
P05060	WAEGGGHS(1)R	1499.6753
P05060	SETHAAGHS(1)QEK	1280.5745
P05060	SETHAAGHSQEKT(0.006)HS(0.994)R	1761.8143
P05060	SETHAAGHS(0.01)QEKT(0.632)HS(0.359)REK	2018.9518
P05060	WAEGGGHS(1)R	955.42603

P05060	S(0.113)QEES(0.886)EEGEEDAT(0.001)SEVDKRR	2308.9891
P05060	MAHGYGEES(1)EEER	1522.5994
P24593	EQVKIERDS(1)R	1258.663
P69905	VLS(1)PADKTNVK	1170.6608
P80723	AEGAATEEEGT(1)PK	1288.5783
Q05CF8	EET(0.032)T(0.003)S(0.012)HLRS(0.925)CEY(0.027)K	1638.7308
Q13784	ISAS(1)AEELR	974.50327
Q14515	HIQETEWQS(1)QEGK	1598.7325
Q14515	TELPREHANS(1)K	1280.6473
Q14515	AEAEENEKETAVS(1)TEDDSSHKAEK	2683.1845
Q14515	ETAVS(0.5)T(0.5)EDDSHHK	1454.6274
Q14515	EES(1)HEQS(1)AEQGK	1357.5746
Q14515	S(1)KEES(1)HEQSAEQGK	1572.7016
Q14515	SS(0.008)S(0.992)QELGLK	947.49238
Q3LGB0	S(1)KEEDKHLK	1112.5826
Q3LGB0	ISHELDS(0.993)AS(0.006)S(0.001)EVN	1386.6263
Q3LGB0	ISHELDS(0.038)AS(0.298)S(0.665)EVN	1386.6263
Q3LGB0	ISHELDS(0.006)AS(0.994)SEVN	1386.6263
Q3LGB0	KANDES(1)NEHSDVIDSQELSK	2586.2158
Q3LGB0	KANDESNEHSDVIDSQELS(0.01)KVS(0.99)R	2586.2158
Q53F35	RET(1)DDEGEDD	1307.5113
Q59G34	ADES(1)QEPQSQVR	1372.6219
Q5JTM7	S(0.03)NS(0.189)AEPNS(0.781)AEQDEAEPR	1829.7664
Q6FHJ5	KLS(1)PTEPK	898.51238
Q86U12	DKEVS(1)DDEAEEKEDK	1764.7537
Q8IVG5	LNS(0.439)KS(0.562)PES(0.992)DNHDPGQLDNS(0.008)K	2180.9934
Q8N4S1	AEDEENEKET(0.032)AVS(0.513)T(0.435)EDDS(0.02)HHK AEK	2727.1744
Q969E1	RCS(0.993)LS(0.007)VAQE	1048.4971
Q96AF9	GPPAS(0.639)S(0.361)PAPAPK	1075.5662
Q96AF9	GPPAS(0.259)S(0.741)PAPAPK	1075.5662
Q9H7J1	S(1)RERPPGT(1)DIPR	1379.727

Table S9. The phosphopeptides obtained from the tryptic digest of human blood enriched by G@mSiO₂@PEI-PFIL-Ti⁴⁺ nanocomposites.

Protein IDs	Phospho (STY) Probabilities	Mass
A0A024QYV2	S(0.531)DDS(0.469)NGIENNVR	1415.6277
A0A024QYV2	SDDS(1)NGIENNVR	1415.6277
A0A024QZ54	EEDGADAS(1)EEDLTR	1535.6223
A0A024QZ70	ASDPQS(1)PPQVSR	1267.6157
A0A024QZ77	ADLNQGIGEPQS(1)PSR	1567.759
A0A024QZ77	RADLNQGIGEPQS(0.907)PS(0.093)RR	1879.9613
A0A024R028	LTS(1)AEVPMATDR	1289.6286
A0A024R028	S(0.003)QS(0.997)FAGFSGLQER	1412.6684
A0A024R0X0	SLS(1)LGDKEISR	1203.6459
A0A024R0X0	TADS(1)VSPLEPPTKDK	1583.8043
A0A024R166	AVS(1)EGCAS(1)EDEVEGEA	1637.6363
A0A024R555	VPAS(1)PLPGLER	1134.6397
A0A024R5S7	GT(0.009)S(0.991)T(1)ELVKENQKLK	1573.8675
A0A024R603	NCES(1)DTEEDIAR	1437.5678
A0A024R629	QGS(1)LAMEELK	1104.5485
A0A024R629	SGS(0.002)GPS(0.998)LK	731.38137
A0A024R7N1	S(0.012)QGS(0.986)PEDS(0.002)APQASPGPSK	1725.7806
A0A024R7N1	S(1)LDSPTSSPGAGTR	1331.6317
A0A024R7N1	SLDS(1)PTS(0.263)S(0.737)PGAGTR	1331.6317
A0A024R8A9	S(0.111)S(0.356)S(0.528)PCRT(0.004)PEPDNDLHLR	1937.865
A0A024RBK4	ALPSLNTGS(0.008)S(0.126)S(0.866)PR	1285.6626
A0A024RBK4	LDSQPQET(0.596)S(0.404)PELPRR	1751.8802
A0A024RCL9	ADY(1)ACIAENKPT	1351.6078
A0A024RCU1	AS(0.001)S(0.999)LEDLVLK	1073.5968
A0A024RD07	LLDY(0.002)S(0.998)LHKER	1272.6826
A0A024RD92	RPPS(1)PPGPEER	1217.6153
A0A024RDV7	RNVPQEESLEDS(1)DVDADFK	2191.9869
A0A075BPH5	AETSEGSGSAPAVPEAS(0.02)AS(0.98)PK	1928.8963
A0A087WTC9	T(0.177)PRIS(0.823)PPIKEEETK	1623.8832
A0A087WTQ7	S(0.122)RS(0.878)PLELEPEAK	1354.7092
A0A087WZ99	ARGDS(1)EALDEES	1277.5372
A0A087WZ99	EGPDLLDRPGS(1)DR	1312.6008
A0A087WZ99	EGPDLLDRPGS(1)DRQER	1725.803
A0A087X183	S(0.242)PS(0.758)PAHLPDDPKVAEK	1686.8577
A0A087X1N4	VPPS(1)PDDLPSR	1178.5932
A0A090N8Y7	VDS(1)EPS(1)GT(1)S(1)VLIK	1330.698
A0A096LNQ0	RRS(1)HS(1)PS(1)PR	1078.5744
A0A0A0MQV9	AS(0.001)LT(0.182)PVKS(0.818)GEHK	1252.6776
A0A0A0MRJ9	GS(1)GS(1)LEGEAAGCGR	1306.5572

A0A0A0MRN0	REHS(0.979)PS(0.021)KEK	1096.5625
A0A0A0MRN0	RRS(0.955)QS(0.901)IEQES(0.144)QEK	1603.7914
A0A0A0MRN0	S(1)RS(1)IDRGLER	1187.6371
A0A0A0MT65	S(1)RPT(0.082)S(0.918)FADELAAR	1419.7106
A0A0C4DGA7	RFS(0.746)S(0.254)GGEEDDFDR	1515.6226
A0A0D9SFT8	S(0.032)S(0.032)RPAS(0.658)AS(0.276)S(0.001)STK	1164.5735
A0A0J9YVR0	RPLS(0.726)S(0.135)S(0.135)HEAS(0.003)EGQAK	1582.7699
A0A0S2Z4W1	KET(1)ES(1)EAEDNLDDLEK	1863.8222
A0A0S2Z4W1	S(0.003)RVS(0.995)VS(0.93)PGRT(0.038)S(0.034)GK	1316.7161
A0A0S2Z4W1	APQTSS(0.071)S(0.929)PPPVRR	1378.7317
A0A0S2Z4W1	EARS(1)PQPNK	1025.5254
A0A0S2Z4W1	KS(0.013)RVS(0.988)VS(0.999)PGR	1071.6149
A0A0S2Z4W1	KVELS(0.763)ES(0.237)EEDKGGK	1533.7522
A0A0S2Z4W1	QRS(0.444)S(0.556)PVTK	901.49813
A0A0S2Z4W1	RHS(1)PS(1)PRPR	1088.5952
A0A0S2Z4W1	RLS(0.946)PS(0.073)AS(0.981)PPR	1066.5883
A0A0S2Z4W1	RRT(1)PS(1)PPPR	1062.6047
A0A0S2Z4W1	RRT(1)PT(1)PPPR	1076.6203
A0A0S2Z4W1	RS(1)PS(0.998)PPPT(0.002)RR	1149.6367
A0A0S2Z4W1	RYS(1)PPIQR	1015.5563
A0A0S2Z4W1	S(0.75)PS(0.25)PAPPPR	904.47667
A0A0S2Z4W1	T(1)AS(1)PPPPPCK	890.48617
A0A0S2Z4W1	T(1)AS(1)PPPPPKR	1046.5873
A0A0S2Z4W1	EKT(1)PELPEPSVK	1352.7187
A0A0S2Z4W1	EPS(1)PEKNSK	1014.4982
A0A0S2Z4X1	LAS(0.009)DDRPS(0.991)PPR	1209.6102
A0A140F1N4	S(0.002)ES(0.997)PPPLSDPK	1152.5663
A0A140GX60	LS(0.999)LT(0.001)DPLVAER	1212.6714
A0A140VJZ1	SAADS(1)ISESVPVGPK	1442.7253
A0A140VK53	RS(0.985)LS(0.305)GS(0.548)S(0.162)PCPK	1174.5765
A0A140VK53	S(1)CFES(0.231)S(0.769)PDPELK	1394.6024
A0A140VK53	SCFES(0.039)S(0.961)PDPELK	1394.6024
A0A140VK53	SATRPS(1)PS(1)PER	1183.5945
A0A140VK53	QSHS(0.923)ES(0.076)PS(0.001)LQSK	1313.6212
A0A140VK53	RGS(0.649)RS(0.795)S(0.555)PEPK	1099.5734
A0A140VK53	RVPS(0.982)PT(0.018)PAPK	1048.6029
A0A140VK53	S(1)RT(1)PLLPR	938.56615
A0A140VK53	S(1)RT(1)PPAIR	896.5192
A0A140VK53	S(1)RT(1)PPVTR	912.51411
A0A140VK53	SSGHS(0.001)S(0.002)S(0.008)ELS(0.989)PDAVEK	1615.7326
A0A140VK53	T(0.94)KS(0.382)RT(0.678)PPR	941.54066
A0A140VK53	S(0.5)RT(0.5)PPSAPSQSR	1269.6426
A0A193AUV8	RPS(1)ALSQGR	970.53083

A0A1B0GW05	APLS(1)PGRK	824.48684
A0A1I9RI50	MLMV(0.977)LS(0.023)PTK	1119.6032
A0A1V1G0D9	S(0.002)T(0.002)S(0.995)LNERPK	1030.5407
A0A1W2PQQ1	RLEFILMPT(1)KR	1402.8119
A0A1W2PQQ1	VTS(1)TPQADSER	1189.5575
A0A1W2PQQ1	VT(0.003)S(0.971)T(0.026)PQADSEREASPLGSSVEPGTE EK	2787.3046
A0A1X7SBS1	S(0.001)SS(0.999)PVNVK	816.43413
A0A1X7SBS1	S(0.013)S(0.1)S(0.887)PVNVKK	944.5291
A0A220K8H0	LDLIS(1)KGEEPR	1255.6772
A0A2Q2T6B6	AS(1)PAPDDTDDTPQELKK	1826.8534
A0A2Q2T6B6	KSPS(0.5)SPS(0.5)VENSI	1230.6092
A0A2R8Y4N6	S(1)LDGAAAVDSADR	1246.579
A0A2R8Y695	SLGGQQGS(1)PK	957.48796
A0A2R8Y7C9	GAFFMEFVRS(1)PR	1442.7129
A0A2R8YDC1	KDNEES(0.001)EQPPVPGT(0.699)PT(0.301)LR	1992.9752
A0A2U3TZI1	RGS(1)LLELGQGLQR	1425.8052
A0A2X0SFD3	VEQEEPIS(0.999)PGSTLPEVK	1837.9309
A0A2X0SFD3	S(0.008)S(0.008)S(0.816)S(0.168)VGGLSVSSR	1208.5997
A0A2Z5DI31	KCS(1)QTQCPR	1163.5176
A0A2Z5DI31	S(0.5)S(0.5)PEQPRPSTSK	1299.6419
A0A2Z5DI31	S(0.412)S(0.588)PEQPRPS(0.862)T(0.128)S(0.01)K	1299.6419
A0A3B3IRV6	ERDLS(1)RDR	1045.5265
A0A3B3IRV6	GRS(1)IDQDYER	1237.5687
A0A3B3IRV6	SFS(1)PEERR	1006.4832
A0A3B3ISK1	DADS(1)QNPDAPEGK	1342.5637
A0A3B3ISP1	SES(1)LSNC SIGKK	1308.6344
A0A3B3ITZ9	GSFS(0.999)DT(0.001)GLGDGK	1139.5095
A0A3B3ITZ9	IDIS(1)PSTFR	1034.5397
A0A3B3ITZ9	NKKS(1)PEIHR	1107.6149
A0A3B3ITZ9	SSS(1)PPP RK	854.46102
A0A3B3ITZ9	ASAVSELS(1)PR	1015.5298
A0A3B3IU28	ERTESEVPPRPAS(1)PK	1678.8638
A0A494C130	S(1)DNDDIEVESDADKR	1706.7231
A0A494C1Q3	AT(1)NLEDMLKEEEK	1548.7341
A0A494C1S7	GKLS(1)AEENPDDSEVPSSSGINSTK	2447.13
A0A5E8	ARS(1)PAAPR	824.46168
A0A5J6KJ24	T(0.999)PLGDT(0.372)T(0.848)HT(0.781)CPR	1354.6299
A0A669KAX1	SES(0.002)S(0.588)S(0.397)KS(0.011)S(0.001)QPLASK	1421.6998
A0A7I2V4F2	ADRDQS(0.996)PFS(0.004)K	1149.5415
A0A7I2V4F2	KS(1)PPKADEK	998.53966
A0A7I2V4F2	NVS(1)ES(1)PNRK	1029.5203
A0A7P0TAI0	VTAEDKGT(1)GNKNK	1360.6947

A0A7P0TAL9	SPEKNERHT(1)C	1256.5568
A0A7P0Z484	AEEDEILNRS(1)PR	1427.7005
A0A7P0Z484	QKS(0.674)DAEEDGGT(0.319)VS(0.007)QEEEDR	2107.8778
A0JLU4	NEGS(0.004)ES(0.996)APEGQAQQR	1586.6921
P68871	VHLT(1)PEEK	951.50255
A2A2D0	ASGQAFELILS(1)PR	1387.746
A2VCK8	S(1)DKPDMAEIEK	1261.586
A2VCK8	S(1)DKPDMAEIEKFDFK	1651.7763
A2VCK8	ETIEQEKGAGES(1)	1347.6154
A2VCK8	NPLPS(1)KETIEQEKGAGES	1983.9749
A2VDH9	S(0.004)LS(0.996)VPDSGR	916.46141
A4D1V5	REGS(0.981)LS(0.01)PVNS(0.01)QK	1300.6735
A6NKB8	ASGEHS(0.999)PGS(0.001)GAAR	1182.5378
A6PVJ7	KEEMALS(1)LTR	1176.6173
A8K0J3	NGPLNES(0.983)QEDEEDS(0.017)EHGTSLNR	2456.0324
A8K201	DDFMMGAS(1)MK	1131.4399
A8K2L4	AEAS(0.079)S(0.921)DPGAEEER	1217.516
A8K2L4	LIDRT(0.034)ES(0.966)LNR	1215.6571
A8K2L4	LIDRT(0.617)ES(0.383)LNR	1215.6571
A8K2L4	TPSPLVLEGTEQS(0.61)S(0.385)PPLS(0.004)PT(0.001)TK	2378.2581
A8K2L4	S(1)PEGEQEDRPGLHAYEK	1940.8864
A8K4F0	S(0.083)T(0.083)S(0.832)VELT(0.001)GDPNKTR	1503.7529
A8K6R3	SLS(1)ASPALGSTK	1117.5979
A8K6R3	S(0.003)LS(0.997)AS(1)PALGSTK	1117.5979
A8K6R3	S(0.005)RS(0.991)LS(0.003)AS(0.001)PALGSTK	1360.731
A8K709	SSS(0.944)S(0.055)S(0.001)EDVASSNQK	1411.6063
A8K874	VMKAS(0.996)VDDDDS(0.001)GWELS(0.003)MPEK	2237.982
A8K8G0	EDAEAPGIRDHES(1)L	1537.7009
A8K8G0	AGDLLEDS(1)PK	1043.5135
A8K8G0	AGDLLEDS(1)PKRPK	1424.7623
A8K8G0	GNAEGS(1)S(1)DEEGKLVIDEPAKEK	2301.0972
A8K8G0	RRAGDLLEDS(1)PK	1355.7157
A8KAL3	ACS(0.5)T(0.5)PHVQVAGK	1253.6187
A8KAL3	LDS(1)LGKEK	888.49165
A8KAQ3	S(0.002)GYHDDS(0.998)DEDLLE	1493.5794
A8MVU1	PGPQS(1)PGS(1)PLEEER	1478.7001
A8MY87	RT(0.255)ES(0.733)VPS(0.012)DINNPVDR	1697.8333
B0QY04	SVS(1)PQGNSVDR	1144.5473
B1AKB5	RS(0.13)S(0.522)FS(0.348)MEEGDVL	1355.6027
B1AKL5	S(0.011)GS(0.989)PLEKDSDGLR	1359.663
B1ALB7	APGRPQLS(1)PGQK	1234.6782
B2R548	FGS(1)NINLEADES	1294.5677

B2R7R4	CQESLGRLS(1)PK	1273.6449
B2RBA0	LVEQANS(1)PK	984.52401
B2RBY7	SKPS(0.002)S(0.995)PVVS(0.003)EK	1143.6136
B2RBY7	S(0.435)S(0.574)S(0.991)FKDFAK	1015.4975
B2RDG4	VLLY(0.01)LLS(0.99)PR	1072.6645
B2REB7	RQS(1)PLPPQK	1049.5982
B2RTU8	EGPEVQEPEKRPLT(0.858)PS(0.164)LS(0.979)Q	2120.075
B2RTU8	EGPEVQEPEKRPLT(0.951)PS(0.044)LS(0.006)Q	2120.075
B3KMN2	RPKS(1)ESQGNATK	1301.6688
B3KMS9	S(1)VDIHDSIQPR	1265.6364
B3KN67	GETEERKDS(1)DDEK	1536.654
B3KRW2	DS(0.002)S(0.998)PS(0.02)S(0.517)S(0.825)PS(0.638)PK	1074.4829
B3KRW2	DSSPSS(0.001)S(0.018)PS(0.981)PK	1074.4829
B3KRW2	SEKDTAAVVS(1)R	1161.599
B3KRW2	SEPRPPIS(0.5)S(0.5)PR	1221.6466
B3KSJ3	LDKENLS(1)DER	1217.5888
B3KTG4	KS(0.142)S(0.858)PQKEVK	1029.5819
B3KTQ6	S(0.012)T(0.012)S(0.977)FGVPNANSIK	1320.6674
B3KU03	RPEAS(1)PVQK	1010.5509
B3KU16	DYDDMS(1)PR	997.38111
B3KU80	S(0.372)PT(0.628)S(0.001)S(0.999)PTPQR	1056.52
B3KUY5	ATAAT(0.165)S(0.835)PALK	929.5182
B3KVN0	QGGAS(0.815)QS(0.082)DKT(0.102)PEELFHPLGADSV	2497.1721
B3KVS4	RRDS(1)DGVDGFEAEGK	1636.7441
B3KVY2	S(1)RS(1)PPPVS	953.52943
B3KX39	LDQVVES(1)PAIPR	1322.7194
B3KX39	LS(0.173)T(0.827)PPPLAEEEGLASR	1665.8574
B3KX39	RDS(1)RDVDEEK	1247.5742
B3KX39	IT(0.001)HS(0.998)PT(0.001)VSQVTER	1453.7525
B3KXZ8	LLPEPGPS(0.208)DS(0.792)PGPK	1389.714
B3KY29	AGPVS(1)PGCVK	970.4906
B3KY56	TLS(1)PEFNER	1091.5247
B4DDX2	S(0.04)GS(0.96)MDPSGAHPSVR	1383.6201
B4DEJ6	RS(0.109)S(0.891)PAQTR	901.47298
B4DF22	RS(0.999)PS(0.969)PS(0.032)PTPEAK	1252.6412
B4DF22	S(0.996)PS(0.979)PS(0.025)PTPEAK	1096.5401
B4DF22	TLTDEVNS(1)PDSDRR	1603.7438
B4DF77	T(0.017)NS(0.804)S(0.167)DS(0.006)ERS(0.006)PDLGHS TQIPR	2183.0203
B4DGM5	EAEDS(1)DS(1)DDNIKR	1492.6278
B4DJ25	AQLS(1)PGIYDDTSAR	1492.7158
B4DPJ0	KET(1)PPPLVPPAAR	1371.7874
B4DKZ9	IY(1)GISFPDPK	1135.5914

B4DLW4	S(1)PVLEEAPFSR	1230.6245
B4DLW4	T(0.004)GS(0.978)S(0.019)GALGPPer	1127.5571
B4DLW4	TGSSGALGPPer	1283.6582
B4DM28	GDDDEES(1)DEEAVKK	1564.6377
B4DM68	S(0.206)PS(0.344)T(0.449)IS(0.297)LKES(0.704)K	1175.6398
B4DMA2	EKEIS(1)DDEAEEEK	1549.6631
B4DMA2	EKEIS(1)DDEAEEEKGEK	1863.8222
B4DMA2	EREKEIS(1)DDEAEEEK	1834.8068
B4DMA2	EIS(1)DDEAEEEK	1292.5256
B4DMA2	IEDVGS(0.5)DEEDDS(0.5)GKDK	1736.7224
B4DMA2	IEDVGS(1)DEEDDSGKDKK	1864.8174
B4DMF3	SGLS(1)LEELR	1002.5346
B4DMS5	AS(0.921)PS(0.079)LERPEK	1112.5826
B4DNA8	KDS(1)AQDDQAK	1104.5047
B4DNA8	RKDS(1)AQDDQAK	1260.6058
B4DNG7	S(0.964)DT(0.034)S(0.001)ESGAGLTR	1179.5368
B4DNM0	KYVIS(1)DEEEEEDDD	1584.6315
B4DNS4	S(0.007)LS(0.96)S(0.032)S(0.001)LDDTEVK	1279.6143
B4DNT8	KDIS(1)QNKR	987.54614
B4DNT8	GGS(1)GSGPTIEEVD	1203.5255
B4DNW3	PGPREES(1)EEEEDEDDEEEEEEEKEK	3049.1803
B4DPW4	SPGS(1)PVGEGTGSPPK	1352.6572
B4DQ75	S(0.101)S(0.899)PPEGKLETK	1171.6085
B4DQZ7	GDS(1)DDEKPR	1017.4363
B4DQZ7	T(0.001)TS(0.999)PLEEEER	1189.5463
B4DQZ7	T(0.008)T(0.008)S(0.985)PLEEEEREIK	1559.7679
B4DQZ7	S(1)LS(1)PGVSR	801.43447
B4DRA2	LDS(0.144)S(0.848)PS(0.007)VSSTLAAK	1361.7038
B4DRS4	GSEEDS(1)PKKESK	1319.6205
B4DSW1	TIS(1)DGTISASK	1078.5506
B4DT54	AKS(0.981)PGLT(0.019)PEPR	1151.6299
B4DTV0	DIDIS(0.117)S(0.883)PEFK	1149.5554
B4DV85	S(1)PHSKS(1)PAEQR	1222.6054
B4DV85	SAS(1)EPSLHR	982.48321
B4DVS2	RPS(0.649)QEQS(0.345)AS(0.004)AS(0.001)S(0.001)GQP QAPLNR	2195.0679
B4DW31	TPT(1)PEPAEVETR	1325.6463
B4DXI0	RGS(1)DPASGEVEASQLR	1657.802
B4DXI0	RGS(1)DPASGEVEASQLRR	1813.9031
B4DY33	EGS(1)PIPHDPEFGSK	1495.6943
B4DZ56	KGNS(1)PNSEPPTPK	1351.6732
B4DZC9	SNS(1)EDKLNSK	1120.536
B4DZE1	LDFIES(0.037)DS(0.944)PCS(0.015)S(0.003)EALSKK	2011.9408

B4DZX7	KVEEEQEADEEDVS(1)EEEAESK	2437.014
B4DZX7	S(1)LGPSLATDKS	1074.5557
B4DZZ3	S(0.001)IS(0.999)ADDLQESSR	1421.627
B4E0B9	AEDS(1)DS(1)EPEPEDNVR	1687.6809
B4E0Y2	SFS(1)QPGLR	890.46102
B4E0Z3	ENDIKPLT(0.685)S(0.315)FR	1318.6881
B4E0Z3	KGGS(0.979)T(0.021)S(0.021)S(0.091)S(0.866)PS(0.022)R R	1205.6113
B4E0Z3	KGGS(0.361)T(0.608)S(0.133)S(0.485)S(0.407)PS(0.007)R R	1205.6113
B4E0Z3	RS(0.5)AS(0.5)ASHQADIK	1269.6426
B4E0Z3	S(1)AS(0.995)AS(0.005)HQADIK	1113.5415
B4E0Z3	S(1)RS(1)PGRPPK	980.55156
B4E100	RS(0.334)S(0.664)DT(0.001)S(0.001)GSPATPLK	1402.7052
B4E100	S(0.5)S(0.5)DT(0.001)SGSPATPLK	1246.6041
B4E105	S(1)FDGNTLLNR	1135.5622
B4E2F3	SGST(0.021)ES(0.979)LNPR	1046.4993
B4E326	LDSQEPEGRQT(1)PDR	1497.7172
B4E3V2	LTPVS(0.939)PES(0.022)S(0.031)S(0.007)T(0.001)EEK	1489.7148
B5B0A5	KGLVS(0.003)PQS(0.997)PQK	1167.6612
B5BU25	EEHGLIIRS(1)PR	1249.6527
B5BU25	S(1)DFDEFER	1043.4196
B6RC65	PARQES(1)WEK	1129.5516
B7Z255	RNS(0.199)VDT(0.264)AT(0.312)S(0.067)S(0.069)S(0.072) LS(0.054)T(0.053)PS(0.024)EPLS(0.705)PT(0.142)S(0.031) S(0.008)LGEERN	3105.4698
B7Z3I9	S(0.5)S(0.5)PAFGDRR	991.48354
B7Z556	CDSSPDS(1)AEDVRK	1464.6151
B7Z5R7	S(0.001)RS(0.999)DIDVNAAASAK	1403.7005
B7Z6N1	GEGPGEAGGPLT(1)PR	1293.6313
B7Z8E4	SAS(1)ADNLTLPR	1143.5884
B7Z8U8	DTETVY(0.953)S(0.046)EVR	1197.5513
B7Z8U8	YSRTEGS(0.888)LDGT(0.112)	1184.5309
B7Z910	AGS(1)PS(1)PQPSGELPR	1378.6841
B7Z910	AGSPS(1)PQPSGELPRK	1506.7791
B7Z910	NRAGS(0.5)PS(0.5)PQPSGELPR	1648.8281
B7Z959	S(1)VVS(1)FDKVKEPR	1389.7616
B7Z9E9	LGSQHS(1)PGR	937.47298
B7ZAQ8	CWRVTSSVPLPS(0.001)GS(0.028)T(0.028)S(0.601)S(0.34 2)PGR	2117.0324
B7ZAQ8	RS(0.018)DS(0.982)QQAVK	1017.5203
B7ZAQ8	RSDSQQAVKS(1)PPLLESPDATR	2281.1662
B7ZAQ8	S(1)PPLLESPDATR	1281.6565
B7ZAZ3	VT(0.001)GELT(1)MT(1)FPAGIVR	1590.844
B7ZL14	TVS(1)DNSLSNSR	1178.5527

B8ZZJ0	S(1)DQEAKPSTEDLGDKK	1746.8272
B8ZZQ6	S(1)DAAVDTsseITTK	1423.6678
B9A053	ATEIGS(1)PPR	926.48214
C6KYL4	NQGS(0.147)S(0.853)LLGR	930.48829
C7C5T8	S(1)PQPLGGS(1)HR	1034.5257
C9IZC6	IVHS(0.5)ES(0.5)QPEK	1152.5775
C9J013	RGNPDPLT(0.042)S(0.254)S(0.704)PGR	1255.6269
C9J0A7	ATIS(1)DEEIER	1161.5513
C9J0I2	S(1)AGGDGFNPLR	1089.5203
C9J3F6	NISS(0.006)S(0.022)PS(0.969)VES(0.003)LPGGR	1485.7423
C9J582	T(0.001)HS(0.999)EGS(0.001)LLQEPR	1352.6684
C9J650	SVPHFS(1)DEDKDPE	1500.6369
C9J6K0	KDS(1)GEDPATCAFQR	1580.6889
C9J8Q2	RS(0.247)S(0.749)DT(0.005)EEESR	1194.5113
C9JAH2	TVS(1)EPNLKL	999.56006
C9JB56	GDTLAS(1)PNSETGPGKK	1557.7635
C9JB56	SKDIPLS(1)PPAQK	1279.7136
C9JC20	AAPT(0.067)T(0.933)PPPPVK	1074.6073
C9JEY1	AS(0.451)S(0.546)EGGT(0.004)AAGAGLDSLHK	1627.7802
C9JSU1	RGS(0.956)GDT(0.041)S(0.001)S(0.001)LIDPDTSLSLR	2105.0237
C9JTC6	EIDCLS(1)PEAQK	1288.5969
C9JUY6	S(1)AELNPIDPSAPACPEPGHK	2185.0474
C9JW01	GKAS(1)PFEEDQNRDLK	1732.838
C9JW01	QAS(1)PTEVVER	1114.5619
C9JWS9	ADS(1)DSEDKGEESKPK	1620.7115
C9JX20	MFPS(1)WPT(1)CLELER	1664.7691
C9JXV0	STPFIVPS(0.235)S(0.744)PT(0.02)EQEGR	1730.8475
C9JZ19	S(0.005)QT(0.995)DIEREK	1104.5411
D2KTB4	KGVQQAAS(1)VLVK	1226.7347
D3DPF9	DKEIKPS(0.367)S(0.633)K	1030.5659
D3DPF9	PLKS(0.907)EEPVT(0.093)PK	1223.6762
D3DPZ7	RLS(0.226)S(0.774)LDDK	932.49271
D3DRH1	ALS(1)LEENGVGNSFK	1463.7256
D3DRH1	KCETQLS(0.994)QGS(0.006)	1136.5132
D3DVA5	SES(1)LESPRGER	1245.5949
D3DVA5	QELGS(1)PEER	1043.4884
D3DVA5	ANS(1)RDGEAGR	1031.4744
D3DVD8	ALS(1)NAANLQR	1056.5676
D3DVD8	KES(1)LNEAQK	1045.5404
D3DWC7	IT(0.01)RRS(0.997)WS(0.997)S(0.996)R	1147.621
D6R904	EQAEAEVAS(1)LNR	1315.6368
D6R904	EQAEAEVAS(1)LNRR	1471.7379
D6R9V6	KY(1)IMLEIK	1036.5991

D6RA28	VAS(0.999)DT(0.001)EEADRTSSK	1494.6798
D6RAM3	AT(0.001)S(0.999)LPSLDTPGELR	1455.7569
D6RD83	NEEDEGHSNS(0.029)S(0.971)PR	1456.5815
D6RFJ5	SGPT(1)PPTSENEQK	1370.6314
D6W5C0	RPPS(1)PEPSTK	1094.572
D6W5C0	T(0.119)S(0.147)S(0.718)KES(0.027)S(0.988)PIPS(0.832)PT(0.138)S(0.03)DRK	1802.901
E5RG76	T(1)AKEKQAPR	1027.5774
E5RIK5	MAEKT(0.938)QKS(0.062)VK	1148.6223
E5RJ37	DSLS(1)DDGVDLK	1162.5354
E5RJ37	GKDSL(1)DDGVDLK	1347.6518
E5RKA2	S(0.5)S(0.5)PLPGKK	812.4756
E7EMN6	YRIQEQQES(0.996)S(0.996)GEEDS(0.008)DLSPEEREK	2739.2107
E7ER77	RS(1)PGGSGGASR	987.4846
E7ETM8	ESLS(1)PGKLK	957.5495
E7ETM8	T(0.002)IS(0.998)QEFLTPGK	1219.6449
E7ETM8	EMLAS(1)DDEEDVSSK	1553.6403
E7EV03	KDMQGT(1)EEEK	1193.5234
E7EV54	GS(0.997)PDGS(0.003)LQTGKPSAPK	1525.7736
E7EW15	EGASGRPGS(1)PK	1041.5203
E9PB13	PT(0.536)FT(0.464)KLMDMULEK	1452.7357
E9PF10	AAPQS(0.851)PS(0.149)VPK	980.5291
E9PG46	VGS(0.002)LT(0.998)PPS(0.699)S(0.301)PK	1068.5815
E9PG46	VQT(0.016)T(0.984)PPPAVQGQK	1349.7303
E9PGC8	VPS(0.003)APGQES(0.997)PIPDPK	1517.7726
E9PI52	EQSEVS(0.006)VS(0.994)PR	1116.5411
E9PIE9	S(1)APPS(1)PPPPGTR	1159.5986
E9PIJ1	QIS(1)QDVKLEPDILLR	1765.9938
E9PJA7	AEGEPQEES(0.998)PLKS(0.002)K	1527.7417
E9PK06	AT(0.001)APQT(0.025)QHVS(0.974)PMR	1422.7038
E9PKF8	T(0.128)QT(0.872)PPLGQTPQLGLK	1577.8777
E9PNJ0	NAS(1)VPNLR	869.47191
E9PS23	AS(1)GVAVSDGVIK	1101.603
E9PSG1	SQPGQKPAAS(1)PR	1222.6418
F5GX80	SSSHSS(0.001)PGS(0.999)PK	1056.4836
F5H3K7	S(0.355)T(0.645)GGDFGNPLR	1119.5309
F5H5B4	EKENQINS(1)FGK	1292.6361
F5H5B4	ENQINS(1)FGK	1035.4985
F6KPG5	TCVADES(1)AENCDA	1497.5712
F6RFD5	AS(1)GVQVADEVCR	1289.6034
F6RY50	TEFLHSQNS(0.001)LS(0.999)PR	1514.7478
F6RY50	S(0.582)GS(0.418)DAGEARPPTPASPR	1651.7914
F6S289	KNQDVKFT(1)K	1106.6084

F6UYG0	S(0.003)GS(0.997)GGGSAKEPQEER	1474.6648
F8VR77	S(0.999)GEDEQQEQT(0.001)IAEDLVVTK	2117.9964
F8VS07	ET(0.06)PHS(0.94)PGVEDAPIAK	1546.7627
F8W095	KQS(1)QQLELLESELR	1699.9105
F8W1E0	STS(0.999)LGSNLSELDR	1377.6736
F8W1J5	S(1)RT(1)PDRER	1015.5159
F8WC91	EVDEDS(1)EPEREVR	1587.7013
F8WDB4	ACAS(0.791)PS(0.205)AQVEGS(0.004)PVAGSDGSQPAVK	2356.0965
F8WEH2	S(1)DVEENNFEGR	1294.5426
F8WF93	S(0.028)GS(0.972)AAQAEGLCK	1177.5397
G3V1D0	RNS(0.976)S(0.02)S(0.001)S(0.001)S(0.001)SPSERPR	1532.7291
G3V1T9	S(0.002)FS(0.994)S(0.004)PENFQR	1197.5415
G3V2C9	ASNNT(1)ASIAQAR	1202.6004
G3V2D6	NDKSEEQSSS(0.093)S(0.907)VK	1552.6853
G3V2D6	EAEEGEDDRDS(1)ANGEDDS	1938.6835
G3V4Q5	RGGS(1)LGQTAR	1001.5366
G3V5E1	KPS(1)PQPS(0.058)S(0.942)PR	1079.5724
G3V5F0	GFS(1)DSGGGPPAK	1075.4934
H0UII19	KVS(1)APDILKPLNQEDPK	1891.0415
H0UI78	APS(1)GAPR	654.34492
HOY332	S(0.079)S(0.1)S(0.821)VT(0.165)S(0.835)IDKESR	1294.6365
HOY555	ANVS(0.004)S(0.996)PHR	866.43586
H0Y6Z4	AVT(1)PNQVR	883.48756
H0Y7V4	KLYHS(1)QK	902.4974
H0Y8W3	LGS(1)PDATR	815.41373
H0Y8W3	S(1)LGS(0.99)T(0.01)EGESES RPGK	1519.7114
H0Y8X6	QIS(1)EETESVDNR	1405.6321
H0YA82	KRS(0.57)S(0.738)S(0.692)EDAESLAPR	1531.759
H0YA82	SS(0.5)S(0.5)EDAESLAPR	1247.563
H0YAD9	S(1)PPDGQSFR	989.45666
H0YBC7	DHS(0.045)S(0.639)QS(0.316)EEEVVEGEKEVEALK	2357.087
H0YBF7	RT(0.603)LS(0.397)DPPSPLPHGPPNK	1808.9533
H0YCR2	LKS(0.995)EDELRPEVDEHT(0.005)QK	2052.0124
H0YD16	SELGNQS(1)PSTSSR	1348.6219
H0YDZ9	AS(0.012)S(0.988)PEKAEEEDR	1217.5524
H0YE74	RPNEDS(1)DEDEEK	1461.5856
H0YE82	SLGLSLS(1)GGDQEDAGR	1560.738
H0YEF9	RS(0.219)S(0.703)DGS(0.069)LS(0.009)HEEDLAK	1629.7594
H0YEV2	LPS(0.002)S(0.998)PVYEDAASFK	1509.7351
H0YEV2	LPSSPVY(1)EDAASFK	1509.7351
H0YFI1	KLLLDPS(0.018)S(0.982)PPTK	1294.7497
H0YFQ2	DKMVWEILVS(1)ER	1503.7755

H0YI08	GLS(1)WDSGPEEPGPR	1482.6739
H0YJ03	ESLKEEDES(1)DDDNM	1654.6152
H0YJ45	TGDT(1)S(1)RMFRR	1225.5986
H0YJB5	RGS(0.965)S(0.922)PGS(0.112)LEIPK	1226.6619
H0YJK1	ALS(0.001)AS(0.999)HTDLAH	1121.5465
H0YJL4	T(0.081)S(0.118)S(0.8)PHKEESPK	1225.5939
H0YKH0	ESSANNSVS(0.993)PS(0.006)ESLR	1562.7172
H0YKX5	ATDAEADVAS(1)LNRR	1487.7328
H0YKX5	ATDAEADVAS(1)LNR	1331.6317
H0YLQ7	QAQAQES(1)EEEEESR	1648.6813
H0YN01	LDEGT(1)PPEPK	1081.5292
H3BM18	EVDAT(0.011)S(0.956)PAPS(0.022)T(0.007)S(0.002)S(0.01)T(0.001)VK	1575.7628
H3BPE3	QNPEQS(1)ADEDAEK	1459.6063
H3BQF1	IDYIAGLDS(1)R	1121.5717
H3BQZ7	EEDEPEERS(0.999)GDET(0.001)PGSEVPGDK	2386.9885
H3BQZ7	SKPAGS(1)DGERR	1158.5741
H3BRH3	RPNT(0.134)S(0.866)PDR	941.46789
H3BS66	DGVS(1)LGAVS(0.903)S(0.085)T(0.011)EEASR	1563.7376
H3BSN4	KRPS(0.998)LPS(0.051)S(0.895)PS(0.056)PGLPK	1546.8831
H3BTK3	ERS(1)PS(1)PLR	940.50903
H3BTK3	GNVVPS(0.978)PLPT(0.022)RR	1291.7361
H3BTK3	SRERS(0.5)PS(0.5)PLR	1183.6422
H3BUH7	GILAADES(0.861)T(0.136)GS(0.003)IAK	1331.6933
H3BUH7	GILAADES(0.999)T(0.001)GSIAKR	1487.7944
H7BXE3	DDKGSTS(0.128)S(0.72)T(0.128)S(0.023)GS(0.001)SGSS TK	1674.718
H7BXM6	DIKEES(1)DEEEEDDEESGRLR	2408.0099
H7BXT7	AQS(1)PGAVEEILDRENK	1754.8799
H7BZ09	NRT(1)PSDVK	915.47739
H7BZ56	ASAGRLT(1)PESQSK	1330.6841
H7BZZ6	RS(1)AS(1)PERMD	1047.4767
H7C0S1	LGNIIHAMIMY(1)RR	1586.8538
H7C0S1	LGNIIHAMIMY(1)RR	1586.8538
H7C124	RHS(0.944)S(0.056)EGGVK	955.48354
H7C1F9	RS(0.088)S(0.914)S(0.998)PAELDLK	1201.6303
H7C1F9	SSS(1)PAELDLK	1045.5292
H7C1F9	SSS(1)PAELDLKDDLQQQTQGK	2059.0069
H7C1L9	RS(0.677)ES(0.323)PPAELPSLR	1565.8526
H7C1L9	RS(0.999)ES(0.001)PPAELPSLR	1437.7576
H7C1L9	S(0.001)ES(0.999)PPAELPSLR	1281.6565
H7C1M2	DTEEPLPVKES(0.001)DQT(0.001)LAALLS(0.999)PK	2380.2373
H7C2W5	KT(0.131)FLPEMS(0.869)EK	1208.6111
H7C2Y0	IYHLFDAES(1)DEDEDFFKEQTR	2436.0717

H7C3D5	QALDS(1)EEEEEDVAAK	1661.7268
H7C3F4	GKVLS(0.358)AKVVT(0.642)NAR	1341.8092
H7C4V2	EKDECT(0.972)PT(0.028)RK	1262.5925
H7C4W5	SSS(0.018)VS(0.982)PSASFR	1110.5306
H7C5D9	S(0.284)S(0.331)S(0.386)QSGS(0.002)GPS(0.223)S(0.741) PDS(0.034)VLRPR	1886.9082
H7C5L6	T(0.01)VS(0.99)AS(0.003)S(0.831)T(0.167)GDLPK	1161.5877
H9KV85	RHVLS(1)DLEDDEVR	1581.7747
J3KNR6	TLS(1)KDDVNYK	1181.5928
J3KPF0	SIS(0.998)GT(0.002)PAETPACK	1317.6235
J3KRF7	AAGS(0.993)PS(0.007)PLPAPDPAPK	1471.7671
J3KS94	LFS(1)RDAPGREDNTFK	1751.8591
J3KS94	AST(0.006)NS(0.923)ET(0.07)NRGES(0.001)EK	1508.6703
J3KSH8	NS(0.962)S(0.038)EASSGDFLDLK	1468.6682
J3KSH8	NS(0.238)S(0.762)EASSGDFLDLK	1468.6682
J3KSH8	RNS(0.385)S(0.615)EASSGDFLDLK	1624.7693
J3KSN1	RDS(1)QDGSSYR	1169.5061
J3QL44	SKS(1)NPDFLK	1034.5397
J3QL75	T(0.575)QPFHKY(0.425)MST	1238.5754
J3QQK8	SVIY(1)AIES(1)AVIK	1291.7388
J3QQV5	S(1)GGGVIRGPAGNNDCR	1585.7379
J3QRP6	S(1)ADAAAGAPLPR	1095.5673
K7EJB8	GPGGS(1)PGGLQK	953.49304
K7EM16	VS(1)KQEEASGGPTAPK	1484.7471
K7EP20	DTVLS(1)EGNVEQELR	1587.774
K7EPU6	KLS(0.999)LS(0.001)EGKVK	1087.6601
K7ES59	TDS(0.332)S(0.668)PNQAR	974.44174
M0QXW7	VQIS(1)PDSGGLPER	1353.6888
M0QZH8	RAT(1)PEPGDEGEPR	1466.675
M0QZS0	SLS(1)PILPGR	938.55492
M0R1B8	SQS(1)ADAPGTER	1214.5527
M0R3H9	T(0.166)RS(0.834)NPEGAEDR	1230.5589
O14686	AS(0.036)EPLLS(0.963)PPPFGES(0.001)RK	1710.8941
O19690	SDSAQGSDVS(1)LTA	1236.547
O43306	DAEPPS(0.977)PT(0.023)PAGPPR	1387.6732
O60293	RIS(0.782)T(0.109)S(0.109)DILSEK	1247.6721
O60307	S(0.876)S(0.124)ENVLDEEGGRSPR	1630.7547
O60832	AGLES(1)GAEPGDGDS(0.739)DT(0.141)T(0.12)K	1705.7279
O60832	AGLES GAEPGDGDS(0.877)DT(0.061)T(0.061)K	1705.7279
O94804	AS(0.001)QS(0.999)RPNS(0.822)S(0.178)ALETLGGEK	1830.9072
O94804	QVAEQGGDLS(1)PAANR	1511.7328
O94874	DDDS(1)DDESQSSHTGK	1621.5976
O95466	RDS(1)ELGPGVK	1056.5564

O95466	NKPLEQS(1)VEDLSKGPPSSVPK	2235.1747
P05114	TEES(1)PAS(1)DEAGEKEAK	1676.7377
P05114	KVS(0.996)S(0.004)AEGAKEEPK	1429.7413
P05114	VS(0.001)S(0.999)AEGAKEEPK	1301.6463
P06702	MHEGDEGPGRAPHHCKPGLGEKT(1)P	2174.9552
P09651	SES(1)PKEPEQLR	1298.6466
P09651	S(0.008)KS(0.548)ES(0.444)PKEPEQLR	1513.7736
P16401	S(0.922)ET(0.078)APAETATPAPVEK	1597.7835
P16401	SETAPAETATPAPVEKS(1)PAKK	2109.0954
P16402	S(0.831)ET(0.169)APLAPTIPAPAEK	1591.8457
P16403	S(0.862)ET(0.138)APAAPAAAAPPAAEK	1477.7413
P21127	S(1)VEEFQCLNR	1280.5819
P21127	RDS(1)LEEGERL	1202.5891
P30273	NQET(0.103)Y(0.869)ET(0.028)LK	1124.535
P30273	SDGVY(1)TGLSTR	1154.5568
P35579	GAGDGS(1)DEEVDGK	1234.495
P35579	GAGDGS(1)DEEVDGKADGAEAKPAE	2173.9247
P35579	KGAGDGS(1)DEEVDGK	1362.5899
P35579	RQAQQERDELADEIANS(0.5)S(0.5)GK	2244.0731
P49006	AAAT(1)PESQEPEQAK	1326.6416
P67936	AGLNS(1)LEAVK	1000.5553
P67936	AGLNS(1)LEAVKR	1156.6564
P69905	VLS(1)PADKTNVK	1170.6608
P80723	ETPAATEAPS(0.147)S(0.054)T(0.799)PK	1385.6674
P80723	AEGAATEEEGT(1)PK	1288.5783
Q02040	VVPEDGS(1)PEKR	1211.6146
Q05B97	SSTGSPTS(1)PLNAEK	1374.6627
Q05CF8	ETTCSKES(1)NEELTESCETK	2260.9311
Q05CY8	VVS(0.916)S(0.075)T(0.009)S(0.001)EEEEAFTEK	1670.7523
Q05CY8	VVS(0.007)S(0.381)T(0.554)S(0.057)EEEEAFTEK	1670.7523
Q05DV5	TVFS(0.999)PT(0.001)LPAAR	1158.6397
Q08495	ERS(0.05)LS(0.95)PK	815.45012
Q08495	GNS(1)LPCVLEQK	1243.6231
Q08495	HLS(0.999)AEDFS(0.001)R	1060.4938
Q08495	SS(0.002)S(0.998)LPAYGR	936.46649
Q13131	SDS(1)DAEAQGK	1006.4203
Q13131	SGTAT(1)PQR	816.40898
Q13131	SIDDEITEAKS(0.837)GT(0.144)AT(0.019)PQR	1917.928
Q13233	AT(0.019)S(0.981)PEAGGGGGALK	1171.5833
Q13233	LSAS(0.986)S(0.014)EDISER	1192.5572
Q13442	KS(0.247)LDS(0.886)DES(0.866)EDEDDYQQK	2158.8662
Q15172	SQGS(1)SQFR	895.41479
Q15454	HTDDEMT(0.582)GY(0.416)VAT(0.001)R	1494.6409

Q15651	AEEAQKT(0.021)ES(0.979)VDNEGE	1634.6908
Q15651	RKS(1)PENTEGK	1144.5836
Q15744	APS(1)PAGPLHK	973.53451
Q16513	AS(0.001)S(0.999)LGEIDESSELR	1491.7053
Q1ZYL5	ETAEADVAS(1)LNRR	1430.7114
Q32M78	HMKT(0.998)PT(0.002)EEK	1099.5332
Q3LGB0	ISHELD(S(0.993)AS(0.006)S(0.001)EVN	1386.6263
Q3LGB0	ISHELD(S(0.006)AS(0.994)SEVN	1386.6263
Q3LGB0	ISHELD(S(0.038)AS(0.298)S(0.665)EVN	1386.6263
Q3LGB0	KANDES(1)NEHSDVIDSQELSK	2244.0142
Q3MNE1	GKS(1)DS(1)EDGEKENEK	1550.6696
Q496C9	SAS(0.028)S(0.972)GAEGDVS(0.57)S(0.43)ERE	1563.6649
Q496C9	SASSGAEGDVS(0.063)S(0.937)ERE	1563.6649
Q4G1C1	T(0.01)DDVS(0.996)EKT(0.997)S(0.997)LADQEEVR	1920.8912
Q4G1C1	TS(1)LADQEEVR	1146.5517
Q4KMP7	AAGGAPS(1)PPPPVR	1172.6302
Q4KMP7	AAGGAPS(1)PPPPVRR	1328.7313
Q4KMP7	ALAAGADS(1)PK	899.47125
Q4LE74	RT(0.154)S(0.846)FSTSDVSK	1213.5939
Q4LE74	SKPCGS(1)PR	887.42834
Q4R1Q4	AIDS(1)S(1)KKLR	1016.5978
Q4VB24	SETAPAAPAAPAPAECT(1)PVKK	2031.1001
P16401	GTGAS(0.001)GS(0.999)FK	810.38718
Q4VBX8	GVAPADS(1)PEAPR	1165.5728
Q52LB7	RPAS(0.818)PS(0.554)S(0.628)PEHLPATPAESPAQR	2282.1404
Q53F35	KRET(1)DDEGEDD	1307.5113
Q53F35	RET(1)DDEGEDD	1179.4164
Q53FL4	IEEVLSPEGGS(0.017)PS(0.278)KS(0.674)PS(0.032)K	1769.9047
Q53HB8	Y(0.008)LDVS(0.992)KNMLEK	1338.6853
Q53HU8	QVQS(0.829)LT(0.171)CEVDALKGTNESLER	2376.1591
Q53HU8	QVQLTCEVDALKGT(0.609)NES(0.391)LER	2376.1591
Q53QN0	DLLRPES(0.005)QS(0.995)PK	1270.6153
Q53TD0	RGS(0.954)GS(0.046)QPQEPENK	1412.6644
Q59EF5	EGRGES(1)ENAGTNQETR	1733.7565
Q59H22	AS(0.001)S(0.999)LDLNK	846.4447
Q59HB3	VRES(1)DEETQIK	1332.6521
Q5CZ77	LIDLES(0.999)PT(0.001)PESQK	1455.7457
Q5H924	GSGTAS(1)DDEFENLR	1496.6379
Q5H924	AES(1)PEEVACR	1146.4975
Q5H924	AES(1)PEEVACRKEEEER	1946.864
Q5JPT2	ANS(0.993)PS(0.007)LFGTEGKPK	1431.7358
Q5JPT2	ETT(0.103)GS(0.897)ES(0.999)DGGDS(0.001)SSTK	1543.6122
Q5JSH3	VGNES(1)PVQELK	1198.6194

Q5QPM0	GRLS(1)PVPVPR	1076.6455
Q5TBN5	ARGS(1)VSDEEMMELR	1608.7236
Q5TBN5	GSVS(1)DEEMMELR	1381.5854
Q5U071	GPGRPTGS(1)K	855.45626
Q5U071	KGPGRPTGS(1)K	983.55123
Q5VZS7	DSGRGDS(1)VSDSGSDALR	1679.7347
Q5VZS7	GDS(1)VSDSGSDALR	1264.5531
Q5VZS7	SGLTVPT(0.017)S(0.983)PK	985.54441
Q5W011	RPDPDS(1)DEDEDYER	1736.6762
Q60FE6	VKES(0.5)IT(0.5)RR	987.58253
Q66K80	S(0.001)T(0.001)PMGRALLT(0.998)R	1201.6601
Q69YG1	GEDVNRT(1)LEGGR	1301.6324
Q6AWA7	EINVNMWET(1)LPGR	1557.761
Q6DKJ0	S(1)FEEEGEHLGSR	1375.6004
Q6FHJ5	KLS(1)PTEPK	898.51238
Q6FHN3	NIIHGS(0.983)DS(0.017)VK	1068.5564
Q6FI30	DAEQS(0.513)GS(0.487)PR	945.41519
Q6IB11	EGEEPT(1)VYSDEEEPK	1736.7265
Q6IB11	EGEEPTVYS(1)DEEEPKDESAR	2294.9663
Q6IB11	LLKEGEEPTVYS(1)DEEEPKDESAR	2649.2294
Q6IC76	HDNEGS(0.916)GS(0.084)KRPK	1310.6327
Q6JBY9	APGS(0.996)PLS(0.003)SEGAAGEGVR	1540.7481
Q6JBY9	S(0.997)PS(0.003)RTEKQEEDR	1460.6855
Q6JBY9	RS(0.891)QS(0.109)DCGELGDFR	1525.658
Q6JBY9	S(0.035)QS(0.965)DCGELGDFR	1525.658
Q6JBY9	S(0.5)QS(0.5)DCGELGDFR	1369.5568
Q6N039	FGS(1)ADNIPNLK	1174.5982
Q6NVI1	AEDGATPS(0.001)PS(0.027)NET(0.971)PKK	1627.7689
Q6NVI1	AEDGATPSPS(0.038)NET(0.962)PKKK	1755.8639
Q6P1X2	AS(0.03)EDNRVPS(0.964)PPPT(0.006)GDDGGGGGR	2093.9362
Q6P9G4	EEKES(1)NHNPS(0.998)DS(0.147)ES(0.855)	1587.6285
Q6PG47	S(1)HAKELQUELLK	1294.7245
Q6PI41	PQT(1)MLLGR	914.50077
Q6PJM5	RGS(1)IGENQIK	1100.5938
Q6PJM5	RGS(1)IGENQIKDEK	1472.7583
Q6PK00	ECLS(1)LDPEER	1246.55
Q6UWX4	GS(0.017)S(0.983)KKLAS(0.974)PT(0.013)S(0.01)S(0.002)K	1276.6987
Q70EK8	SHS(0.982)HT(0.018)GVGK	908.44643
Q75MF5	S(0.5)S(0.5)PSPGKR	814.42972
Q75MP3	HAPHCLS(1)EEESEQDRPR	2045.8973
Q75MY8	ILT(1)KPDLMDR	1200.6536
Q7KZE5	LAQIRHIY(1)HS(1)ELEK	1735.937

Q7RTP6	LGS(1)PLAVDEALR	1239.6823
Q7RTS1	KLS(1)KIET(1)LT(1)LAK	1343.8388
Q7Z3Q8	QS(0.044)S(0.955)PS(0.002)GSEQLVR	1273.6262
Q7Z3Q8	RES(0.903)CGS(0.073)S(0.024)VLTDFEGKDVTAK	2185.0321
Q7Z5Y0	SQS(0.997)S(0.003)DTEQQSPTSGGGK	1679.7235
Q7Z637	SAEEAPLY(0.178)S(0.822)K	1093.5292
Q7Z637	MSRS(1)LDSAR	1021.4975
Q86U12	ESEDKPEIEDVGS(1)DEEEEKK	2320.0078
Q86U12	DKEVS(1)DDEAEKK	1392.5892
Q86U12	ERDKEVS(1)DDEAEKK	1677.733
Q86U86	AAQQQQPS(0.1)AS(0.9)PR	1267.6269
Q86UK0	DIKT(1)DLHT(1)VRK	1324.7463
Q86VU2	RGS(1)PAPANPGR	1078.5632
Q86VX6	SLDEDEPPPS(0.831)PLT(0.169)R	1551.7417
Q86VX6	AEPHS(0.987)EDDS(0.013)R	1141.4636
Q86VX6	VTDGCGS(1)PLHR	1197.5561
Q86WR7	APS(1)PPVEHPR	1085.5618
Q86WR7	S(0.002)RS(0.997)FT(0.001)LDDESLK	1396.6834
Q86X09	ARS(1)LPS(0.609)S(0.391)PER	1098.5782
Q86X09	ARS(0.999)LPS(0.054)S(0.947)PERR	1254.6793
Q86X09	SLPSS(1)PERR	1027.5411
Q86X36	LT(0.5)QIS(0.5)DPEKWEIK	1585.8352
Q86YV0	DGPPSALGS(1)R	955.47231
Q86YV0	DAVQSQLQLS(1)PR	1212.6463
Q8N3K9	S(1)EAMLAEAHPEIR	1452.7031
Q8N4C8	S(0.018)QS(0.982)LQDQPTR	1158.5629
Q8N9C4	TASF(1)ESRADEVAPAK	1664.8006
Q8N9C4	T(0.001)AS(0.999)FSESRADEVAPAKK	1792.8955
Q8N9U0	TNKLPGS(0.981)PGLS(0.019)K	1197.6717
Q8ND56	S(0.5)S(0.5)PQLDPLRK	1139.6299
Q8ND56	S(0.165)S(0.835)PQLDPLRK	1139.6299
Q8NFC6	S(0.187)S(0.813)VDLEESSTK	1180.5459
Q8TC26	S(0.5)S(0.5)QGPTVPPP PR	1218.6357
Q8TCJ2	RENPPVEDS(1)S(1)DEDDKR	1886.8242
Q8TF42	VNS(1)QPGPQK	953.49304
Q8TF42	VNS(1)QPGPQKR	1109.5942
Q92522	AGGSAALS(0.999)PS(0.001)K	944.49271
Q92835	KDQES(1)PKMPR	1214.6078
Q92835	GES(0.132)PPT(0.868)PPGQPPIS(1)PK	1584.8148
Q96AF9	S(1)PGAPGPLTLK	1036.5917
Q96AF9	GPPAS(0.639)S(0.361)PAPAPK	1075.5662
Q96AF9	GPPAS(0.259)S(0.741)PAPAPK	1075.5662
Q96AF9	GPPAS(0.459)S(0.541)PAPAPKFS(0.958)PVT(0.041)PK	1831.9832

Q96DF8	ELIPQES(1)PR	1067.5611
Q96DI9	RVNS(0.782)AS(0.116)S(0.046)S(0.055)NPPAEVDPDTILK	2196.1022
Q96DY7	ES(0.068)RS(0.937)QKHT(0.995)R	1127.5796
Q96I65	AAS(1)LTEDRDR	1132.5473
Q96I65	EAEEES(1)DHN	1058.3789
Q96I65	RS(0.918)FS(0.082)KEVEER	1265.6364
Q96I65	S(0.001)FS(0.999)KEVEER	1109.5353
Q96L67	RGS(0.962)LS(0.038)NAGDPEIVK	1441.7525
Q96PY6	TCS(1)LPDL SK	1019.4957
Q96QH2	HPLS(1)PGFGAAGTPR	1363.6997
Q96QH2	TSS(1)EPEFNSLPR	1362.6416
Q96QH2	T(0.005)S(0.007)S(0.988)EPEFNS(1)LPR	1362.6416
Q96QH2	T(0.003)S(0.003)S(0.995)EPEVSVLPK	1271.6609
Q96QR8	GGGS(0.5)GGGEES(0.5)EGEEVDED	1694.6027
Q96RG5	KSSEGGVGVGPGGGDEPPT(0.57)S(0.43)PR	2022.9607
Q99698	LT(0.001)GS(0.999)LGCSIDR	1177.5761
Q99698	SEDDS(1)PGDESCPR	1449.5314
Q9BQ02	KVVVS(1)PTKK	984.63317
Q9BQ02	VVVS(0.739)PT(0.261)KK	856.5382
Q9BRF8	S(1)AAEAGGVFHR	1100.5363
Q9BSN3	EEPVS(1)S(1)GPEAVGK	1413.6624
Q9BSW2	S(0.001)QS(0.999)EEEEEVFGIPR	1634.7424
Q9BT91	S(0.5)S(0.5)PEQPIGQGR	1154.568
Q9BVG4	RADS(1)GEEENTK	1234.5426
Q9BX95	RNS(0.91)LT(0.09)GEEGQLAR	1429.7274
Q9BXP5	GDS(1)DDEYDRR	1226.48
Q9BXP5	GDS(1)DDEYDRRR	1382.5811
Q9BXP5	HELS(1)PPQKR	1090.5883
Q9C0I1	QLS(1)LPLTQSK	1113.6394
Q9H1B4	RNCMAATLKIT(1)ER	1562.8021
Q9H1B7	KAS(1)PEPPDSAEGALK	1495.7518
Q9H1E3	EEDEEPES(1)PPEKK	1541.6733
Q9H1E3	NSQEDS(1)EDS(1)EDKDVK	1723.702
Q9H3L7	STETSDFENIES(1)PLNER	1966.8756
Q9H7J1	S(0.008)RS(0.978)PDT(0.015)R	817.40423
Q9H932	LHEAICS(0.667)S(0.667)T(0.667)KLLK	1498.8177
Q9HA40	ECRT(0.16)S(0.816)AS(0.024)DVDADNNCLGTEVA	2282.938
Q9HA40	EQHLQS(1)PK	965.49304
Q9NQX1	RHMIT(0.138)HS(0.862)EK	1137.5713
Q9NRX5	S(0.1)DGS(0.9)LEDGDDVHR	1400.5804
Q9NS13	ET(0.008)EPES(0.992)LEHVR	1324.6259
Q9NS13	LRS(1)WEQEEEEEEVR	1846.8333

Q9NS13	QDS(0.999)GAGET(0.001)AK	962.4305
Q9NWD4	GRS(0.927)T(0.336)S(0.737)PKPK	956.54033
Q9NWD4	SSPS(0.041)GAS(0.646)S(0.313)PR	931.43592
Q9NWI3	GDSLRG(T(0.5)S(0.5)GPK	1073.5465
Q9NXY1	VT(0.001)PQEADS(0.999)DVGEEDSENTPQK	2500.0725
Q9NXY1	S(0.005)CGET(0.123)FNS(0.767)IT(0.106)KR	1398.6562
Q9NYE8	YSHS(0.001)YLS(0.866)DS(0.099)DT(0.034)EAK	1601.6845
Q9NZ63	VGDTEKPEPERS(1)PPNR	1806.886
Q9P054	AQAVS(0.996)EEEEEEEGKS(0.001)S(0.002)S(0.001)PK	2048.9022
Q9P134	LIEDNEY(0.771)T(0.229)AR	1222.583
Q9P266	GLS(1)APDLR	827.45012
Q9UIB8	IY(1)DEILQSK	1107.5812
Q9UKE5	T(0.025)T(0.029)S(0.946)IS(1)PALAR	1015.5662
Q9UPR0	S(1)LEVIPEKANDETGE	1629.7734
Q9UPU5	VSDQNS(1)PVLPK	1182.6245
Q9Y210	S(0.019)QS(0.981)PAFGPR	945.46683
Q9Y210	KLGILGS(0.999)HEDLS(0.001)K	1395.7722
Q9Y210	LGILGS(0.5)HEDLS(0.5)K	1267.6772
Q9Y493	KPT(0.5)VS(0.5)IEK	900.52803
Q9Y5K6	S(1)VDFDSLTVR	1137.5666
S4R2Y4	RKS(0.971)LS(0.001)DS(0.024)ES(0.004)DDSK	1452.6692
S4R2Y4	S(0.004)LS(0.996)DSESDDSK	1168.4732
S4R2Y4	S(0.004)LS(0.158)DS(0.831)ES(0.007)DDSKSK	1383.6001
S4R418	ASLGT(0.001)GT(0.014)AS(0.985)PR	1016.5251
S4R418	SLVIS(1)PPVR	966.58622
S4R418	TASEGS(1)EQPK	1032.4724
S4R418	TAS(1)EGSEQPKK	1160.5673
S4R418	TSLEVS(0.245)PNPEPPEKPVRT(0.754)PEAK	2401.2489
S6G369	SS(0.007)S(0.993)FGNFDR	1015.4359
U5XKH1	REMAS(0.992)PPS(0.418)S(0.385)LS(0.205)GEFLDT(0.002)KDR	2222.0637
V9GYE3	S(1)KEQLTPLIK	1155.6863
V9GZG8	VLS(1)PADKT	829.45453
V9H0E3	S(1)VEPQDAGPLER	1296.631
V9HVZ0	ARS(1)VS(1)PPPKR	1093.6356
V9HW92	VWS(1)PLVTEEGK	1243.6449
V9HWC7	DFT(1)PVCTTELGR	1394.65
W0S0D3	QEDGGVY(0.628)S(0.265)S(0.082)S(0.026)GLK	1325.6099
X5D7W4	AAGGDHGS(0.729)PDS(0.271)YR	1288.5432
X6R383	T(0.88)S(0.913)PLS(0.913)S(0.293)DK	833.41306
X6RJP6	NFS(1)DNQLQEGK	1278.584

References

1. Yi, L. H.; Yan, Y. H.; Tang, K. Q.; Ding, C. F., Facile preparation of polymer-grafted ZIF-8-modified magnetic nanospheres for effective identification and capture of phosphorylated and glycosylated peptides. *Anal Methods-Uk* **2020**, *12* (38), 4657-4664.
2. Du, J. L.; Yan, Y. H.; Tang, K. Q.; Ding, C. F., Modified Carbon Nanotubes Decorated with ZIFs as New Immobilized Metal Ion Affinity Chromatography Platform for Enrichment of Phosphopeptides. *Chemistryselect* **2021**, *6* (6), 1313-1319.
3. Sun, N. R.; Deng, C. H.; Li, Y.; Zhang, X. M., Size-Exclusive Magnetic Graphene/Mesoporous Silica Composites with Titanium(IV)-Immobilized Pore Walls for Selective Enrichment of Endogenous Phosphorylated Peptides. *Acs Appl Mater Inter* **2014**, *6* (14), 11799-11804.
4. Su, J.; He, X. W.; Chen, L. X.; Zhang, Y. K., Adenosine Phosphate Functionalized Magnetic Mesoporous Graphene Oxide Nanocomposite for Highly Selective Enrichment of Phosphopeptides. *Acs Sustain Chem Eng* **2018**, *6* (2), 2188-2196.
5. Lin, H.; Deng, C., Development of Hf(4+)-immobilized polydopamine-coated magnetic graphene for highly selective enrichment of phosphopeptides. *Talanta* **2016**, *149*, 91-97.
6. Qi, H.; Li, Z.; Ma, J. T.; Jia, Q., Tailoring a multifunctional magnetic cationic metal-organic framework composite for synchronous enrichment of phosphopeptides/glycopeptides. *J Mater Chem B* **2022**, *10* (18), 3560-3566.
7. Zhu, C.; Wu, J.; Jin, X.; Yan, Y.; Ding, C. F.; Tang, K.; Zhang, D., Post-synthesis of biomimetic chitosan with honeycomb-like structure for sensitive recognition of phosphorylated peptides. *J Chromatogr A* **2021**, *1643*, 462072.
8. Xu, Z. X.; Wu, Y. L.; Wu, H.; Sun, N. R.; Deng, C. H., Hydrophilic polydopamine-derived mesoporous channels for loading Ti(IV) ions for salivary phosphoproteome research. *Anal Chim Acta* **2021**, *1146*, 53-60.
9. Salimi, K.; Usta, D. D.; Celikbicak, O.; Pinar, A.; Salih, B.; Tuncel, A., Ti(IV) carrying polydopamine-coated, monodisperse-porous SiO₂ microspheres with stable magnetic properties for highly selective enrichment of phosphopeptides. *Colloid Surface B* **2017**, *153*, 280-290.
10. Wang, H.; Jiao, F.; Gao, F.; Lv, Y.; Wu, Q.; Zhao, Y.; Shen, Y.; Zhang, Y.; Qian, X., Titanium (IV) ion-modified covalent organic frameworks for specific enrichment of phosphopeptides. *Talanta* **2017**, *166*, 133-140.
11. Yan, S.; Luo, B.; He, J.; Lan, F.; Wu, Y., Phytic acid functionalized magnetic bimetallic metal-organic frameworks for phosphopeptide enrichment. *J Mater Chem B* **2021**, *9* (7), 1811-1820.
12. Wang, B. B.; Liang, W. D.; Liang, H. Z.; Liu, B.; Wang, Q. Y.; Yan, Y. H.; Wang, T. T.; Jiang, Y. F.; Jiang, Y. L.; Qiu, H. D.; Lu, L. H.; Cui, W.; Zhou, Y.; Zhao, L. L.; Yu, H. B., Phosphonate-Functionalized Ionic Liquid: A New Surface Modifier Contributing to the Enhanced Enrichment of Phosphorylated Peptides. *Acs Sustain Chem Eng* **2021**, *9* (23), 7930-7940.
13. Liu, B.; Wang, B.; Yan, Y.; Tang, K.; Ding, C. F., Efficient separation of

- phosphopeptides employing a Ti/Nb-functionalized core-shell structure solid-phase extraction nanosphere. *Mikrochim Acta* **2021**, *188* (2), 32.
- 14. Gao, C. H.; Bai, J.; He, Y. T.; Zheng, Q.; Ma, W. D.; Lei, Z. X.; Zhang, M. Y.; Wu, J.; Fu, F. F.; Lin, Z., Postsynthetic Functionalization of Zr⁴⁺-Immobilized Core-Shell Structured Magnetic Covalent Organic Frameworks for Selective Enrichment of Phosphopeptides. *Acs Appl Mater Inter* **2019**, *11* (14), 13735-13741.
 - 15. Huang, Y. L.; Wang, J.; Jiang, Y. H.; Yang, P. Y.; Wang, G. W.; Liu, F., Development of amphiphile 4-armed PEO-based Ti(4+) complex for highly selective enrichment of phosphopeptides. *Talanta* **2019**, *204*, 670-676.
 - 16. Yu, L. Z.; Luo, B.; Li, Z. Y.; He, J.; Lan, F.; Wu, Y., PAMAM-PMAA brush-functionalized magnetic composite nanospheres: a smart nanoprobe with tunable selectivity for effective enrichment of mono-, multi-, or global phosphopeptides. *J Mater Chem B* **2020**, *8* (6), 1266-1276.
 - 17. Yao, J. Z.; Sun, N. R.; Wang, J. W.; Xie, Y. Q.; Deng, C. H.; Zhang, X. M., Rapid synthesis of titanium(IV)-immobilized magnetic mesoporous silica nanoparticles for endogenous phosphopeptides enrichment. *Proteomics* **2017**, *17* (8).
 - 18. Zhang, H. Y.; Ou, J. J.; Yao, Y. T.; Wang, H. W.; Liu, Z. S.; Wei, Y. M.; Ye, M. L., Facile Preparation of Titanium(IV)-Immobilized Hierarchically Porous Hybrid Monoliths. *Anal Chem* **2017**, *89* (8), 4655-4662.
 - 19. Wang, J.; Wang, Z.; Sun, N.; Deng, C., Immobilization of titanium dioxide/ions on magnetic microspheres for enhanced recognition and extraction of mono- and multi-phosphopeptides. *Mikrochim Acta* **2019**, *186* (4), 236.
 - 20. Lu, Y.; Liu, B.; Yan, Y.; Tang, K.; Ding, C., "One-step" synthesis of a bifunctional nanocomposite for separation and enrichment of phosphopeptides. *J Chromatogr B Analyt Technol Biomed Life Sci* **2019**, *1130-1131*, 121833.
 - 21. Lin, H. Z.; Deng, C. H., Development of immobilized Sn⁴⁺ affinity chromatography material for highly selective enrichment of phosphopeptides. *Proteomics* **2016**, *16* (21), 2733-2741.
 - 22. Lin, H. Z.; Chen, H. M.; Shao, X.; Deng, C. H., A capillary column packed with azirconium(IV)-based organic framework for enrichment of endogenous phosphopeptides. *Microchim Acta* **2018**, *185* (12).
 - 23. Peng, J.; Zhang, H.; Li, X.; Liu, S.; Zhao, X.; Wu, J.; Kang, X.; Qin, H.; Pan, Z.; Wu, R., Dual-Metal Centered Zirconium-Organic Framework: A Metal-Affinity Probe for Highly Specific Interaction with Phosphopeptides. *ACS Appl Mater Interfaces* **2016**, *8* (51), 35012-35020.
 - 24. Li, J. Y.; Zhang, S.; Gao, W.; Hua, Y.; Lian, H. Z., Guanidyl-Functionalized Magnetic Bimetallic MOF Nanocomposites Developed for Selective Enrichment of Phosphopeptides. *Acs Sustain Chem Eng* **2020**, *8* (44), 16422-16429.