

Supplementary Material

ATM-Mediated Phosphorylation of Cortactin Involved in Actin Polymerization Promotes Breast Cancer Cells Migration and Invasion

Lei Lang^a Yixuan Hou^{a,b} Yanlin Chen^a Gang Tu^c Jing Tao^d
Dan Yang^a Lei Xi^a Lixin Fu^a Kexin Sun^a Jiali Yin^a Rui Chen^c
Meixi Peng^a Shuiqing Liu^a Manran Liu^a

^aKey Laboratory of Laboratory Medical Diagnostics, Chinese Ministry of Education, Chongqing Medical University, Chongqing, ^bExperimental Teaching Center of Basic Medicine Science, Chongqing Medical University, Chongqing, ^cDepartment of Endocrine and Breast Surgery, the First Affiliated Hospital of Chongqing Medical University, Chongqing, ^dDepartment of Rheumatology and Immunology, Children's Hospital of Chongqing Medical University, Chongqing, China

Table S1. The target shRNA and primer sequences for qRT-PCR

Gene name	shRNA sequences	Primer sequences
ATM	5'-GCTGTTACCTGTTTGAAAA-3'	Forward: 5'-ACTATCTCAGCTTCTACCCC-3' Reverse: 5'-TGCTCAGAACTTATACCACG-3'
CTTN	5'-GCACGAGTCACAGAGAGAT-3'	Forward: 5'-ATGTGGAAAGCTTCAGCAGGC-3' Reverse: 5'-TTGATATGCTCCTGGTGCCCG-3'
Control	5'-TTCTCCGAACGTGTCACGT-3'	Forward: 5'-TGACGTGGACATCCGCAAAG-3' Reverse: 5'-CTGGAAGGTGGACAGCGAGG-3'

Control primers are for β -actin

Table S2. The list of identified and quantified phosphopeptides

Protein accession	Position	Amino acid	Modified sequence	m/z	C/N Ratio
Q86UP2	397	S	_IHVS(ph)YQETQQM(ox)QMK_	616.27	0.18
Q00722	672	S	_QFNPFs(ph)VDR_	595.26	0.27
Q6UN15	554	S	_RHES(ph)EEGDSHR_	355.39	0.29
Q9NWW8	27	T	_T(ph)RSNPEGAEDR_	656.27	0.29
Q8IYB3	414	S	_TRHS(ph)PTPQQSNR_	496.89	0.34
P49321	477	T	_EGEET(ph)EGS(ph)EEDDK_	700.57	0.35
P49321	480	S	_EGEET(ph)EGS(ph)EEDDK_	700.57	0.35
Q12906	482	S	_GEDS(ph)AEETEAK_	623.23	0.35
Q9NYF8	648	S	_QKS(ph)PEIHR_	269.38	0.35
H7BZ55	886	T	_ET(ph)LS(ph)LT(ph)LAEEK_	491.86	0.36
H7BZ55	888	S	_ET(ph)LS(ph)LT(ph)LAEEK_	491.86	0.36
H7BZ55	890	T	_ET(ph)LS(ph)LT(ph)LAEEK_	491.86	0.36
Q5SW79	379	S	_HDDGTQS(ph)DSENAGHR_	592.89	0.36
O96013	104	S	_RDS(ph)PPPPAR_	358.17	0.37
Q9BZD4	247	S	_IVDS(ph)PEK_	289.8	0.37
P55040	47	S	_NRHS(ph)ATPEDHCR_	520.54	0.38
Q14247	113	S	_HCS(ph)QVDSVR_	584.23	0.38
P50876	4	T	_MTTT(ph)RYR_	336.82	0.41
Q9NX58	276	S	_RHS(ph)EVETDSK_	423.18	0.41
Q7Z3K3	1364	S	_LSGEHS(ph)ESSTPR_	683.79	0.42
Q92688	244	T	_KRET(ph)DDEGEDD_	694.75	0.42
Q9UQ35	2382	S	_MAPALSGANLTS(ph)PR_	489.23	0.42
O94979	799	S	_AQGEPVAGHES(ph)PK_	462.87	0.43
P19338	121	T	_ALVAT(ph)PGK_	279.48	0.43
P62995	102	S	_RHS(ph)HS(ph)HSPMS(ph)TR_	830.29	0.43
Q96S55	153	S	_RPAAAAAGSAS(ph)PR_	445.22	0.43
P07900	231	S	_EVS(ph)DDEAEEK_	615.72	0.44
P62995	97	S	_RHS(ph)HS(ph)HS(ph)PMSTR_	553.86	0.44
Q13188	385	S	_NATS(ph)PQVQR_	540.75	0.44
Q5T8P6	127	S	_LNHS(ph)PPQSSSR_	430.53	0.44
Q9H4A6	36	S	_AAGGGAGSS(ph)EDDAQSR_	505.86	0.44
Q9UIF9	1770	S	_GRES(ph)PAAGPR_	359.83	0.44
O95696	885	T	_RHT(ph)LEDR_	336.15	0.45
Q9BRD0	126	S	_HDTPTS(ph)SPR_	364.48	0.45
Q9H8Y5	56	S	_TSCSGSGERES(ph)PER_	540.21	0.45
P19338	67	S	_VVVS(ph)PTK_	270.48	0.46
P49792	1399	T	_T(ph)SPENVQDR_	563.23	0.46
P52701	137	S	_VHVQFFDDS(ph)PTR_	509.89	0.46
P62995	95	S	_HS(ph)HS(ph)HS(ph)PMSTR_	501.83	0.46
P62995	99	S	_HS(ph)HS(ph)HS(ph)PMSTR_	752.24	0.46
Q9BRD0	127	S	_HDTPDSS(ph)PR_	546.21	0.46
Q9UNL2	105	S	_KLS(ph)EADNR_	506.73	0.46
P13984	248	S	_HYQGEEKS(ph)D_	391.48	0.47
P18433	185	S	_QAGS(ph)HSNS(ph)FR_	625.72	0.47
P22626	85	S	_PHS(ph)IDGR_	287.79	0.47
P49321	726	S	_KPEEES(ph)PR_	526.23	0.47
Q15435	12	S	_GAGQQQS(ph)QEMMEVDR_	887.35	0.47
Q9BTA9	511	S	_QQGHEPVS(ph)PR_	405.52	0.47

P07910	299	S	_EAEEGEDDRDS(ph)ANGED_	673.89	0.48
Q14103	80	S	_NEEDEGHS(ph)NSSPR_	513.19	0.48
Q14103	83	S	_NEEDEGHSNSS(ph)PR_	769.28	0.48
Q16204	240	S	_LDQPVS(ph)APPS(ph)PR_	475.21	0.48
Q16204	244	S	_LDQPVS(ph)APPS(ph)PR_	475.21	0.48
Q8NHZ8	82	S	_SSQFGS(ph)LEF_	541.22	0.48
Q9BUI4	204	S	_RRS(ph)S(ph)DEDAAGEPK_	526.54	0.48
Q9BUI4	205	S	_RRS(ph)S(ph)DEDAAGEPK_	526.54	0.48
P06748	254	S	_M(ox)QAS(ph)IEK_	301.46	0.49
Q0JRZ9	394	S	_HS(ph)PVQMNR_	524.72	0.49
Q14699	220	S	_NQS(ph)PEPSSGPR_	618.26	0.49
Q63ZY3	540	S	_VPS(ph)VAEAPQLR_	416.21	0.49
Q8IYB3	696	S	_APQTSSS(ph)PPPVR_	435.21	0.49
Q8TDJ6	451	S	_LDHDL(ph)LDR_	388.51	0.49
Q96JM3	275	S	_TTS(ph)PEPR_	434.18	0.49
Q9UPU5	1943	S	_SVDQGGGGS(ph)PR_	548.72	0.49
P35556	2516	S	_NTEGSYQCS(ph)CPR_	769.77	0.5
Q14678	1331	S	_AQS(ph)PGTPR_	447.2	0.5
Q15424	383	S	_M(ox)S(ph)S(ph)PEDDSDTK_	772.25	0.5
Q15424	384	S	_M(ox)S(ph)S(ph)PEDDSDTK_	772.25	0.5
Q99613	166	S	_QNPEQS(ph)AEDAEK_	514.2	0.5
Q9BRD0	248	S	_VHNNS(ph)PDTSR_	603.75	0.5
Q9UDY2	440	S	_ERPS(ph)SREDTPSR_	499.55	0.5
Q9ULJ8	839	T	_RT(ph)SLGEVSK_	352.84	0.5
P31948	481	S	_HDS(ph)PEDVK_	503.7	0.51
P42167	385	S	_MEES(ph)FSSK_	342.13	0.51
Q14676	504	S	_S(ph)SPGIHLER_	359.17	0.51
Q14676	505	S	_SS(ph)PGIHLER_	359.17	0.51
Q3MII6	506	S	_QAS(ph)LDGLQQLR_	436.88	0.51
Q9BXJ9	588	S	_EHEADTANMS(ph)DK_	476.51	0.51
O60256	227	S	_HS(ph)PPMVR_	301.8	0.52
O95071	1549	S	_RIS(ph)QSQPVR_	575.79	0.52
Q09666	5780	S	_HRS(ph)NS(ph)FSDER_	465.5	0.52
Q8N4C8	599	S	_S(ph)QSLQDQPTR_	620.27	0.52
Q96FX7	46	S	_HS(ph)VDLIGR_	326.16	0.52
Q9NYF8	264	S	_PSQSHS(ph)IQHS(ph)PER_	501.2	0.52
Q9NYF8	268	S	_PSQSHS(ph)IQHS(ph)PER_	501.2	0.52
Q9UHP6	323	T	_AMEVET(ph)YEK_	590.24	0.52
O60333	1613	S	_LSDIS(ph)PIGR_	519.25	0.53
P08581	977	T	_VHT(ph)PHLDR_	352.17	0.53
P41227	186	S	_GNS(ph)PPSSGEACR_	649.75	0.53
P41227	205	S	_GLAAEDS(ph)GGDSK_	593.73	0.53
Q09666	5782	S	_HRS(ph)NS(ph)FSDER_	465.5	0.53
Q14669	310	S	_S(ph)ESPPAELPSLR_	454.88	0.53
Q16643	141	S	_LS(ph)SPVLHR_	330.17	0.53
Q6PKG0	526	T	_AVT(ph)PVPTK_	298.16	0.53
Q8IXT5	254	S	_SEEHS(ph)PPR_	509.7	0.53
Q96LR5	19	S	_SPSTSGGSS(ph)DGDQR_	873.83	0.53
Q9H307	100	S	_QES(ph)DPEDDDVK_	678.75	0.53
O75396	177	S	_ANLSSLS(ph)K_	338.49	0.54
O75970	230	S	_GSLPQLVS(ph)PIVS(ph)R_	504.91	0.54

O75970	234	S	_GSLPQLVS(ph)PIVS(ph)R_	504.91	0.54
O95365	337	S	_AGAAAGDS(ph)DEESR_	658.24	0.54
P18433	189	S	_QAGSHSNS(ph)FR_	390.83	0.54
P46379	964	S	_AS(ph)PEPQR_	432.68	0.54
P53396	455	S	_TAS(ph)FSESR_	482.69	0.54
P55072	197	S	_EEES(ph)LNEVGYYDDIGGCR_	755.95	0.54
P78527	2624	S	_TQEGS(ph)LSAR_	514.72	0.54
Q12983	66	S	_SSHCDSD(ph)PPR_	561.71	0.54
Q12996	691	S	_RPNEDS(ph)DEDEEK_	514.86	0.54
Q8N5G2	332	S	_NASGVVNSS(ph)PR_	584.26	0.54
Q8WVC0	162	S	_IQNS(ph)DDEER_	593.22	0.54
Q9HCG8	39	S	_YEEQERS(ph)PR_	425.18	0.54
Q9P287	42	S	_EVENEDEDDDS(ph)DKEK_	664.24	0.54
O60749	277	S	_AVNTQALS(ph)GAGILR_	484.25	0.55
O75533	273	T	_GDT(ph)PGHATPGHGGATS_	605.26	0.55
P02545	429	S	_SS(ph)FSQHAR_	500.21	0.55
P43243	596	S	_S(ph)YS(ph)PDGK_	457.14	0.55
P49354	373	S	_HSTENDS(ph)PTNVQQ_	768.8	0.55
P52594	181	S	_GTPSQS(ph)PVVGR_	582.77	0.55
P61313	197	T	_RNT(ph)LQLHR_	373.19	0.55
Q12983	86	S	_ASETDTHS(ph)IGEK_	452.19	0.55
Q14103	82	S	_NEEDEGHSNS(ph)SPR_	513.19	0.55
Q7RTP6	1221	S	_AVHS(ph)PIR_	287.14	0.55
Q96RY7	1443	S	_HNS(ph)MEDAR_	347.13	0.55
Q9BQ39	45	S	_HHYDS(ph)DEKS(ph)ETR_	416.65	0.55
Q9H4L4	307	S	_AGQHS(ph)PLR_	315.81	0.55
Q9H501	153	S	_IDSNIS(ph)PK_	318.48	0.55
Q9UM00	60	S	_ETITES(ph)AGR_	522.22	0.55
Q14739	99	S	_SAS(ph)ASHQADIK_	597.76	0.56
Q14839	1349	S	_QVNYNDGS(ph)QEDR_	752.79	0.56
Q96F86	161	S	_HNS(ph)WSSSSR_	564.22	0.56
Q9BQ39	41	S	_HHYDS(ph)DEKS(ph)ETR_	416.65	0.56
Q9H0D6	448	S	_NS(ph)PGSQVASNPR_	647.28	0.56
O75376	2102	S	_YS(ph)PESQAQSVHHQR_	578.58	0.57
Q15149	1721	S	_RAS(ph)FAEK_	296.8	0.57
Q96JM3	542	S	_TAPPAS(ph)PEAR_	538.74	0.57
Q9UJM3	326	S	_EPLS(ph)PSNSR_	356.16	0.57
Q9Y248	182	S	_TNLQPLESTQS(ph)QDF_	563.25	0.57
P36507	306	S	_PVS(ph)GHGMDSR_	561.72	0.58
Q02338	4	T	_MLAT(ph)RLSR_	514.26	0.58
Q96HP0	178	S	_GSGS(ph)PEDTPR_	541.71	0.58
Q96T37	292	S	_S(ph)LSPGGAALGYR_	410.2	0.58
Q9NWW5	31	S	_HGS(ph)VSADEAAR_	393.83	0.58
Q9NYF8	287	S	_YSPS(ph)QNS(ph)PIHHIPSR_	627.27	0.58
Q9UKJ3	653	S	_QEPGGSHGS(ph)ETEDTGR_	575.22	0.58
O95674	33	S	_VDGETAS(ph)DSESR_	666.75	0.59
P13807	657	S	_HSS(ph)PHQS(ph)EDEEDPR_	905.31	0.59
P56537	239	S	_DS(ph)LIDS(ph)LT_	512.19	0.59
Q01433	190	S	_TDS(ph)DSDLQLYK_	682.78	0.59
Q12872	604	S	_LDDDS(ph)DDDEESK_	731.74	0.59
Q13433	478	S	_YESQLS(ph)TNEEK_	469.86	0.59

Q13595	86	S	_S(ph)YT(ph)PEYR_	359.12	0.59
Q13595	88	T	_S(ph)YT(ph)PEYR_	359.12	0.59
Q6NZI2	302	T	_SFT(ph)PDHVYAR_	457.87	0.59
Q8IYB3	683	S	_HS(ph)PS(ph)PRPR_	547.22	0.59
Q8IYB3	685	S	_HS(ph)PS(ph)PRPR_	547.22	0.59
Q96CP6	267	S	_SQEPS(ph)PVGSR_	562.24	0.59
Q96IZ0	233	S	_STTSVS(ph)EEDVSSR_	732.3	0.59
Q9NYM9	9	S	_AQS(ph)PGAVEEILDR_	732.84	0.59
Q9UKV3	838	S	_GVPAGNS(ph)DTEGGQPGR_	789.83	0.59
O43583	73	S	_LTVENS(ph)PK_	323.15	0.6
P02794	179	S	_HTLGDS(ph)DNES_	577.7	0.6
P13807	652	S	_HS(ph)S(ph)PHQSEDEEDPR_	603.88	0.6
P48651	442	S	_GSEDS(ph)PPK_	448.67	0.6
Q13185	95	S	_SLS(ph)DSESDDSK_	625.23	0.6
Q5T200	1208	S	_LRS(ph)PSNDSAHR_	440.53	0.6
Q8IXQ3	76	S	_RDS(ph)GDNSAPSGQER_	778.31	0.6
Q8TAD8	52	S	_HSGGS(ph)PS(ph)PPTSEPA_	664.61	0.6
Q8TAD8	54	S	_HSGGS(ph)PS(ph)PPTSEP_	664.61	0.6
Q92667	445	S	_SLLSS(ph)PTK_	304.82	0.6
Q9Y2D5	748	S	_QVLQSTQS(ph)PR_	612.29	0.6
P10827	12	S	_VECGS(ph)DPEENSAR_	765.28	0.61
P43243	598	S	_SYS(ph)PDGK_	417.16	0.61
Q01130	26	S	_TS(ph)PDTLR_	435.19	0.61
Q6KC79	318	S	_DVPPDILLDS(ph)PER_	515.91	0.61
Q8IYB3	416	T	_HSPT(ph)PQQSNR_	411.18	0.61
Q9H5H4	139	S	_S(ph)PGYESESSR_	589.72	0.61
Q9NQS7	263	S	_IAQVS(ph)PGPR_	335.5	0.61
O00159	408	S	_DVES(ph)PSWR_	352.48	0.62
Q13185	93	S	_S(ph)LSDSESDDSK_	625.23	0.62
Q15149	720	S	_SDEGQLS(ph)PATR_	620.76	0.62
Q15388	138	S	_IVSAQS(ph)LAEDDVE_	728.32	0.62
Q5VZL5	1240	S	_CGGVEQASS(ph)SPR_	657.76	0.62
Q8IYB3	463	S	_VELS(ph)ES(ph)EEDK_	662.73	0.62
Q8IYB3	465	S	_VELS(ph)ES(ph)EEDK_	662.73	0.62
Q8NC54	263	Y	_ITNDY(ph)IF_	483.2	0.62
Q8WVC0	205	S	_QQLS(ph)EEEEK_	357.48	0.62
Q92922	310	S	_NEEPVRS(ph)PER_	431.53	0.62
Q92974	932	S	_QELGS(ph)PEER_	562.73	0.62
Q9H8M2	566	S	_DQHHLGS(ph)PSR_	607.26	0.62
Q9UBB9	59	S	_DS(ph)DDERPSFGGK_	463.85	0.62
Q9UDY2	978	S	_AAS(ph)SDQLR_	464.2	0.62
Q9Y217	588	S	_TIEGS(ph)SPADNR_	613.76	0.62
Q9Y217	589	S	_TIEGS(ph)SPADNR_	613.76	0.62
P00533	991	S	_MHLPS(ph)PTDSNFYR_	548.9	0.63
P02545	394	T	_LSPSPT(ph)SQR_	526.74	0.63
P13807	653	S	_HS(ph)S(ph)PHQSEDEEDPR_	603.88	0.63
P18031	378	S	_VVGGS(ph)LR_	384.19	0.63
P49454	1750	S	_S(ph)LLGIDTEDAIQGR_	523.25	0.63
P49792	2454	S	_DSLITPHVS(ph)R_	402.2	0.63
P56537	243	S	_DS(ph)LIDS(ph)LT_	512.19	0.63
P62805	48	S	_RIS(ph)GLIYEETR_	472.9	0.63

Q05397	910	S	_LQPQEIS(ph)PPPTANLDR_	619.3	0.63
Q13242	204	S	_GRDS(ph)PYQSR_	382.5	0.63
Q13443	761	T	_HVS(ph)PVT(ph)PPR_	383.83	0.63
Q6PKG0	521	S	_ETESAPGS(ph)PR_	555.73	0.63
Q8IYB3	560	S	_S(ph)PS(ph)PAPPPR_	533.21	0.63
Q8IYB3	562	S	_S(ph)PS(ph)PAPPPR_	533.21	0.63
Q8NC51	197	S	_EFDRHS(ph)GSDR_	322.13	0.63
Q9C0E8	384	S	_AS(ph)DSEEPEEK_	600.72	0.63
Q9H410	81	S	_SLHLS(ph)PQEQSASYQDR_	642.62	0.63
P04049	621	S	_SAS(ph)EPSLHR_	532.23	0.64
P07355	127	S	_GLGTDEDS(ph)LIEIICSR_	619.95	0.64
P61313	187	S	_FHHTIGGS(ph)R_	364.5	0.64
Q13443	758	S	_HVS(ph)PVT(ph)PPR_	383.83	0.64
Q6PKG0	517	S	_ETES(ph)APGSPR_	555.73	0.64
Q86WB0	344	S	_S(ph)PGPIVSR_	446.72	0.64
Q92633	341	S	_SENPTGPTEGS(ph)DR_	713.78	0.64
Q96EB6	47	S	_S(ph)PGEPGGAAPER_	602.75	0.64
Q9H7C4	325	S	_RLS(ph)AQFENLMAESR_	577.93	0.64
Q9HBR0	997	S	_GGDHVPVS(ph)HEQPR_	498.89	0.64
Q9NYV4	514	T	_EEIVT(ph)PK_	299.14	0.64
Q9Y613	367	S	_S(ph)LEGGGCPAR_	542.22	0.64
O76061	250	S	_AHHGEAGHHLPEPS(ph)SR_	450.45	0.65
O76061	251	S	_AHHGEAGHHLPEPSS(ph)R_	360.56	0.65
P26599	141	S	_TDSS(ph)PNQAR_	528.21	0.65
P50443	12	S	_EQHNVS(ph)PR_	523.72	0.65
P52732	926	T	_LDIPTGTT(ph)PQR_	426.87	0.65
Q8IYB3	738	S	_AAS(ph)PS(ph)PQSVR_	387.16	0.65
Q8IYB3	740	S	_AAS(ph)PS(ph)PQSVR_	387.16	0.65
Q8N201	1327	S	_SS(ph)PEQPIGQGR_	618.27	0.65
Q8TB61	427	S	_AVPVES(ph)PVQKV_	616.82	0.65
Q8TEW0	973	S	_ESVSTASDQPSHS(ph)LER_	603.93	0.65
Q8WUY3	2211	S	_GAS(ph)PDMAPILEPVDR_	549.92	0.65
Q96JM3	432	S	_S(ph)PAGS(ph)PELR_	358.47	0.65
Q96JM3	436	S	_S(ph)PAGS(ph)PELR_	358.47	0.65
Q96K21	463	S	_EHQTSAYS(ph)PPR_	451.53	0.65
Q9NSC5	159	S	_SQS(ph)ADAPGPTER_	648.27	0.65
Q9NZM1	174	S	_GPVGTVS(ph)EAQLAR_	455.56	0.65
Q9UGH3	81	S	_LAETLDST(ph)GS(ph)LDPQR_	646.27	0.65
P20700	393	S	_LSPS(ph)PSSR_	455.71	0.66
P49207	12	S	_RLS(ph)YNTASNK_	411.86	0.66
P49321	244	S	_S(ph)VSGTDVQEECR_	723.78	0.66
P49761	215	S	_RDS(ph)DTYR_	496.7	0.66
Q01664	124	S	_FIQELSGSS(ph)PK_	424.87	0.66
Q04637	1209	S	_AAS(ph)LTEDR_	471.7	0.66
Q6P2E9	844	S	_ETCSTLAES(ph)PR_	665.77	0.66
Q99442	341	S	_EGSGGERHS(ph)DTDSDR_	601.74	0.66
Q9H2H9	52	S	_S(ph)LTNSHLEK_	370.17	0.66
Q9NZL4	353	S	_LLQTCFS(ph)SPADDSMDR_	641.59	0.66
O15085	635	S	_SRS(ph)DVDMDAAAEATR_	837.84	0.67
O75475	129	S	_EDT(ph)DHEEKAS(ph)NED_	502.44	0.67
P07437	75	S	_AILVDLEPGTMDS(ph)VR_	565.94	0.67

P98175	89	S	_HS(ph)PTGPPGFPR_	410.52	0.67
Q8N9B5	115	S	_SSAWAEGGS(ph)PR_	592.74	0.67
Q96QR8	304	S	_SGGGEES(ph)EGEEVDED_	888.29	0.67
Q96T37	686	S	_DRYNS(ph)DNDR_	617.73	0.67
Q9H2I8	153	S	_ASSEDVASS(ph)PER_	657.76	0.67
Q9Y5S9	56	S	_REDYDS(ph)VEQDGDEPG_	768.3	0.67
O43159	223	S	_TEVS(ph)PVPR_	482.73	0.68
P16949	63	S	_S(ph)HEAEVLK_	331.49	0.68
P38432	566	S	_LIIES(ph)PSNTSSTEPA_	542.58	0.68
P49736	40	S	_TDALTS(ph)S(ph)PGR_	582.72	0.68
Q05D60	320	S	_LESSYLPS(ph)IK_	406.2	0.68
Q14692	552	S	_AGLS(ph)PANCQSDR_	678.27	0.68
Q5T200	642	S	_DQRPS(ph)SPIR_	379.18	0.68
Q5T200	1364	S	_LIS(ph)DSVER_	499.73	0.68
Q6PD62	941	S	_KGS(ph)GS(ph)EQEGEDE_	647.22	0.68
Q6PD62	943	S	_KGS(ph)GS(ph)EQEGEDE_	647.22	0.68
Q86V48	745	S	_SQRPFS(ph)PR_	352.17	0.68
Q8IWW6	215	S	_IHQDSES(ph)GDELSSSS_	762.32	0.68
Q8N3X1	464	S	_ATS(ph)PESTR_	508.21	0.68
Q8WWM7	339	S	_ES(ph)PSLASR_	463.7	0.68
Q9BRD0	163	S	_HDT(ph)PDPS(ph)PLR_	432.17	0.68
Q9NYF8	496	S	_ETQS(ph)PEQVK_	563.24	0.68
Q9UKV3	710	S	_RLS(ph)QPESAEK_	612.78	0.68
Q9Y388	188	S	_EVQAEQPSSSS(ph)PR_	741.32	0.68
P23528	3	S	_AS(ph)GVAVSDGVIK_	394.86	0.69
P23588	445	S	_S(ph)LENETLNK_	376.5	0.69
P28715	341	S	_EPDATPPS(ph)PR_	573.74	0.69
P55196	424	S	_LQLS(ph)VTEVGTEK_	461.9	0.69
Q01130	25	T	_T(ph)SPDTLR_	435.19	0.69
Q13112	428	S	_TQDPS(ph)SPGTTPPQAR_	810.36	0.69
Q14978	643	S	_VADNS(ph)FDAK_	523.71	0.69
Q15149	1047	S	_SWS(ph)LATFR_	524.24	0.69
Q5T200	1366	S	_LISDS(ph)VER_	499.73	0.69
Q6IN85	127	S	_FDDMSS(ph)PGLELPSC_	707.3	0.69
Q8IXT5	562	S	_HSS(ph)EDFR_	479.18	0.69
Q8NB49	1129	S	_TFS(ph)DES(ph)NVL_	586.2	0.69
Q8TAD8	35	S	_QERLS(ph)PEVAPPAHR_	417.46	0.69
Q96B23	145	S	_SRS(ph)ESETSTMAAK_	732.81	0.69
Q96LD4	588	S	_GGIPAS(ph)PIDPFQSR_	507.91	0.69
Q9H4L5	440	S	_ALVHQLS(ph)NES(ph)R_	707.3	0.69
O14745	280	S	_EALAEAALES(ph)PRPALVR_	468.99	0.7
P08670	214	S	_QDVDNAS(ph)LAR_	584.75	0.7
P20839	481	S	_S(ph)M(ox)MY(ph)S(ph)GELK_	651.19	0.7
P20839	484	Y	_S(ph)M(ox)MY(ph)S(ph)GELK_	651.19	0.7
P20839	485	S	_S(ph)M(ox)MY(ph)S(ph)GELK_	651.19	0.7
P23193	100	S	_EPAITSQNS(ph)PEAR_	493.89	0.7
P24534	93	T	_DVEDTTGSGAT(ph)DSK_	617.58	0.7
Q02297	418	S	_ETPDSYRDS(ph)PHSER_	585.9	0.7
Q03188	333	S	_TIS(ph)PAESTALLQGR_	508.59	0.7
Q08170	458	S	_SKPNLPSES(ph)R_	398.86	0.7
Q09666	41	S	_VFVQEVTQNS(ph)PAAR_	956.93	0.7

Q12873	73	S	_KRDS(ph)EEFSGSER_	387.91	0.7
Q14159	132	S	_DELQFIDWEIDS(ph)DR_	620.93	0.7
Q16643	142	S	_LSS(ph)PVLHR_	494.75	0.7
Q5T200	643	S	_DQRPS(ph)PIR_	379.18	0.7
Q5VTL8	290	S	_EGHGSSS(ph)FDR_	386.81	0.7
Q5VZ89	863	S	_THS(ph)FENVSCHLPDSR_	622.59	0.7
Q7Z3C6	675	S	_AHSTMTGS(ph)GVDAR_	457.19	0.7
Q86X27	422	S	_LYHS(ph)LGPVTR_	408.2	0.7
Q8IWB9	194	S	_S(ph)LSTEVEPK_	357.17	0.7
Q96Q42	1335	S	_QHRDS(ph)PEILSR_	473.22	0.7
Q9BRD0	325	S	_YEYDPDIS(ph)PPR_	477.87	0.7
Q9BVG4	181	S	_ADS(ph)GEEENTK_	580.21	0.7
Q9H792	281	S	_ANTLS(ph)PVR_	469.23	0.7
Q9NP60	280	Y	_SGES(ph)GPMIY(ph)WM_	1065.9	0.7
Q9NQG6	59	S	_AISAPTS(ph)PTR_	540.76	0.7
O43395	619	S	_GDDDEES(ph)DEEAVKK_	549.21	0.71
P02545	22	S	_SGAQASSTPLS(ph)PTR_	720.33	0.71
P17252	319	S	_VIS(ph)PSEDR_	491.72	0.71
P17252	321	S	_VIS(ph)PSEDR_	491.72	0.71
P35251	368	S	_ESVS(ph)PEDSEK_	593.73	0.71
Q01082	2169	S	_ESS(ph)PIPS(ph)PTSDR_	716.77	0.71
Q14643	1598	S	_RDS(ph)VLAASR_	352.17	0.71
Q5T200	1438	S	_TES(ph)LEGDDDESK_	645.24	0.71
Q6IN85	117	S	_VDITQDLVDES(ph)EEER_	719.3	0.71
Q86YP4	256	S	_GAQQIHS(ph)IR_	545.26	0.71
Q8NC51	234	S	_DELTES(ph)PK_	333.47	0.71
Q96ST2	438	S	_TIAS(ph)DS(ph)EEEAGK_	698.75	0.71
Q96ST2	440	S	_TIAS(ph)DS(ph)EEEAGK_	698.75	0.71
Q99569	314	S	_VGS(ph)PLTLTDAQTR_	480.24	0.71
Q9BRD0	358	S	_ATDSLSS(ph)PR_	564.73	0.71
Q9BYW2	1098	S	_HYS(ph)DHWEDER_	485.18	0.71
Q9UNF1	191	S	_EEDGSS(ph)DQSQASGTT_	757.63	0.71
Q9UQ35	895	S	_HSCSGSS(ph)PPR_	576.22	0.71
Q9Y6N8	701	T	_RT(ph)PTAPDNTDVR_	474.88	0.71
O15027	1178	S	_S(ph)LHS(ph)AHS(ph)LASR_	703.26	0.72
O15027	1181	S	_S(ph)LHS(ph)AHS(ph)LASR_	703.26	0.72
O15027	1184	S	_S(ph)LHS(ph)AHS(ph)LASR_	703.26	0.72
O75792	298	S	_GLESATS(ph)L_	429.19	0.72
O94854	668	S	_DS(ph)DSFLNIFPEK_	497.88	0.72
O94885	248	S	_EQS(ph)DDETEESVK_	738.27	0.72
P08670	39	S	_TYS(ph)LGSALR_	524.25	0.72
P18615	115	S	_SIS(ph)ADDDLQESSR_	751.8	0.72
P29590	36	S	_QPS(ph)PS(ph)PSPTER_	671.76	0.72
P29590	38	S	_QPS(ph)PS(ph)PSPTER_	671.76	0.72
Q5VZ89	810	S	_SCS(ph)FSSESR_	563.7	0.72
Q8IWB9	197	T	_SLST(ph)EVEPK_	357.17	0.72
Q9H1E3	75	S	_DDSHS(ph)AEDS(ph)EDEK_	711.57	0.72
Q9H1E3	79	S	_DDSHAEDS(ph)EDEK_	513.94	0.72
Q9ULH0	1555	S	_S(ph)PEHSAEPIR_	401.51	0.72
P26045	425	S	_GSLAPQDS(ph)DSEVSQNR_	590.58	0.73
P30305	249	S	_MEVEELS(ph)PLALGR_	762.36	0.73

P46013	3253	S	_SHRDS(ph)EDI_	519.7	0.73
P49736	41	S	_TDALTSS(ph)PGR_	542.74	0.73
P52948	1816	S	_ELAVGS(ph)L_	384.68	0.73
P78316	146	S	_HNDIVDS(ph)DS(ph)DAEDR_	874.3	0.73
P78316	148	S	_HNDIVDS(ph)DS(ph)DAEDR_	874.3	0.73
Q04637	1231	S	_EAALPPVS(ph)PLK_	401.21	0.73
Q12929	660	S	_QNSS(ph)SSDSGGSIVR_	730.8	0.73
Q13425	110	S	_GPAGEAGAS(ph)PPVR_	415.86	0.73
Q5JTV8	315	S	_SELGNQS(ph)PSTSSR_	715.3	0.73
Q5JTV8	317	S	_SELGNQSPS(ph)TSSR_	715.3	0.73
Q5T4S7	2718	S	_HVTLPS(ph)SPR_	358.51	0.73
Q9BXW9	1435	S	_ATEDGEEDEVS(ph)AGEK_	823.31	0.73
Q9UBI6	26	S	_LEAS(ph)IER_	449.21	0.73
Q9UBL3	623	S	_RS(ph)PPWEP_	474.7	0.73
Q9UHY1	431	T	_T(ph)PTPEPAEVETR_	703.81	0.73
Q9ULH1	910	S	_TDHLS(ph)LDK_	336.82	0.73
Q9UQ35	2702	S	_RPS(ph)PQPS(ph)PR_	591.25	0.73
Q9UQ35	2706	S	_RPS(ph)PQPS(ph)PR_	591.25	0.73
Q9UQ88	583	T	_AYT(ph)PVVVTQWYR_	521.58	0.73
O15013	379	S	_S(ph)LIAQDHR_	340.49	0.74
O43491	39	S	_ENQQNQSS(ph)DPEEEK_	680.94	0.74
O94915	1945	S	_LS(ph)LIGDR_	427.21	0.74
O95772	193	S	_LLIVQDAS(ph)ER_	612.31	0.74
P08670	458	T	_DGQVINET(ph)SQHHDDLE_	639.59	0.74
P21333	1459	S	_CSGPGLS(ph)PGMVR_	433.19	0.74
P62942	9	S	_GVQVETIS(ph)PGDGR_	465.55	0.74
Q13523	20	S	_EQPEMEDANS(ph)EK_	496.18	0.74
Q13595	98	S	_S(ph)HS(ph)PMSNR_	538.18	0.74
Q13595	100	S	_S(ph)HS(ph)PMSNR_	538.18	0.74
Q9BQG0	1163	S	_EIPSATQS(ph)PISK_	446.55	0.74
Q9NR09	480	S	_SDDLLEDS(ph)DSEEHSR_	743.29	0.74
Q9UPU9	419	S	_AYS(ph)SPSTTPEAR_	673.78	0.74
O75475	141	T	_AVDITT(ph)PK_	462.73	0.75
O95425	261	S	_S(ph)PSFGDPQLSPEAR_	523.23	0.75
O95425	263	S	_SPS(ph)FGDPQLS(ph)PEAR_	549.89	0.75
P08238	255	S	_VGS(ph)DEEDDS(ph)GKDK_	633.23	0.75
P11388	1213	S	_TQMAEVLPS(ph)PR_	436.87	0.75
P13591	263	Y	_Y(ph)IFS(ph)DDS(ph)S(ph)Q_	958.8	0.75
P13591	266	S	_IFS(ph)DDS(ph)S(ph)QL_	958.8	0.75
P13591	269	S	_DDS(ph)S(ph)QLT(ph)IK_	958.8	0.75
P13591	270	S	_DS(ph)S(ph)QLT(ph)IK_	958.8	0.75
P13591	273	T	_DDS(ph)S(ph)QLT(ph)IK_	958.8	0.75
P27540	77	S	_S(ph)DDEQSSADKER_	482.85	0.75
Q15649	80	S	_SIADFLNS(ph)DEEEDR_	727.27	0.75
Q15910	487	T	_IIAPAPAEDVDT(ph)PPR_	972.95	0.75
Q3B726	60	S	_HIALS(ph)PR_	291.82	0.75
Q5T200	831	S	_NEGS(ph)PSPR_	462.18	0.75
Q86WB0	394	S	_GDTPGLEVPS(ph)SPLR_	627.62	0.75
Q8N7R7	344	S	_SFS(ph)ADNFIGIQR_	478.89	0.75
Q8NBJ4	360	S	_YNM(ox)DENEAES(ph)ETDK_	614.73	0.75
Q8NDX6	44	S	_AGS(ph)PDVLR_	447.71	0.75

Q8TBZ6	318	S	_NELDS(ph)PHEEK_	639.26	0.75
Q8TEW0	971	S	_ESVSTASDQPS(ph)HSLER_	603.93	0.75
Q96D71	562	S	_SSS(ph)LDMNR_	495.19	0.75
Q96PN6	1219	Y	_IY(ph)S(ph)Y(ph)S(ph)Y(ph)L_	940.77	0.75
Q96PN6	1220	S	_IY(ph)S(ph)Y(ph)S(ph)Y(ph)L_	940.77	0.75
Q96PN6	1221	Y	_IY(ph)S(ph)Y(ph)S(ph)Y(ph)L_	940.77	0.75
Q96PN6	1222	S	_IY(ph)S(ph)Y(ph)S(ph)Y(ph)L_	940.77	0.75
Q96PN6	1223	Y	_IY(ph)S(ph)Y(ph)S(ph)Y(ph)L_	940.77	0.75
Q96RK0	171	T	_T(ph)QSLSALPK_	342.17	0.75
Q99569	281	S	_PAS(ph)PTAIR_	446.72	0.75
Q9H307	347	S	_EIAIVHS(ph)DAEK_	431.2	0.75
Q9HCN4	338	S	_DEEADS(ph)DTDDIDHR_	786.29	0.75
O94888	280	S	_SES(ph)LIDASSED(ph)QLEA_	698.63	0.76
O94888	288	S	_SES(ph)LIDASSED(ph)QLEA_	698.63	0.76
O95239	801	S	_TFS(ph)LTEVR_	516.74	0.76
P08238	226	S	_EKEIS(ph)DDEAEKGEK_	486.95	0.76
P0C1Z6	249	S	_LLPYPTLAS(ph)PAS(ph)D_	502.22	0.76
P0C1Z6	252	S	_LLPYPTLASPAS(ph)D_	712.84	0.76
P15923	168	T	_AADGSLDT(ph)QPK_	296.38	0.76
Q14160	1378	S	_RVS(ph)LVGADDLR_	640.82	0.76
Q5VTL8	529	S	_S(ph)QS(ph)IEQESQEK_	726.77	0.76
Q7Z460	598	S	_S(ph)RSDIDVNAASAK_	495.56	0.76
Q7Z460	600	S	_SRS(ph)DIDVNAASAK_	742.84	0.76
Q86UP2	110	S	_APVPLNVVETSSS(ph)VR_	723.36	0.76
Q8N140	149	S	_LSDCDDSIAS(ph)FWK_	579.58	0.76
Q8ND56	182	S	_S(ph)SPQLDPLR_	546.76	0.76
Q8NDT2	609	S	_TTHS(ph)PYEER_	400.5	0.76
Q8WUY3	597	S	_NLSLTDFVGDSPS(ph)PER_	648.29	0.76
Q96EB6	26	S	_EAAS(ph)SPAGEPLR_	632.78	0.76
Q9H0U9	436	S	_PFGFQS(ph)G_	410.16	0.76
Q9HCG8	829	S	_RNS(ph)FSENEK_	595.75	0.76
Q9UK59	514	S	_RLS(ph)DEHEPEQR_	369.66	0.76
Q9Y6Q9	214	S	_TPHDILEDINAS(ph)PEMR_	639.95	0.76
O00571	594	S	_FS(ph)GGFGAR_	439.68	0.77
O14617	658	S	_HRPS(ph)EADEEELAR_	540.23	0.77
O14920	672	S	_GPVSGS(ph)PDSMNASR_	721.29	0.77
P02545	66	S	_ITES(ph)EEVVS_	614.78	0.77
P12694	337	S	_IGHHS(ph)TSDDSSAYR_	538.22	0.77
P16104	140	S	_ATQAS(ph)QEY_	489.18	0.77
P36915	50	T	_EEQTD(ph)SDGESVTHHIR_	505.96	0.77
P49321	246	S	_SVS(ph)GTDVQEECR_	723.78	0.77
P53621	173	S	_NLS(ph)PGAVESDVR_	441.87	0.77
Q5T200	137	S	_TPES(ph)EEENVEWETNR_	643.59	0.77
Q5T5U3	1668	S	_RNS(ph)EGSELSCTEGSL_	818.01	0.77
Q5VTR2	136	S	_EPEPDS(ph)DSNQR_	654.62	0.77
Q9C0C2	672	S	_AS(ph)PEPPGPSSSR_	689.29	0.77
Q9C0J8	1279	S	_SSS(ph)LDGEHHDGYHR_	559.55	0.77
Q9H4L5	437	S	_ALVHQLS(ph)NES(ph)R_	707.3	0.77
Q9H7D0	1766	S	_S(ph)LQLMDNR_	528.73	0.77
Q9NR19	30	S	_SWS(ph)PPPEVSR_	611.27	0.77
Q9UBP6	27	S	_AHS(ph)NPM(ox)ADHTLR_	482.54	0.77

Q9UDY2	168	S	_S(ph)RSWEDS(ph)PER_	470.17	0.77
Q9Y388	187	S	_EVQAEQPSSS(ph)SPR_	741.32	0.77
Q9Y657	199	S	_IMPDSNDS(ph)PPAER_	754.81	0.77
O94804	417	S	_SRPVS(ph)MDAR_	366.83	0.78
O94967	2	T	_(ac)T(ph)AEETVNVK_	556.75	0.78
P04075	46	S	_LQS(ph)IGTENTEENR_	524.23	0.78
P11388	193	T	_QT(ph)WM(ox)DNM(ox)GR_	625.72	0.78
P26038	576	S	_IDEFES(ph)M_	475.66	0.78
P49585	362	S	_AAAYDIS(ph)EDEED_	704.25	0.78
Q04727	208	S	_SSSVS(ph)PSASFR_	397.84	0.78
Q13263	473	S	_S(ph)GEGEVSGLMR_	601.25	0.78
Q14157	609	S	_YPSSISSS(ph)PQK_	420.86	0.78
Q15311	29	S	_TPS(ph)SEEISPTK_	628.28	0.78
Q68DK2	297	S	_VS(ph)PDHLDPER_	415.52	0.78
Q6PKG0	769	T	_S(ph)LPT(ph)TVPESPNYR_	540.9	0.78
Q6PKG0	770	T	_S(ph)LPT(ph)TVPESPNYR_	540.9	0.78
Q8NB49	1126	S	_TFS(ph)DESNVL_	546.22	0.78
Q8WWI1	246	S	_REDS(ph)FESLDSLGSR_	559.91	0.78
Q96JM7	625	S	_TDANESSSS(ph)PEIR_	736.8	0.78
Q96PY5	171	S	_S(ph)IEDLHR_	317.14	0.78
Q9BRS2	21	S	_GQFDDADS(ph)SDSENR_	959.38	0.78
Q9BZF1	342	S	_EHDES(ph)DNEVM(ox)GK_	657.9	0.78
Q9H2H9	49	S	_FISDRES(ph)R_	545.24	0.78
Q9NWB6	77	S	_ASS(ph)PPDR_	405.16	0.78
Q9ULJ3	411	S	_SFS(ph)ASQSTDR_	583.23	0.78
P29692	133	S	_ATAPQTQHVS(ph)PMR_	501.9	0.79
P42167	184	S	_NDSDRYs(ph)DNEEDSK_	713.93	0.79
P46821	1819	S	_SSSS(ph)PPIDAASAEPYG_	830.35	0.79
Q14160	1475	S	_VQS(ph)PEPPAPER_	643.79	0.79
Q14669	991	S	_DDSLDLS(ph)PQGR_	428.18	0.79
Q4G0F5	302	S	_S(ph)MSHQAAIASQR_	456.2	0.79
Q6ZRV2	870	S	_GS(ph)PTSAYPER_	572.74	0.79
Q8N1F7	767	S	_GTS(ph)PSSSSR_	473.19	0.79
Q8TAP8	84	T	_FRLT(ph)PPS(ph)PVR_	443.88	0.79
Q8TAP8	87	S	_FRLT(ph)PPS(ph)PVR_	443.88	0.79
Q92974	956	S	_LS(ph)PPHS(ph)PR_	350.81	0.79
Q92974	960	S	_LS(ph)PPHS(ph)PR_	350.81	0.79
Q96NE9	542	S	_TSTDRHS(ph)LSLDDIR_	565.93	0.79
Q9BQG0	1290	S	_S(ph)PLSALAR_	447.73	0.79
Q9BXP5	74	S	_HELs(ph)PPQKR_	293.65	0.79
Q9BXW9	592	S	_SES(ph)PSLTQER_	607.26	0.79
Q9NR30	89	S	_EEPSQNDIS(ph)PK_	441.85	0.79
Q9Y4J8	641	S	_VGS(ph)ETESNVDSEFAR_	760.32	0.79
Q9Y5S9	42	S	_GFGS(ph)EEGSR_	503.19	0.79
O14646	1689	S	_S(ph)PFEHSVEHK_	426.18	0.8
O75369	983	S	_LDVTILS(ph)PSR_	590.8	0.8
P15056	446	S	_RDS(ph)SDDWEIPDGQIT_	752	0.8
P40818	716	S	_S(ph)YSSPDITQAIQEEEEK_	635.61	0.8
Q03164	1858	S	_EDS(ph)PELNPPPGIEDNR_	929.9	0.8
Q15154	1958	S	_S(ph)DEEDFVK_	524.7	0.8
Q5JTD0	547	T	_KDSLTL(ph)QAQEQGNLLN_	580.27	0.8

Q7Z3C6	735	S	_RES(ph)DESGESAPDEGG_	672.26	0.8
Q86SF2	103	S	_EHHAGGDS(ph)QKDIMQR_	540.73	0.8
Q8TDD1	782	S	_IDDRDS(ph)DEEGASDR_	553.88	0.8
Q8TEW0	383	S	_FS(ph)PDSQYIDNR_	474.53	0.8
Q8WYP5	1142	S	_S(ph)PLYLVS_	507.75	0.8
Q96RL1	653	S	_VPS(ph)PGMEEAGCSR_	486.19	0.8
Q9C0C2	920	S	_YSS(ph)QDADEQDWEFQK_	652.58	0.8
Q9NZM1	729	S	_S(ph)LSQIHEAAVR_	430.88	0.8
Q9Y2F5	1854	S	_LDTGS(ph)PEPETR_	641.27	0.8
Q9Y4K4	335	S	_TAS(ph)EINFDK_	368.83	0.8
Q9Y5B0	740	S	_ENS(ph)PAAFPR_	592.24	0.8
O75448	872	S	_LLSNEDDANILS(ph)SPTDR_	676.3	0.81
P31323	114	S	_RAS(ph)VCAEAYNPDEEEDDAESR_	831.66	0.81
P47712	437	S	_HIVSNDSSDS(ph)DDESHEPK_	693.27	0.81
P49006	22	S	_GDVTAEAAAGAS(ph)PAK_	485.21	0.81
P49585	329	S	_ERS(ph)PS(ph)PSFR_	408.16	0.81
P49736	27	S	_GNDPLTSS(ph)PGR_	394.17	0.81
P51114	423	S	_KDELS(ph)DWS(ph)LAGEDDR_	632.57	0.81
P78411	185	S	_NRS(ph)EDEEEENIDLEK_	686.61	0.81
Q01082	2165	S	_ESS(ph)PIPSPTSDR_	676.79	0.81
Q09666	5841	S	_GHYEVTGS(ph)DDETGK_	525.54	0.81
Q12888	1678	S	_LITSEEERS(ph)PAK_	360.67	0.81
Q13427	356	S	_S(ph)ET(ph)PPHWR_	390.48	0.81
Q13427	358	T	_S(ph)ET(ph)PPHWR_	390.48	0.81
Q14126	782	S	_AAS(ph)YTEEDENHTAK_	549.22	0.81
Q5VTL8	527	S	_S(ph)QS(ph)IEQESQEK_	726.77	0.81
Q8N7R7	342	S	_S(ph)FSADNFIGIQR_	717.82	0.81
Q8WXI9	134	S	_S(ph)PDIIVLS(ph)DNEAS(ph)S_	848.68	0.81
Q8WYP5	1232	S	_IS(ph)FVEEDVHPK_	460.55	0.81
Q92538	1317	T	_GYT(ph)SDSEVYTDHGR_	833.82	0.81
Q9BZ29	927	S	_AEPYVAS(ph)EYK_	618.76	0.81
Q9H814	350	S	_SLNFQEDDDTS(ph)R_	753.79	0.81
Q9NPF5	445	T	_DTIIDVVGAPLT(ph)PNSR_	874.43	0.81
Q9NS68	241	S	_RDS(ph)VQTCGPVR_	452.2	0.81
Q9NW82	638	S	_TMFAQVES(ph)DDEEAK_	560.56	0.81
Q9UKV3	1004	S	_TAQVPS(ph)PPR_	344.83	0.81
Q9UQ88	273	S	_DLLSDLQDIS(ph)DS(ph)ER_	589.24	0.81
P41229	301	S	_EELSHS(ph)PEPCTK_	498.54	0.82
Q05519	483	S	_VNGDDHHEEDMDMS(ph)D_	609.19	0.82
Q06265	305	T	_APIDT(ph)SDVEEK_	428.52	0.82
Q13459	1346	T	_ATGAALT(ph)PTEER_	432.87	0.82
Q15154	537	S	_ETEES(ph)EYDS(ph)EHENS_	757.29	0.82
Q15773	238	S	_LAIQGPEDS(ph)PSR_	675.31	0.82
Q5VUA4	136	S	_S(ph)PGLCSDSLEK_	636.76	0.82
Q86W92	1001	S	_SPS(ph)ASITDEDSNV_	701.27	0.82
Q8TCJ2	499	S	_EDS(ph)S(ph)DEDDKR_	631.23	0.82
Q8TF40	760	S	_SMS(ph)PDS(ph)DTELR_	714.96	0.82
Q8TF40	763	S	_DSMS(ph)PDS(ph)DTELR_	714.96	0.82
Q8WXI9	135	S	_DIIVLSDNEASS(ph)PR_	697.67	0.82
Q92974	645	S	_SES(ph)LESPR_	492.71	0.82
Q96C92	243	S	_AS(ph)PAGS(ph)PSADFA_	824.35	0.82

Q96C92	247	S	_VSPAS(ph)PAGS(ph)PSAD_	824.35	0.82
Q96ST2	398	S	_AAVLS(ph)DS(ph)EDEEK_	726.76	0.82
Q96ST2	400	S	_AAVLS(ph)DS(ph)EDEEK_	726.76	0.82
Q9HAS0	18	S	_ELES(ph)SEEGSAEER_	794.8	0.82
Q9UBQ5	217	S	_IDFDSVSSIMASS(ph)Q_	783.82	0.82
O00161	20	S	_AHQITDES(ph)LESTR_	522.9	0.83
O15027	1045	S	_YPEPERPSS(ph)R_	433.19	0.83
P02545	628	S	_S(ph)VGGSGGGSFGDNLV_	823.86	0.83
P08559	232	S	_YGMGTS(ph)VER_	540.22	0.83
P08621	410	S	_GGQDNGLLEGLGND(ph)R_	870.35	0.83
P18669	14	S	_HGES(ph)AWNLENR_	696.79	0.83
P40925	333	S	_ESAFEFLSS(ph)A_	584.23	0.83
P49916	210	S	_LTTTGQVTS(ph)PVK_	437.89	0.83
P62995	203	T	_RPHTPT(ph)PGIYMGR_	391.44	0.83
Q13263	683	S	_SLS(ph)LDGADSTGVVAK_	643.95	0.83
Q14147	749	S	_EEQDGGG(ph)S(ph)DEDR_	862.79	0.83
Q14147	750	S	_EEQDGGG(ph)S(ph)DEDR_	862.79	0.83
Q15058	1292	S	_QDEES(ph)QDNLFSSDR_	739.29	0.83
Q53F19	25	S	_PALGLPS(ph)PEAESGVDR_	724.34	0.83
Q6ICG6	324	S	_SHS(ph)ANDSEEFFR_	502.53	0.83
Q92614	140	S	_RFS(ph)FSQR_	336.49	0.83
Q96RK0	173	S	_TQS(ph)LSALPK_	342.17	0.83
Q96ST2	49	S	_HS(ph)ENET(ph)SDREDGLP_	625.24	0.83
Q96ST2	53	T	_HS(ph)ENET(ph)SDREDGLP_	625.24	0.83
Q96ST2	54	S	_HS(ph)ENET(ph)SDREDGLP_	625.24	0.83
Q9H1K1	14	S	_AAS(ph)ALLLR_	447.74	0.83
Q9H5H4	132	S	_S(ph)PGYEPR_	443.18	0.83
Q9NU22	4538	S	_AEENTDQAS(ph)PQEDY_	746.29	0.83
Q9P2F8	1488	S	_TLS(ph)DESICSNR_	681.27	0.83
Q9ULF5	591	S	_LTDLEGQQES(ph)PPK_	527.74	0.83
Q9Y385	266	S	_RLS(ph)TSPDVIQGHQPR_	590.96	0.83
O14579	99	S	_RDS(ph)IVAELDR_	418.53	0.84
O60716	857	S	_SDFQVNLNNAS(ph)R_	722.81	0.84
O75475	106	S	_QSNASS(ph)DVEVEEK_	751.31	0.84
P11388	1106	S	_VPDEEENEES(ph)DNEK_	581.55	0.84
P29966	145	S	_AEDGATPS(ph)PSNETPK_	527.55	0.84
P38159	88	S	_VEQATKPS(ph)FESGR_	758.35	0.84
P50402	110	S	_TYGEPES(ph)AGPSR_	665.77	0.84
Q12983	72	T	_SQT(ph)PQDTNR_	563.73	0.84
Q5JSH3	403	S	_EYVSNDAFAQS(ph)DDEEK_	890.33	0.84
Q7RTP6	1649	S	_RPDS(ph)PTRPTLR_	688.35	0.84
Q8IXT5	638	S	_RS(ph)PTEDFR_	363.16	0.84
Q8IYB3	713	S	_QS(ph)PS(ph)PSTRPIR_	693.3	0.84
Q8IYB3	715	S	_QS(ph)PS(ph)PSTRPIR_	693.3	0.84
Q8TCJ2	498	S	_VEDS(ph)S(ph)DEDDKR_	631.23	0.84
Q92597	333	S	_TAS(ph)GSS(ph)VTSLDGTR_	749.79	0.84
Q9BQG0	11	S	_DPAQPMS(ph)PGEATQS_	890.37	0.84
Q9H063	75	S	_S(ph)QGGEEEGPLSDK_	706.78	0.84
Q9H5J0	362	S	_VEAIVIS(ph)DEETDVSDEQ_	874.72	0.84
Q9NYF8	290	S	_YSPS(ph)QNS(ph)PIHHIPSR_	627.27	0.84
Q9Y570	243	S	_QCEGITS(ph)PEGSK_	458.19	0.84

O60333	1454	S	_MSDTGS(ph)PGMQR_	623.73	0.85
O75362	407	S	_AGAES(ph)PTMSVDGR_	453.19	0.85
O95297	210	S	_DYTGCSSESLS(ph)PVK_	570.9	0.85
O95425	245	S	_DSSFTEVPRS(ph)PK_	358.16	0.85
P08670	7	S	_SVS(ph)SSSYR_	476.69	0.85
P13798	185	S	_ALDVS(ph)ASDDEIAR_	721.31	0.85
P42858	419	S	_SGS(ph)IVELIAGGGSSC_	731.66	0.85
P42858	432	S	_LIAGGGSSCS(ph)PVLSR_	731.66	0.85
P46379	1117	S	_LQEDPNYS(ph)PQR_	713.8	0.85
P52948	1028	S	_ADTSQEICS(ph)PR_	672.27	0.85
Q14692	494	S	_LELEEDS(ph)EMDLPAFAD_	938.69	0.85
Q14692	504	S	_EMDLPAFADS(ph)DDDLER_	938.69	0.85
Q15154	65	S	_VTNDIS(ph)PES(ph)SPGVGR_	837.84	0.85
Q15154	991	S	_WVSELS(ph)YVEEK_	483.55	0.85
Q15464	310	S	_QSVDS(ph)DSESTVSPR_	1012.8	0.85
Q5T4S7	2719	S	_HVTLPSS(ph)PR_	358.51	0.85
Q69YN4	222	S	_EDYFEPIS(ph)PDR_	724.29	0.85
Q86UE4	298	S	_LSSQIS(ph)AGEEK_	614.78	0.85
Q8TAQ2	283	S	_TLTDEVNS(ph)PDSDRR_	562.24	0.85
Q96RU3	296	S	_TVS(ph)DNSLSNSR_	630.27	0.85
Q9BUH6	148	S	_LAAAEETAVS(ph)PR_	647.81	0.85
Q9HD20	935	S	_DRLS(ph)QVLR_	356.19	0.85
Q9NR31	139	T	_IDRT(ph)DAISEEK_	452.87	0.85
Q9Y5B9	979	S	_ES(ph)LGS(ph)EEES(ph)GKD_	666.74	0.85
O15042	811	S	_S(ph)EEHLYSNPIK_	511.9	0.86
O43719	445	S	_TEDGGFEFEGAS(ph)ENNAK_	621.9	0.86
P24386	651	S	_ESTNLGNLEES(ph)SE_	744.79	0.86
P42167	265	S	_VETS(ph)EHFR_	362.15	0.86
P46013	2105	S	_S(ph)PPESMDTPTSTR_	791.83	0.86
P49792	2293	T	_LNQSGTSVGT(ph)DEESDV_	830.68	0.86
P51114	420	S	_KDELS(ph)DWS(ph)LAGED_	632.57	0.86
Q02543	123	S	_AHS(ph)IQIMK_	336.5	0.86
Q13426	328	S	_NS(ph)S(ph)PEDLFDEI_	713.25	0.86
Q13586	257	S	_AEQS(ph)LHDLQER_	469.21	0.86
Q32MZ4	768	S	_ALDSNS(ph)LENDLAPGR_	927.4	0.86
Q8IYU2	386	T	_DST(ph)EITSILLK_	433.89	0.86
Q8TCT7	555	T	_T(ph)SEEM(ox)GAGAP_	674.75	0.86
Q8WWM7	305	S	_EIES(ph)SPQYR_	594.75	0.86
Q92597	336	S	_TASGSSVTS(ph)LDGTR_	709.81	0.86
Q96D46	468	S	_DPVES(ph)DT(ph)DDEGAPR_	967.36	0.86
Q96EB6	27	S	_EAASS(ph)PAGEPLR_	632.78	0.86
Q9BWH2	151	S	_S(ph)NQIPTEVR_	562.26	0.86
Q9UPR0	584	T	_EGDVT(ph)DEDEGAEMSQR_	884.67	0.86
Q9Y561	655	T	_FSVES(ph)DDT(ph)DTENER_	668.58	0.86
O60238	120	S	_DHSSQS(ph)EEEEVEGEK_	884.85	0.87
O75143	361	S	_AS(ph)PHDVLETIFVR_	521.92	0.87
P35579	1943	S	_KGAGDGS(ph)DEEVDGK_	481.86	0.87
P46087	181	S	_QWS(ph)EEET(ph)EDEEEEK_	823.63	0.87
P46087	185	T	_QWS(ph)EEET(ph)EDEEEEK_	823.63	0.87
Q1ED39	42	S	_YSVLNDDYFADV(ph)PLR_	689.97	0.87
Q5VTR2	138	S	_ALVVPEPEPDS(ph)NQER_	981.43	0.87

Q69YQ0	220	S	_AQLGINEDHS(ph)EGDEK_	574.57	0.87
Q7Z3G6	693	S	_S(ph)RSDNALHLASER_	512.57	0.87
Q8NCF5	204	S	_TEFLDLDNSPLSPPS(ph)PR_	655.64	0.87
Q8TEA8	197	S	_SASS(ph)GAEGDVSSER_	709.78	0.87
Q99442	335	S	_VGPGNHGTEGS(ph)GGER_	745.8	0.87
Q9C0H2	437	S	_QAHDS(ph)LYR_	357.15	0.87
Q9H4Z3	159	S	_MWGTS(ph)PEDK_	565.71	0.87
Q9NXE4	753	S	_HLLS(ph)PVGR_	320.17	0.87
Q9NYF3	273	S	_S(ph)QPCDLAR_	571.22	0.87
Q9Y6M7	407	S	_ENS(ph)TVDFSK_	553.72	0.87
O95251	124	S	_NTADHDES(ph)PPR_	440.17	0.88
O95425	270	S	_SPSFGDPQLS(ph)PEAR_	523.23	0.88
P18031	50	S	_DVS(ph)PFDHSR_	380.49	0.88
P18206	822	Y	_SFLDSGY(ph)R_	512.71	0.88
P36507	293	S	_RPVVDGEEGEPHS(ph)ISPR_	675.82	0.88
P43243	208	S	_S(ph)QESGYYDR_	592.72	0.88
P58004	249	S	_DPLNNS(ph)GGFESAR_	722.3	0.88
Q07157	297	S	_ISEIQLAS(ph)DHS(ph)GR_	945.37	0.88
Q07157	300	S	_SEIQLAS(ph)DHS(ph)GR_	945.37	0.88
Q13045	856	S	_NAEAVLQS(ph)PGLSGK_	484.24	0.88
Q13439	71	S	_VPS(ph)VESLFR_	557.27	0.88
Q14103	87	S	_HS(ph)EAATAQR_	525.72	0.88
Q8TBZ3	465	S	_FATLS(ph)LHDR_	380.51	0.88
Q8WWI1	1510	S	_GES(ph)LDNLDSR_	641.77	0.88
Q96N67	180	S	_S(ph)MSIDDTPR_	551.22	0.88
Q96ST2	511	S	_EAEDS(ph)DS(ph)DDNIKR_	827.29	0.88
Q96ST2	513	S	_EAEDS(ph)DS(ph)DDNIKR_	827.29	0.88
Q96T37	700	S	_LLLERPS(ph)PIR_	425.24	0.88
Q9BVG4	197	S	_GADS(ph)GEEKEEGINR_	393.41	0.88
Q9H4A3	2	S	_S(ph)GGAAEK_	233.76	0.88
Q9Y4E5	1027	S	_ECDS(ph)DDNMGAK_	661.21	0.88
O15541	329	S	_GGAS(ph)DLPEDPDEDAIPIT_	750.65	0.89
O75151	458	S	_PEVNTVAS(ph)SDEVCDGDR_	752.66	0.89
P06748	243	S	_GPSS(ph)VEDIK_	506.22	0.89
P08651	339	S	_SPFNSPS(ph)PQDSPR_	499.21	0.89
P35269	446	T	_TT(ph)PNSGDVQVTEDAVR_	884.89	0.89
P42677	11	S	_DLLHPS(ph)PEEEKR_	383.18	0.89
P48651	429	S	_CEDGTYSPEIS(ph)WHHR_	811.99	0.89
Q13595	236	S	_RDS(ph)YYDR_	352.14	0.89
Q14498	97	S	_YRS(ph)PYSGPK_	378.84	0.89
Q5XUX1	18	S	_TWDDDS(ph)DPESETDP_	734.61	0.89
Q8IXT5	575	S	_HS(ph)PEDFR_	323.13	0.89
Q8IYB3	391	S	_RLS(ph)PS(ph)AS(ph)PPR_	654.25	0.89
Q8ND56	183	S	_SS(ph)PQLDPLR_	546.76	0.89
Q8ND76	326	S	_SAS(ph)ADNLTLPR_	612.78	0.89
Q8TEM1	1844	T	_DLAVPAALT(ph)PR_	602.31	0.89
Q92785	142	S	_VDDDS(ph)LGEFPVTNSR_	577.58	0.89
Q96J84	560	S	_HSDREDDTAS(ph)VSTATR_	604.51	0.89
Q9BPX3	973	S	_CQTAEADS(ph)ES(ph)DHEV_	888.98	0.89
Q9BXX5	426	S	_EESLVEELS(ph)PASEK_	542.91	0.89
Q9HB09	242	S	_LS(ph)SDSFAR_	481.7	0.89

Q9NZD8	304	S	_GSLGIS(ph)QEEQ_	564.23	0.89
O00767	198	S	_GS(ph)TLDLSDLEAEK_	486.55	0.9
O14495	297	S	_EILS(ph)PVDIIDR_	675.34	0.9
P13798	187	S	_ALDVSAS(ph)DDEIAR_	481.21	0.9
P17706	304	S	_EDLSPAFDHS(ph)PNK_	512.88	0.9
P18615	251	S	_SDS(ph)FPER_	459.17	0.9
P49327	2204	T	_ADEASELACPT(ph)PK_	490.21	0.9
P49590	67	S	_DLS(ph)PQHMVVR_	421.2	0.9
P54253	775	S	_RWS(ph)APESR_	356.83	0.9
Q15154	533	S	_KDEETEES(ph)EYDS(ph)EH_	757.29	0.9
Q86TC9	928	S	_TPVDES(ph)DDEIQHDEIPT_	735.65	0.9
Q86WR7	43	S	_S(ph)FTLDDESLK_	412.18	0.9
Q8IVT5	406	S	_TES(ph)VPSDINNPVDR_	811.86	0.9
Q8IWS0	155	S	_DLEESFNEHELEPSS(ph)PK_	695.04	0.9
Q8IXJ6	23	S	_VQEAQDS(ph)DSDS(ph)EGG_	939.68	0.9
Q8IXJ6	27	S	_VQEAQDS(ph)DSDS(ph)EGGA_	939.68	0.9
Q8N3D4	1273	S	_AHGS(ph)FSHVR_	359.83	0.9
Q96JM3	416	S	_AVPPVS(ph)PELR_	572.79	0.9
Q96T37	294	S	_SLS(ph)PGGAALGYR_	614.79	0.9
Q9BTC0	1714	S	_SSS(ph)PAGETEGDREPQAR_	618.59	0.9
Q9BV36	264	S	_GCHSHPEEQPTS(ph)ISPSR_	779.83	0.9
Q9H788	315	S	_TLS(ph)SSAQEDIIR_	700.33	0.9
Q9NYF8	285	S	_YS(ph)PSQNSPIHHIPS(ph)R_	940.4	0.9
Q9UKA4	448	S	_EDSGLFS(ph)PIR_	600.77	0.9
Q9UPN3	4521	S	_AFLAELEQNS(ph)PK_	476.23	0.9
O75400	373	T	_QETVADFT(ph)PK_	405.85	0.91
O94804	438	S	_QVAEQGGDLS(ph)PAANR_	531.57	0.91
O94854	666	S	_RDS(ph)DSFLNIFPEK_	549.92	0.91
O95155	803	S	_NNESQWKDS(ph)PLATR_	575.92	0.91
P15056	447	S	_RDSS(ph)DDWEIPDGQITVGQR_	752	0.91
P27816	1151	S	_EAQTLDSQIQETS(ph)I_	548.25	0.91
P98175	723	S	_LASDDRPS(ph)PPR_	430.87	0.91
Q00587	195	S	_SDS(ph)LLS(ph)FR_	542.71	0.91
Q14247	401	T	_TQT(ph)PPVS(ph)PAPQPTEER_	947.9	0.91
Q14247	405	S	_TQT(ph)PPVS(ph)PAPQPTEER_	632.27	0.91
Q7L8J4	343	S	_TVAS(ph)DLQK_	471.22	0.91
Q86WC4	325	S	_SSTS(ph)FANIQENSN_	739.79	0.91
Q8IYB3	389	S	_RLS(ph)PS(ph)AS(ph)PPR_	654.25	0.91
Q8IYB3	393	S	_RLS(ph)PS(ph)AS(ph)PPR_	654.25	0.91
Q96F63	337	S	_YFDEEPEPEDAPS(ph)PELDGD_	711.93	0.91
Q9BTC0	1040	S	_S(ph)PPEGDTTLFLSR_	500.56	0.91
Q9BYX2	920	S	_AVSEGCAS(ph)EDEVEGEA_	859.81	0.91
Q9C0C2	691	S	_WLDDLLAS(ph)PPPSGGGAR_	596.95	0.91
Q9H0G5	254	S	_DAKS(ph)S(ph)ADDEIEETR_	736.78	0.91
Q9H0G5	255	S	_AKS(ph)S(ph)ADDEIEETR_	736.78	0.91
Q9NZL4	354	S	_LLQTCFSS(ph)PADDSDMR_	641.59	0.91
Q9UHY1	433	T	_TPT(ph)PEPAEVETR_	703.81	0.91
O00629	60	S	_NVPHEICEDS(ph)DIDGDYR_	743.62	0.92
P62995	201	T	_RPHT(ph)PTPGIYM(ox)GR_	526.91	0.92
Q13206	539	S	_APS(ph)LTNDEVEEFR_	529.56	0.92
Q13242	211	S	_GS(ph)PHYFS(ph)PFRPY_	538.88	0.92

Q13523	366	S	_S(ph)RS(ph)PLLNDR_	406.51	0.92
Q13523	368	S	_S(ph)RS(ph)PLLNDR_	406.51	0.92
Q15061	431	S	_S(ph)GGNEVSIEER_	628.76	0.92
Q15154	69	S	_VTNDIS(ph)PESS(ph)PGVGR_	837.84	0.92
Q15262	856	S	_YLCEGTES(ph)PYQTGQLHPAIR_	800.69	0.92
Q16181	228	T	_IYFPET(ph)DDEEENK_	613.24	0.92
Q16181	334	S	_S(ph)PLAQMEER_	635.26	0.92
Q1KMD3	165	T	_SGDET(ph)PGSEVPGDK_	727.79	0.92
Q2T9K0	333	S	_ES(ph)PDTQALLTCAEK_	548.24	0.92
Q4G0J3	257	T	_SRPT(ph)S(ph)EGSDIESTEPQK_	669.94	0.92
Q4G0J3	258	S	_SRPT(ph)S(ph)EGSDIESTEPQK_	669.94	0.92
Q4G0J3	261	S	_SRPT(ph)SEGS(ph)DIESTEPQK_	669.94	0.92
Q6NZI2	300	S	_S(ph)FTP DHVVYAR_	686.31	0.92
Q7L4I2	32	S	_EQSEVSVS(ph)PR_	599.26	0.92
Q7L9B9	173	S	_S(ph)VEDLVR_	449.21	0.92
Q86VM9	78	S	_S(ph)QDQDS(ph)EVNELSR_	833.8	0.92
Q8IYB3	597	S	_RYS(ph)PPIQR_	366.18	0.92
Q92945	181	S	_VQIS(ph)PDSGGLPER_	478.89	0.92
Q96G23	341	S	_+D820RS(ph)DREET(ph)ES(ph)S(ph)E	782.78	0.92
Q96ST2	377	S	_MDS(ph)DEDEKEGEEEEK_	583.87	0.92
Q9NW13	66	T	_EIT(ph)TFEGCK_	388.83	0.92
Q9NW13	67	T	_EIT(ph)TFEGCK_	388.83	0.92
P04792	82	S	_QLS(ph)SGVSEIR_	385.85	0.93
P28482	139	Y	_Y(ph)IHS(ph)ANVLHR_	685.29	0.93
P28482	142	S	_Y(ph)IHS(ph)ANVLHR_	685.29	0.93
P36507	295	S	_PVVDGEEGEPHSIS(ph)PR_	892.9	0.93
P38159	189	S	_GRDS(ph)YGGPPR_	381.16	0.93
P61247	263	S	_ADGYEPPVQES(ph)V_	685.78	0.93
P62753	235	S	_RLS(ph)S(ph)LRAS(ph)SK_	362.15	0.93
P62753	236	S	_RLS(ph)S(ph)LRAS(ph)SK_	362.15	0.93
Q01432	433	Y	_Y(ph)QY(ph)SEPR_	551.69	0.93
Q01432	435	Y	_Y(ph)QY(ph)SEPR_	551.69	0.93
Q01804	1006	S	_TAADVVS(ph)PGANSVDSR_	813.36	0.93
Q12791	978	S	_SS(ph)PDNS(ph)PVHGMLR_	778.8	0.93
Q12791	982	S	_SS(ph)PDNS(ph)PVHGMLR_	519.54	0.93
Q13185	176	S	_LTWHS(ph)CPEDEAQ_	776.79	0.93
Q15424	604	S	_S(ph)VVS(ph)FDK_	471.17	0.93
Q5VZL5	122	S	_VTQHES(ph)DNENEIQNK_	702.64	0.93
Q7Z3G6	751	T	_T(ph)VSDLALQNAFGDR_	529.58	0.93
Q86YR5	413	S	_LS(ph)AETWDLR_	642.31	0.93
Q8N5D0	511	S	_KDS(ph)ISEDEMVLRL_	751.33	0.93
Q96T37	656	S	_S(ph)PESDRPR_	341.81	0.93
Q9C0C2	1666	S	_S(ph)AEEGELAESK_	410.5	0.93
Q9H7L9	45	S	_GRES(ph)DEDT(ph)EDAS(ph)ETDLAK	1104.4	0.93
Q9H7L9	53	S	_GRES(ph)DEDT(ph)EDAS(ph)ETDLAK	1104.4	0.93
Q9HAU5	1088	T	_ENET(ph)DEENTEVMIK_	587.57	0.93
Q9HAV5	63	T	_CQSCIT(ph)CAVINR_	521.22	0.93
Q9NUP7	397	S	_QDNQNDSS(ph)EEHDDGGYR_	691.91	0.93
Q9NVU7	585	S	_YIEIDS(ph)DEEPR_	723.3	0.93
Q9UDY2	174	S	_SRS(ph)WEDS(ph)PER_	704.75	0.93
Q9UGH3	78	S	_SS(ph)LAETLDS(ph)T(ph)GSLDPQR_	1008.9	0.93

Q9UGH3	79	T	_SS(ph)LAETLDS(ph)T(ph)GSLDPQR_	1008.9	0.93
Q9UQN3	199	S	_ATIS(ph)DEEIER_	621.77	0.93
O60716	864	S	_S(ph)QSSH(ph)YDDSTLPLIDR_	694.28	0.94
O94915	505	S	_VIGMS(ph)VY(ph)Y(ph)PQVR_	826.32	0.94
O94915	507	Y	_VIGMS(ph)VY(ph)Y(ph)PQVR_	826.32	0.94
O94915	508	Y	_VIGMS(ph)VY(ph)Y(ph)PQVR_	826.32	0.94
O95394	64	S	_STIGVMVTAS(ph)HNPEEDNGVK_	722.32	0.94
P29375	1111	S	_DLDLEPLS(ph)DLEEGLEETR_	718.32	0.94
P38159	352	S	_GLPPS(ph)M(ox)ER_	328.14	0.94
P42684	819	S	_TVSTS(ph)SQPEENVDR_	814.84	0.94
Q00536	119	S	_RLS(ph)LPADIR_	374.2	0.94
Q05209	673	S	_DVDVSEDS(ph)PPPLPER_	577.92	0.94
Q14669	312	S	_SES(ph)PPAELPSLR_	681.82	0.94
Q8NBU5	322	S	_EYVNSTSEES(ph)HDEDEIRPVQQQD	805.85	0.94
Q8WYH8	118	S	_MEGS(ph)DFESSGGR_	669.74	0.94
Q96ST2	157	S	_HPAS(ph)DS(ph)EIEELQK_	548.22	0.94
Q96ST2	159	S	_HPAS(ph)DS(ph)EIEELQK_	548.22	0.94
Q9GZY8	155	S	_S(ph)MSENAVR_	487.19	0.94
Q9NSY0	409	T	_T(ph)PTPEPFDSETR_	728.8	0.94
Q9UDY2	266	S	_AYS(ph)PEYR_	483.19	0.94
Q9UHV7	474	T	_RPLT(ph)PFHHR_	310.91	0.94
Q9UQ35	2123	S	_PSM(ox)S(ph)PTPLDR_	399.51	0.94
Q9Y561	652	S	_SLFSVES(ph)DDT(ph)DTENER_	668.58	0.94
Q9Y6I3	435	S	_S(ph)PGAFDMGVR_	602.25	0.94
Q9Y6M1	162	S	_ISYIPDEEVSS(ph)PS(ph)PPQR_	687.63	0.94
O00257	434	S	_SIS(ph)TPTCLGGSPAER_	842.37	0.95
O15400	129	S	_VS(ph)GSFPEDSSK_	610.25	0.95
P02545	392	S	_LSPS(ph)PTSQR_	351.5	0.95
P18206	721	S	_S(ph)LLDASEEAIK_	419.2	0.95
P29317	901	S	_LPS(ph)TSGS(ph)EGVPFR_	498.54	0.95
P35222	551	T	_T(ph)SMGGTQQQFVEGVR_	852.87	0.95
P43243	766	S	_DTSENADGQS(ph)DENKDDYTIPDEY	953.04	0.95
P49585	343	S	_TS(ph)PPCSPANLSR_	683.79	0.95
P62263	139	S	_IEDVTPIPSDS(ph)TR_	755.35	0.95
Q02241	867	S	_YM(ox)LTHQELAS(ph)DGEIETK_	687.63	0.95
Q02880	1550	S	_KAS(ph)GS(ph)ENEGDYNPGR_	580.88	0.95
Q03001	3968	S	_S(ph)FSEDVISHK_	614.77	0.95
Q03135	9	S	_YVDS(ph)EGHLYTVPIR_	576.94	0.95
Q13435	431	S	_GFEEEHKDS(ph)DDDS(ph)S(ph)DDE(	645.95	0.95
Q13435	435	S	_GFEEEHKDS(ph)DDDS(ph)S(ph)DDE(	645.95	0.95
Q13435	436	S	_GFEEEHKDS(ph)DDDS(ph)S(ph)DDE(	645.95	0.95
Q13563	812	S	_SLDDS(ph)EEDDEDSGHSSR_	692.24	0.95
Q15154	68	S	_VTNDIS(ph)PES(ph)SPGVGR_	837.84	0.95
Q15291	350	S	_ES(ph)EFDIEDEK_	718.26	0.95
Q32P44	889	S	_TPSLS(ph)PASSLDV_	627.29	0.95
Q5T200	242	S	_TSAVSS(ph)PLLDQQR_	741.35	0.95
Q69YN4	1579	S	_SFLSEPSS(ph)PGR_	622.27	0.95
Q8IVF2	280	S	_SHS(ph)SSEAYEPR_	665.26	0.95
Q8ND76	25	S	_LES(ph)YRPDTDLSR_	511.23	0.95
Q96FW1	16	S	_QEPLGS(ph)DSEGVNCLAYDEAIMAQ	992.75	0.95
Q96NE9	544	S	_HSLS(ph)LDDIR_	379.18	0.95

Q96PK6	582	S	_TRLS(ph)PPR_	302.82	0.95
Q96RK0	496	S	_VFS(ph)PVIR_	449.23	0.95
Q99543	47	S	_NAS(ph)AS(ph)FQELEDK_	749.78	0.95
Q99543	49	S	_NAS(ph)AS(ph)FQELEDK_	749.78	0.95
Q9NRX5	352	T	_LTLTSDEST(ph)LIEDGGAR_	619.95	0.95
Q9NRX5	364	S	_SDGS(ph)LEDGDDVHR_	741.28	0.95
Q9Y519	402	S	_TLLLS(ph)S(ph)DDEF_	650.24	0.95
Q9Y5B9	982	S	_ES(ph)LGS(ph)EEES(ph)GKDWDELEI	666.74	0.95
Q9Y5B9	986	S	_ES(ph)LGS(ph)EEES(ph)GKDWDELEI	666.74	0.95
O43719	676	S	_LFEES(ph)DDKEDEDADGK_	481.19	0.96
O75131	242	S	_S(ph)SPVEFECINEK_	506.88	0.96
O75131	243	S	_S(ph)SPVEFECINEK_	506.88	0.96
O75970	483	S	_DADLS(ph)PVNASIIK_	474.9	0.96
O95297	221	S	_SPS(ph)DTEGLVK_	556.75	0.96
P04792	83	S	_QLSS(ph)GVSEIR_	385.85	0.96
P18754	11	S	_S(ph)PPADAIPK_	325.82	0.96
P22234	27	S	_EVYELLS(ph)PGK_	443.87	0.96
P24534	106	S	_DDDDIDLFGS(ph)DDEEESEEA	784.95	0.96
P51532	1382	S	_EVDYSDS(ph)LTEK_	683.28	0.96
P52756	59	S	_DYDS(ph)PERER_	623.74	0.96
P62753	240	S	_RLS(ph)S(ph)LRAS(ph)TSK_	362.15	0.96
P86791	266	S	_HIEPELAGRDS(ph)PIR_	557.27	0.96
Q13426	232	S	_DPVYDES(ph)T(ph)DEESENQTDLSGI	780.06	0.96
Q13426	233	T	_DPVYDES(ph)T(ph)DEESENQTDLSGI	780.06	0.96
Q13464	1105	S	_LLDLSDSTSVAS(ph)FPSAETDGNLF	968.43	0.96
Q13615	613	S	_S(ph)YDNLTTACDNTVPLASR_	693.3	0.96
Q13627	321	Y	_IYQY(ph)IQSR_	575.77	0.96
Q14155	518	S	_MS(ph)GFIYQGK_	370.83	0.96
Q16629	192	S	_YFQS(ph)PS(ph)R_	522.68	0.96
Q16629	194	S	_YFQS(ph)PS(ph)R_	522.68	0.96
Q7Z6Z7	1368	S	_DLS(ph)MSEEDQMMR_	776.28	0.96
Q8IXT5	591	S	_RPS(ph)EEDFR_	372.49	0.96
Q92576	1133	S	_MAPVDDL(ph)PK_	417.19	0.96
Q92794	941	S	_RLS(ph)EGVEPWR_	436.87	0.96
Q96N67	1432	S	_SPS(ph)GSAFGSQENLR_	758.83	0.96
Q96RL1	677	S	_DLNES(ph)PVK_	491.22	0.96
Q96ST3	1112	S	_YMNSDTTS(ph)PELR_	747.3	0.96
Q9BV36	266	S	_AEGLEEADTGASGCHSHPEEQPT	779.83	0.96
Q9NQ92	66	S	_GTQSIPNDS(ph)PAR_	661.79	0.96
Q9NZT2	349	S	_S(ph)VEPQDAGPLER_	689.31	0.96
Q9P1Y6	1202	S	_EAS(ph)PAPLAQGEPGREDLPTR_	724.34	0.96
Q9P275	952	S	_HSCSPM(ox)GDGDPEAM(ox)EES(ph)	734.26	0.96
Q9UKA4	1485	T	_SLT(ph)DSCLFEK_	427.18	0.96
Q9UKA4	1580	S	_LS(ph)PLTGQACR_	591.77	0.96
Q9UQ35	1129	S	_S(ph)GMSPEQSR_	529.7	0.96
O00159	864	S	_SIS(ph)PEWK_	463.7	0.97
O43719	579	S	_DLDEEGS(ph)EKELHENVLDK_	545.49	0.97
O75052	192	S	_NS(ph)NSSGDPGR_	535.7	0.97
O95696	1052	S	_VHGEPTS(ph)DLS(ph)DID_	772.78	0.97
O95696	1055	S	_VHGEPTS(ph)DLS(ph)DID_	772.78	0.97
O95999	138	S	_SNS(ph)DESNFSEK_	662.24	0.97

P42167	378	S	_PLELS(ph)DFR_	528.74	0.97
P46013	3127	T	_T(ph)SPEMDIQNPDDGAR_	863.34	0.97
P46013	3128	S	_T(ph)SPEMDIQNPDDGAR_	863.34	0.97
P48651	417	S	_TYS(ph)ECEDGTYSPEISWHHR_	811.99	0.97
Q04726	203	S	_ESSANNSVS(ph)PSESLR_	822.35	0.97
Q13425	393	S	_S(ph)PSLGSDLTFATR_	716.33	0.97
Q15459	359	S	_AEPPSQLDQDTQVQDMDEGS(ph)D	833.08	0.97
Q4G0F5	304	S	_SMS(ph)HQAAIASQR_	683.8	0.97
Q5JSH3	96	S	_ELSDQATAS(ph)PIVAR_	769.37	0.97
Q7Z3G6	319	S	_ACSAGEDPNGS(ph)DSSDSAFQNR_	774.96	0.97
Q8N2M8	294	S	_RDS(ph)PTYDPYKR_	370.17	0.97
Q8N3X1	432	S	_ALEEGDGSVSGSS(ph)PR_	764.32	0.97
Q8WYP5	1297	S	_EHQEMDEGSQS(ph)LEK_	576.23	0.97
Q9BPX3	1015	S	_LNLAQFLNEDLS(ph)_	728.84	0.97
Q9BRX2	380	S	_FPVPELSDQEGDS(ph)S(ph)SEED_	709.58	0.97
Q9BRX2	381	S	_FPVPELSDQEGDS(ph)S(ph)SEED_	709.58	0.97
Q9BRX2	382	S	_FPVPELSDQEGDS(ph)S(ph)SEED_	709.58	0.97
Q9H5H4	83	S	_FEPES(ph)PGFESR_	454.52	0.97
Q9H814	356	S	_ETFAS(ph)DTNEALASLDESQEGHAE,	910.72	0.97
Q9NRL2	731	T	_ELDQDMVT(ph)EDEDPGSHK_	713.94	0.97
Q9NYL9	25	S	_DLDEDELLGNLS(ph)ETELK_	671.64	0.97
Q9UDY2	170	S	_S(ph)WEDSPER_	543.2	0.97
Q9Y6M7	86	S	_EDGRESPTS(ph)YDTPSQR_	601.91	0.97
O43491	87	S	_S(ph)YTLVVAK_	480.74	0.98
O95671	239	S	_HDSIPAADTFEDLS(ph)DVEGGGSEP	937.4	0.98
P18583	1769	S	_SAAS(ph)PVVSSM(ox)PER_	707.31	0.98
P51532	699	S	_IPDPDSDDVS(ph)EVDAR_	570.57	0.98
Q12888	265	S	_SEDMPFS(ph)PK_	373.15	0.98
Q13435	307	S	_SSLGQS(ph)AS(ph)ETEEDTVSVSK_	700.95	0.98
Q13435	309	S	_SSLGQS(ph)AS(ph)ETEEDTVSVSK_	700.95	0.98
Q13523	578	S	_T(ph)RS(ph)PS(ph)PDDILER_	542.54	0.98
Q13523	580	S	_T(ph)RS(ph)PS(ph)PDDILER_	542.54	0.98
Q14004	1246	T	_ILELT(ph)PEPDRPR_	379.69	0.98
Q15366	189	S	_PSSS(ph)PVIFAGGQDR_	749.34	0.98
Q5MIZ7	117	S	_DPSVEVTQDLIDES(ph)EEER_	1085.5	0.98
Q5ZPR3	525	S	_HSDS(ph)KEDDGQEIA_	755.79	0.98
Q7L2E3	226	S	_GSS(ph)FEM(ox)TDDDSAIR_	813.8	0.98
Q7Z6Z7	1395	S	_AES(ph)PEEVACR_	614.24	0.98
Q86W56	302	S	_ESEPEPES(ph)PMDVDNSK_	548.54	0.98
Q8IX90	155	S	_S(ph)PQLSDFGLER_	664.8	0.98
Q8TDY2	237	S	_S(ph)TELVLSPPMPR_	712.83	0.98
Q8WVC0	658	S	_YVIS(ph)DEEEEDDD_	769.26	0.98
Q9BW71	84	T	_RPPT(ph)PCS(ph)DPER_	491.19	0.98
Q9BW71	87	S	_RPPT(ph)PCS(ph)DPER_	491.19	0.98
Q9H7N4	1001	T	_T(ph)PEVSFLPEEATEEAGVR_	1021	0.98
Q9HAW4	1156	S	_NIDDASQMDLFHRDS(ph)DDDQTEEC	901.86	0.98
Q9NQQ7	335	S	_GLGS(ph)SPDLELLLR_	725.37	0.98
Q9UKJ3	1014	S	_S(ph)WGHES(ph)PEER_	458.49	0.98
Q9UKV3	655	S	_S(ph)LS(ph)PGVSR_	481.69	0.98
Q9UKV3	657	S	_S(ph)LS(ph)PGVSR_	481.69	0.98
Q9Y4P1	383	S	_FFDS(ph)EDEDFEILSL_	893.36	0.98

Q9Y6X9	777	S	_DSNELS(ph)DS(ph)AGEEDSADLK_	681.24	0.98
Q9Y6X9	779	S	_DSNELS(ph)DS(ph)AGEEDSADLK_	681.24	0.98
O14545	415	S	_LDSQPQETS(ph)PELPR_	838.88	0.99
O15027	391	S	_QIDSS(ph)PVGGETDETTVSQNYR_	788.34	0.99
O43719	714	S	_LFDEEEDS(ph)S(ph)EKLFDDS(ph)DE	636.97	0.99
O75971	96	S	_SHVTEEEEEEEEEES(ph)DS_	1051.9	0.99
P06493	14	T	_IGEGT(ph)Y(ph)GVVYK_	449.19	0.99
P24386	652	S	_ESTNLGNLEESS(ph)E_	744.79	0.99
P29317	897	S	_LPS(ph)TSGSEGVPFR_	707.32	0.99
P29966	150	T	_AEDGATPSNET(ph)PK_	790.83	0.99
P33527	915	S	_QLS(ph)SSSSYSGDISR_	777.33	0.99
P48382	603	S	_EHVLQSS(ph)LS(ph)QEHK_	841.35	0.99
P48382	605	S	_EHVLQSS(ph)LS(ph)QEHK_	841.35	0.99
P98175	797	S	_AHLS(ph)ENELEALEK_	391.43	0.99
Q08AE8	387	S	_LRPVS(ph)PEEIR_	425.89	0.99
Q13049	335	S	_EMDMSPEEVVAS(ph)PR_	552.89	0.99
Q13283	143	T	_YQDEVFGGFVT(ph)EPQEESEEEVEE	660.07	0.99
Q13426	320	S	_EHISAENMS(ph)LETLR_	855.38	0.99
Q13426	327	S	_NS(ph)S(ph)PEDLFDEI_	713.25	0.99
Q13459	1348	T	_ATGAALT(ph)PTEER_	648.8	0.99
Q13464	1102	S	_LLDLSDSTS(ph)VAS(ph)FPSAETDG	995.09	0.99
Q4VNC1	1145	Y	_CFGY(ph)QSK_	323.79	0.99
Q58WW2	654	T	_DSALQDT(ph)DDS(ph)DDDPVLIPGAF	1188	0.99
Q58WW2	657	S	_DSALQDT(ph)DDS(ph)DDDPVLIPGAF	1188	0.99
Q6P158	127	S	_DLQEQDADAGS(ph)ER_	757.29	0.99
Q6P9H4	383	S	_GSES(ph)PNSFLDQESR_	816.83	0.99
Q6PJG2	655	T	_SFELPPYT(ph)PPILS(ph)PVR_	690.66	0.99
Q6PJG2	661	S	_SFELPPYT(ph)PPILS(ph)PVR_	690.66	0.99
Q7Z309	58	S	_HS(ph)LEEGLDMVNR_	740.32	0.99
Q8IXT5	710	S	_RPPEEDFRHS(ph)PEEDFR_	531.48	0.99
Q96EZ8	282	S	_GDQVLNFS(ph)DAEDLIDDSK_	687.63	0.99
Q96I25	155	S	_RPDPDS(ph)DEDEDYER_	909.33	0.99
Q96ST2	287	S	_NQAS(ph)DS(ph)ENEELPKPR_	625.25	0.99
Q96ST2	289	S	_NQAS(ph)DS(ph)ENEELPKPR_	625.25	0.99
Q9BPX3	975	S	_CQTAEADS(ph)ES(ph)DHEVPEPESEI	888.98	0.99
Q9H7F0	817	S	_LVHDS(ph)LEDLQMTR_	546.25	0.99
Q9NQW6	323	S	_TPIS(ph)PLK_	279.15	0.99
Q9NTI5	1166	S	_METVSNASSSSNPSS(ph)PGR_	937.88	0.99
Q9Y2V2	52	S	_TFS(ph)ATVR_	431.2	0.99
P06756	1046	S	_EQLQPHENGEGNS(ph)ET_	583.56	1
P11717	2400	S	_ALS(ph)SLHGDDQDS(ph)EDEVLTPE	665.04	1
P21333	1084	S	_AFGPGLQGGSAGS(ph)PAR_	503.9	1
P49585	331	S	_ERS(ph)PS(ph)PSFR_	408.16	1
Q02880	1581	S	_TSFDQDS(ph)DVDIFPSDFPTEPPSLP	963.75	1
Q12906	592	T	_LFPDT(ph)PLALDANK_	747.87	1
Q13017	1173	S	_THS(ph)DAS(ph)DDEAFTTSK_	591.21	1
Q13017	1176	S	_THS(ph)DAS(ph)DDEAFTTSK_	591.21	1
Q13610	50	S	_LQEEGGGS(ph)DEEETGSPSEDGMQ	888.01	1
Q16629	196	S	_YFQS(ph)PS(ph)RS(ph)R_	684.23	1
Q5VZ89	760	S	_VPS(ph)GIFDVNS(ph)R_	450.85	1
Q7Z309	115	S	_IDFTPVS(ph)PAPS(ph)PTR_	548.91	1

Q7Z309	119	S	_RIDFTPVS(ph)PAPS(ph)PTR_	600.94	1
Q86VM9	83	S	_SQDQDS(ph)EVNELSR_	793.82	1
Q8IXT5	718	S	_QS(ph)PQEHFR_	554.73	1
Q8IYB3	802	S	_NS(ph)DQEGGK_	486.18	1
Q8IYB8	725	S	_ATEPPS(ph)PDAGELSLASR_	889.4	1
Q8NC51	328	S	_S(ph)KSEEHAEDSVMDHHFR_	439.18	1
Q8TEQ6	757	S	_LES(ph)IDGNEEESMK_	520.88	1
Q8WVT3	184	S	_SPS(ph)FGGASEASAR_	652.27	1
Q96N67	452	S	_TTS(ph)GDDACNLTSFR_	812.82	1
Q96S99	227	S	_QEEAEEQGAGS(ph)PGQPAHLAR_	1071.5	1
Q96TA1	641	S	_QVVSVVQDEEVGLPFEASPES(ph)PP	931.18	1
Q96TA1	646	S	_QVVSVVQDEEVGLPFEASPES(ph)PP	745.14	1
Q99638	387	S	_SPQGSPVLAEDS(ph)EGEG_	868.36	1
Q9NQ55	359	S	_VGGS(ph)DEEASGIPSR_	480.87	1
Q9Y6M1	164	S	_ISYIPDEEVSS(ph)PS(ph)PPQR_	687.63	1
O43719	616	S	_VLDEEGS(ph)ER_	557.23	1.01
O60832	485	S	_AGLES(ph)GAEPGDGDS(ph)DTTK_	933.84	1.01
P15407	267	T	_SSSSSGDPSSDPLGSPT(ph)LLAL_	685.64	1.01
P25490	118	S	_EEVVGDDDS(ph)DGLR_	476.53	1.01
P35221	655	S	_TS(ph)VQT(ph)EDDQLIAGQSAR_	989.91	1.01
P38398	1342	S	_ELVS(ph)DDEER_	586.23	1.01
Q12770	822	S	_RDS(ph)GVGSGLEAQESWER_	971.92	1.01
Q6DN90	512	S	_NS(ph)WDSPAFSNDVIR_	844.36	1.01
Q7Z5L9	240	S	_RPAS(ph)VSSSAAVEHEQR_	597.61	1.01
Q8NEJ9	214	S	_EQYS(ph)DAPEEIR_	708.79	1.01
Q8TDY2	666	T	_M(ox)ESTAGITTTT(ph)SPR_	774.83	1.01
Q8TEW0	583	T	_AEDEDIVLTPDGT(ph)R_	805.85	1.01
Q92597	330	S	_T(ph)AS(ph)GSSVTSLDGTR_	749.79	1.01
Q9H3H3	12	S	_MEPGEELEEEGS(ph)PGGR_	891.85	1.01
Q9H7E2	256	S	_IRS(ph)EDEEDLGAR_	792.34	1.01
Q9HAZ1	138	S	_S(ph)IEDDEEGHLICQSGDVLR_	751.32	1.01
Q9NR30	71	S	_AEPSEVDMNS(ph)PK_	692.28	1.01
Q9NRY4	1179	S	_TSFSVGS(ph)DDELGPIR_	553.91	1.01
Q9Y2K7	28	S	_YEDDGIS(ph)DDEIEGK_	832.81	1.01
Q9Y4R8	836	S	_LLPPAS(ph)P_	387.69	1.01
O43166	1585	S	_TLS(ph)DESIYNSQR_	746.82	1.02
O75962	1723	S	_S(ph)SMEMEGIFNHK_	497.2	1.02
O75962	1724	S	_S(ph)SMEMEGIFNHK_	497.2	1.02
P08670	53	Y	_SLY(ph)ASSPGGVYATR_	754.84	1.02
P08670	459	S	_DGQVINETS(ph)QHHDDLE_	958.89	1.02
P16949	16	S	_RAS(ph)GQAFELILS(ph)PR_	852.9	1.02
Q09666	216	S	_LPS(ph)GSGAAS(ph)PTGSAVDIR_	601.6	1.02
Q13098	474	S	_EGS(ph)QGELTPANSQSR_	547.57	1.02
Q13144	544	S	_GGG(ph)PQMDDIK_	376.49	1.02
Q14671	124	S	_S(ph)MDELNHDFQALALEGR_	675.96	1.02
Q14676	329	S	_AQPFGFIDS(ph)DT(ph)DAEEER_	696.26	1.02
Q15121	116	S	_QPS(ph)EEEEIK_	576.76	1.02
Q15678	593	S	_YVSGS(ph)SPDLVTR_	680.81	1.02
Q69YH5	400	S	_VTFGEDLS(ph)PEVFDESPLANTPLR_	871.74	1.02
Q7Z3G6	695	S	_S(ph)DNALHLASER_	646.79	1.02
Q8N108	52	S	_TLEEEEM(ox)M(ox)EGETNFS(ph)S(ph)	961.03	1.02

Q8N108	53	S	_TLEEEEM(ox)M(ox)EGETNFS(ph)S(ph)	961.03	1.02
Q8NC51	330	S	_S(ph)EEAHAEDSVMDDHFR_	494.95	1.02
Q96S44	8	T	_ATT(ph)PADGEEPAPAEALAAAR_	1059.5	1.02
Q9BV36	314	S	_NEQLPLQYLADVDT(ph)S(ph)DEESIR_	865.7	1.02
Q9UBN6	381	S	_LFYEEDEAGS(ph)ATS(ph)CL_	926.33	1.02
Q9UBN6	383	T	_LFYEEDEAGS(ph)AT(ph)SCL_	617.89	1.02
Q9UBN6	384	S	_LFYEEDEAGS(ph)ATS(ph)CL_	926.33	1.02
Q9Y2W2	237	S	_RDEDMLYS(ph)PELAQR_	901.89	1.02
Q9Y561	851	S	_NETS(ph)DDEALLLC_	730.29	1.02
A6NKF1	402	S	_TLEEVVMAEEDEGTDRPGS(ph)PA_	814.34	1.03
O43150	701	S	_LLHEDLDES(ph)DDDMDEK_	666.92	1.03
O60493	72	S	_RYS(ph)DFEWLR_	451.2	1.03
O60504	529	T	_LCDDGPQLPT(ph)SPR_	768.33	1.03
O60841	135	S	_VEMYS(ph)GS(ph)DDDDDFNK_	948.8	1.03
O60841	137	S	_VEMYS(ph)GS(ph)DDDDDFNK_	948.8	1.03
O60841	164	S	_WDGS(ph)EEDEDNSK_	745.75	1.03
P28715	384	S	_NAPAAVDEGSIS(ph)PR_	732.33	1.03
Q09666	93	S	_S(ph)PEPGQTWTR_	413.51	1.03
Q09666	210	S	_LPS(ph)GSGAAS(ph)PTGSAVDIR_	901.89	1.03
Q14934	334	S	_RTS(ph)SEQAVLPR_	697.84	1.03
Q15269	891	S	_SLDPLGS(ph)EEEEAEAS(ph)EDDSLHL	967.4	1.03
Q15269	898	S	_SLDPLGS(ph)EEEEAEAS(ph)EDDSLHL	967.4	1.03
Q15637	80	S	_S(ph)PS(ph)PEPIYNSEGK_	522.2	1.03
Q15637	82	S	_S(ph)PS(ph)PEPIYNSEGK_	522.2	1.03
Q8TDY2	222	S	_LDS(ph)LPEHEDSEK_	493.54	1.03
Q96T37	659	S	_HLDRS(ph)PESDRPR_	772.85	1.03
Q99661	633	S	_EEEELSSQMSS(ph)FNEAMTQIR_	809.33	1.03
Q9BZC7	2412	T	_ALVADEPEDLDT(ph)EDEGLIS(ph)FEI	961.06	1.03
Q9NP66	105	S	_S(ph)PLTGYVR_	486.73	1.03
Q9P2D1	2559	S	_NIPS(ph)PGQLDPDTR_	745.34	1.03
Q9UBL3	101	S	_DTLEGAGDTSEVMDTQAGS(ph)VDEI	921.7	1.03
Q9UQ35	1132	S	_SGM(ox)S(ph)PEQSR_	537.7	1.03
Q9Y2D5	720	S	_TLS(ph)MIEEEIR_	650.8	1.03
Q9Y2V2	41	S	_GNVVPS(ph)PLPTR_	608.81	1.03
Q9Y4B5	1514	S	_VLHS(ph)PPAVR_	352.52	1.03
P07900	263	S	_ESEDKPEIEDVGS(ph)DEEEEEKK_	481	1.04
P52292	62	S	_NVSSFPDDATS(ph)PLQENR_	652.95	1.04
P52948	1023	S	_ADTS(ph)QEICSPR_	672.27	1.04
Q13136	238	S	_S(ph)SDGS(ph)LSHEEDLAK_	545.54	1.04
Q13283	230	S	_S(ph)S(ph)SPAPADIAQTVQEDLR_	682.29	1.04
Q15154	872	S	_SDGS(ph)ENLCTPQQSR_	829.83	1.04
Q15836	62	T	_ADALQAGASQFET(ph)SAAK_	582.6	1.04
Q58WW2	336	S	_DGEQS(ph)PNVSLMQR_	514.22	1.04
Q5T6F2	254	S	_NS(ph)VEEWTTEDWTEDLSETK_	793.66	1.04
Q5VZ89	753	S	_VPS(ph)GIFDVNS(ph)R_	450.85	1.04
Q7Z417	652	S	_NDS(ph)WGSFDLR_	638.75	1.04
Q8N9N8	155	S	_QYHES(ph)EEES(ph)EEEEAA_	978.31	1.04
Q8N9N8	159	S	_QYHES(ph)EEES(ph)EEEEAA_	978.31	1.04
Q8NDV7	991	S	_EEEPTGWEEPS(ph)PESIR_	976.4	1.04
Q8WVC0	197	S	_MQNTDDEERPQLS(ph)DDER_	719.95	1.04
Q8WX93	893	S	_IAS(ph)DEEIQGTK_	635.78	1.04

Q9BSJ8	1034	S	_TLS(ph)PEFNER_	586.75	1.04
Q9NV58	66	S	_IS(ph)IGS(ph)LFR_	526.73	1.04
Q9NV58	69	S	_IS(ph)IGS(ph)LFR_	526.73	1.04
Q9NYF8	177	S	_AEGEPQEES(ph)PLK_	465.2	1.04
Q9NZT2	315	S	_VEEEGS(ph)PGDPDHEASTQGR_	692.94	1.04
Q9P1Y6	915	S	_GAVAAEGAS(ph)DTEREEPTESQGLA	861.38	1.04
Q9UQ88	577	S	_EYGS(ph)PLK_	437.19	1.04
P09651	6	S	_S(ph)ES(ph)PKEPEQLR_	730.3	1.05
P35580	1956	S	_QLHLEGASLELS(ph)DDDTESK_	722.99	1.05
P46013	1679	S	_AFMES(ph)PK_	297.12	1.05
P50502	75	S	_VEEDLKADEPS(ph)S(ph)EES(ph)DLE	655	1.05
Q02880	1552	S	_KAS(ph)GS(ph)ENEGDYNPGR_	580.88	1.05
Q13136	239	S	_RSS(ph)DGS(ph)LSHEEDLAK_	597.57	1.05
Q13136	242	S	_S(ph)SDGS(ph)LSHEEDLAK_	817.8	1.05
Q13427	687	S	_ADRQDS(ph)PFSK_	410.84	1.05
Q13501	269	T	_SRLT(ph)PVSPESSTEELK_	605.28	1.05
Q14676	495	S	_DQPPFGDS(ph)DDS(ph)VEADK_	627.89	1.05
Q14676	498	S	_DQPPFGDS(ph)DDS(ph)VEADK_	627.89	1.05
Q86VM9	67	S	_GPSQEEEDNHS(ph)DEEDR_	651.56	1.05
Q8N3U4	1160	T	_GT(ph)SLMEDDEEPIVEDVMMSSSEGR	879.35	1.05
Q8N3U4	1161	S	_GT(ph)SLMEDDEEPIVEDVMMSSSEGR	879.35	1.05
Q96T37	670	S	_HCAPS(ph)PDR_	340.46	1.05
Q9UDY2	413	S	_S(ph)FS(ph)PEER_	506.16	1.05
Q9UKJ3	1009	S	_S(ph)WGHES(ph)PEER_	458.49	1.05
O43719	453	S	_ESS(ph)PEKEAEEGCPEK_	595.9	1.06
O43719	702	S	_LFEDDDS(ph)NEK_	431.16	1.06
P00533	1039	S	_TPLLSSLS(ph)ATS(ph)NNSTVACIDR_	789.68	1.06
P00533	1042	S	_TPLLSSLS(ph)ATS(ph)NNSTVACIDR_	789.68	1.06
P23497	157	S	_LPLQES(ph)EEEEEREER_	926.9	1.06
P30305	353	S	_S(ph)VTPPEEQQEAEPEK_	593.26	1.06
P35659	51	S	_S(ph)LIVEGK_	413.21	1.06
P43243	195	S	_RDSFDDRGPS(ph)LNPVLDYDHGSR_	650.29	1.06
P52756	78	S	_SEDGYHS(ph)DGDYGEHDYR_	694.58	1.06
Q13177	169	T	_GTEAPAVVT(ph)EEEDDDEETAPPVIA	939.75	1.06
Q14160	1226	S	_NS(ph)LESISS(ph)IDR_	690.78	1.06
Q14C86	902	S	_S(ph)SDIVSSVR_	515.23	1.06
Q15696	349	S	_DIYLS(ph)PDR_	529.73	1.06
Q5T200	1068	S	_KEDTAFS(ph)DWS(ph)DEDVPDR_	724.6	1.06
Q6WCQ1	993	S	_S(ph)NPDFLK_	450.7	1.06
Q6Y7W6	160	S	_SQS(ph)WEER_	501.19	1.06
Q86WB0	370	S	_S(ph)WDSSSPVDRPEPEAAS(ph)PTT	811.33	1.06
Q92508	1646	S	_TAS(ph)ELLLDR_	549.27	1.06
Q92614	1970	S	_LEGDS(ph)DVDSELEDR_	553.55	1.06
Q92934	99	S	_S(ph)APPNLWAAQR_	430.87	1.06
Q96T37	674	S	_HCAPS(ph)PDRS(ph)PELSSSR_	648.26	1.06
Q9BPX3	674	S	_TLHCEGTEINS(ph)DDEQESK_	724.62	1.06
Q9C0C9	87	S	_LIHGEDS(ph)DS(ph)EGEEEGR_	959.84	1.06
Q9C0C9	89	S	_LIHGEDS(ph)DS(ph)EGEEEGR_	959.84	1.06
Q9HAN9	117	S	_LEASDCDHQQNS(ph)PTLERPGR_	598.26	1.06
Q9ULH0	918	S	_QM(ox)S(ph)FDLTK_	355.82	1.06
Q9UMY4	73	S	_RYS(ph)DFEWLK_	441.86	1.06

Q00161	110	S	_TTWGDGGENS(ph)PCNVVSK_	629.92	1.07
Q075569	18	S	_EDS(ph)GTFSLGK_	560.73	1.07
Q14618	37	S	_LDIDS(ph)PPITAR_	426.54	1.07
Q22059	240	S	_SLS(ph)ELESK_	543.26	1.07
Q46821	1427	S	_GAES(ph)PFEEK_	537.21	1.07
Q50502	76	S	_VEEDLKADEPS(ph)S(ph)EES(ph)DLE	655	1.07
Q09161	21	T	_T(ph)SDANETEDHLESICK_	681.29	1.07
Q09161	22	S	_T(ph)SDANETEDHLESICK_	681.29	1.07
Q09666	5731	S	_GGVTGS(ph)PEASISGSK_	707.32	1.07
Q5SXM2	1398	S	_VGS(ph)ES(ph)EDEDLLSELELADR_	755.97	1.07
Q5SXM2	1400	S	_VGS(ph)ES(ph)EDEDLLSELELADR_	755.97	1.07
Q709C8	736	S	_TTNS(ph)SLEEIMDK_	483.21	1.07
Q8TDR0	476	S	_RQDS(ph)MEALQMDR_	780.32	1.07
Q9NTI5	1177	S	_LDSS(ph)EMDHS(ph)ENEDYTMSSPLI	683.01	1.07
Q9UDY2	415	S	_S(ph)FS(ph)PEER_	506.16	1.07
Q9Y3E7	200	S	_VTDALPEPEPPGAMAAS(ph)EDEEEE	1213.2	1.07
Q060504	530	S	_LCDDGPQLPTS(ph)PR_	768.33	1.08
Q094880	287	T	_NSADDEELT(ph)NDS(ph)LTLSQSK_	742.96	1.08
Q094880	290	S	_NSADDEELT(ph)NDS(ph)LTLSQSK_	742.96	1.08
Q04920	113	S	_RPGAS(ph)PTGETPTIEEGEEDEDEAS	1066.1	1.08
Q13861	99	S	_VS(ph)VCAETYNPDEEEEDTDPR_	812.31	1.08
Q17812	571	S	_S(ph)GSSS(ph)PDSEITELK_	798.81	1.08
Q27708	1859	S	_AS(ph)DPGLPAEEPK_	645.78	1.08
Q35251	69	S	_IIYDS(ph)DS(ph)ESEETLQVK_	672.61	1.08
Q35251	71	S	_IIYDS(ph)DS(ph)ESEETLQVK_	672.61	1.08
Q42167	74	T	_GPPDFSSDEEREPT(ph)PVLGSGAAA	884.06	1.08
Q50502	79	S	_VEEDLKADEPS(ph)S(ph)EES(ph)DLE	655	1.08
Q51946	315	T	_HEEEWT(ph)DDDLVESL_	963.37	1.08
Q03468	486	S	_LEDDS(ph)EES(ph)DAEFDEGFK_	531.18	1.08
Q03468	489	S	_LEDDS(ph)EES(ph)DAEFDEGFK_	531.18	1.08
Q04721	1841	S	_GGS(ph)SDLS(ph)DEDEDAEDSSANII	1008.9	1.08
Q04721	1842	S	_GGS(ph)SDLS(ph)DEDEDAEDSSANII	1008.9	1.08
Q04721	1845	S	_GGS(ph)SDLS(ph)DEDEDAEDSSANII	1008.9	1.08
Q07157	1617	S	_AIPVS(ph)PSAVEEDEDEDGHTVVAT#	892.07	1.08
Q07866	524	S	_S(ph)RES(ph)LNVDVVK_	469.21	1.08
Q0ZGT2	80	S	_EMLAS(ph)DDEEDVSSK_	545.54	1.08
Q12791	977	S	_S(ph)SPDNSPVHGMLR_	492.88	1.08
Q13371	296	S	_NSATCHS(ph)EDS(ph)DLEID_	926.8	1.08
Q13523	576	T	_T(ph)RS(ph)PS(ph)PDDILER_	542.54	1.08
Q14693	889	S	_EPLPPFENQDIHSAS(ph)A_	916.4	1.08
Q53GT1	605	T	_SLLLEPPRGT(ph)PDR_	510.93	1.08
Q5JTD0	491	S	_EEEELNLPIS(ph)PEEER_	946.91	1.08
Q5SW79	933	S	_DNS(ph)IS(ph)PES(ph)DVDTASTISLV	955.05	1.08
Q7Z4V5	652	S	_EGPDLDRPGS(ph)DR_	697.29	1.08
Q8N3X1	508	S	_IDENS(ph)DKEMEVEES(ph)PEK_	542.71	1.08
Q8WZ73	229	S	_VPAEDETQS(ph)IDS(ph)EDSFVPGR_	779.98	1.08
Q92934	75	S	_HSS(ph)YPAGTEDDEGMGEEPSFR_	825.65	1.08
Q969H6	154	S	_SCLLEEEES(ph)GEEAAEAM(ox)E_	1119.4	1.08
Q9BRJ6	59	S	_GEAVLRPGLDAEPELS(ph)PEEQR_	791.38	1.08
Q9BTC0	805	S	_QEAIPLDLS(ph)PPVS(ph)DSEEQQE	939.38	1.08
Q9H0G5	248	S	_VEENPDADS(ph)DFDAK_	544.54	1.08

Q9NZ72	50	S	_RAS(ph)GQS(ph)FEVILK_	498.9	1.08
Q9NZ72	53	S	_RAS(ph)GQS(ph)FEVILK_	498.9	1.08
Q9UJX2	596	T	_VSPLNLSSVT(ph)P_	597.29	1.08
Q9UKM9	135	S	_LS(ph)PVPVPR_	472.75	1.08
Q9UQ88	47	S	_RDS(ph)LEEGELR_	428.53	1.08
Q9Y2W1	243	S	_ASAVSELS(ph)PR_	366.17	1.08
Q9Y6M7	242	S	_KHS(ph)DPHLLER_	328.66	1.08
O75151	681	S	_DEYEVVS(ph)DDGELK_	821.31	1.09
P00533	1045	S	_TPLSSLS(ph)ATS(ph)NNS(ph)TVACI	816.34	1.09
P11388	1247	S	_NENTEGS(ph)PQEDGVELEGLK_	1063	1.09
P11388	1332	S	_FTMDLDS(ph)DEDFS(ph)DFDEK_	1108.4	1.09
P11388	1337	S	_FTMDLDS(ph)DEDFS(ph)DFDEK_	739.25	1.09
P42224	727	S	_LQTTDNLLPMS(ph)PEEFDEVSR_	801.03	1.09
P55072	702	S	_ES(ph)IESEIR_	521.73	1.09
Q06265	306	S	_APIDTS(ph)DVEEK_	642.27	1.09
Q09666	5763	S	_ASLGSLEGAEAEASS(ph)PK_	604.93	1.09
Q15022	546	S	_ASMSEFLES(ph)EDGEVEQQR_	717.62	1.09
Q8IXT5	829	S	_HPPDEDFRS(ph)PQEEDFR_	520.97	1.09
Q8IZ21	118	S	_SSS(ph)PVQVEEEPVR_	761.84	1.09
Q8NDT2	552	S	_TFLEGDWTS(ph)PSK_	483.21	1.09
Q92466	24	S	_S(ph)RSPLELEPEAK_	479.23	1.09
Q92466	26	S	_S(ph)PLELEPEAK_	398.19	1.09
Q92538	1318	S	_GYTS(ph)DSEVYTDHGR_	833.82	1.09
Q96D71	272	S	_RQS(ph)S(ph)SYDDPWK_	510.19	1.09
Q96K76	933	S	_ELEQHIQTS(ph)DPENFQSEER_	799.34	1.09
Q96N67	909	T	_SLSNS(ph)NPDISGTPT(ph)SPDDEVR	783.32	1.09
Q96QT6	134	S	_TTS(ph)PSS(ph)DTDLLDR_	784.3	1.09
Q96T88	287	S	_IERPGEES(ph)PMVDNPMR_	622.27	1.09
Q9BRS2	22	S	_VVPGQFDDADSS(ph)DSENR_	959.38	1.09
Q9BXJ9	855	S	_ITVNGDS(ph)S(ph)AEAEELANEI_	1011.4	1.09
Q9H8M9	114	S	_NVFTS(ph)AEELER_	687.8	1.09
Q9NRX5	351	S	_LTLTSDDES(ph)TLIEDGGAR_	929.43	1.09
Q9NZT2	378	S	_SQGDEAGGHGEDRPEPLS(ph)PK_	536.48	1.09
Q9UDY2	1159	S	_GSYGS(ph)DAEEEEYR_	786.28	1.09
O15084	1011	S	_TVS(ph)FEALPIMR_	672.33	1.1
P08621	226	S	_PGPS(ph)PLPHR_	346.5	1.1
P13612	1021	S	_RDS(ph)WSYINSK_	445.86	1.1
P18583	1556	S	_EMEHNTVCAAGTS(ph)PVGEIGEEK_	809.01	1.1
P35269	389	T	_GNS(ph)RPGT(ph)PSAEGGSTSSTLR	693.62	1.1
P41440	225	S	_CETSAS(ph)ELER_	631.24	1.1
Q12906	62	S	_GSSEQAES(ph)DNMDVPPEDDSK_	739.61	1.1
Q13112	409	S	_GS(ph)SPGPR_	369.15	1.1
Q6P6C2	64	S	_YQEDS(ph)DPER_	609.72	1.1
Q8TEW0	579	T	_AEDEDIVLT(ph)PDGTR_	537.57	1.1
Q96JK2	648	S	_AS(ph)PTSDIESVER_	685.8	1.1
Q9BQ52	199	S	_HQPWQS(ph)PERPLSR_	566.6	1.1
Q9BV36	313	T	_NEQLPLQYLADVDT(ph)S(ph)DEESIR	865.7	1.1
Q9BX95	112	S	_RNS(ph)LTGEEQLAR_	504.24	1.1
Q9NYF8	198	S	_DTFEHDPSES(ph)IDEFNK_	663.93	1.1
Q9UJV9	21	S	_TDEVPAGGS(ph)R_	534.72	1.1
Q9UKS6	319	S	_S(ph)PDEVTLTSIVPTR_	797.89	1.1

Q9ULU4	425	S	_RIS(ph)LSDMPR_	385.52	1.1
Q9UNX4	240	S	_GS(ph)SPGIQDTLEAEDGAFETDEAPI	939.39	1.1
Q9Y490	425	S	_DHFGLEGDEESTM(ox)LEDSVS(ph)PI	806.66	1.1
O43719	713	S	_LFDEEEDS(ph)S(ph)EKLFDDS(ph)DE	636.97	1.11
O75420	155	S	_S(ph)QSWDDRGER_	439.17	1.11
O76021	358	T	_AT(ph)NESEDEIPQLVPIGK_	640.64	1.11
O95402	447	S	_ADS(ph)PVHMEQQSR_	732.8	1.11
O96019	233	S	_EGS(ph)PANWK_	484.7	1.11
P07814	885	S	_EYIPGQPPLSQSSDS(ph)SPTR_	709.32	1.11
P17812	574	S	_S(ph)GSS(ph)S(ph)PDSEITELK_	838.79	1.11
P20645	267	S	_GVGDDQLGEES(ph)EERDDHLLPM_	807.67	1.11
P42696	28	S	_SVQEGENPDDGVRGS(ph)PPEDYR_	795	1.11
P51532	695	S	_IPDPDS(ph)DDVSEVDAR_	570.57	1.11
P98175	736	S	_GLVAAYSGES(ph)DS(ph)EEEQER_	705.93	1.11
P98175	738	S	_GLVAAYSGES(ph)DS(ph)EEEQER_	1058.4	1.11
Q13242	216	S	_GS(ph)PHYFS(ph)PFRPY_	538.88	1.11
Q14204	4369	T	_TDST(ph)SDGRPAWMR_	780.32	1.11
Q14571	252	T	_FLT(ph)CDEYEKK_	471.53	1.11
Q15154	815	S	_SVFEPEDS(ph)SIVDNELWSEMR_	817.01	1.11
Q15642	296	S	_APS(ph)DS(ph)SLGTPSDGRPELR_	667.95	1.11
Q16555	509	T	_GLYDGPVCEVSVT(ph)PK_	567.59	1.11
Q5SW79	881	S	_SES(ph)LDPDSSMDTTLILK_	644.62	1.11
Q6PJG6	742	S	_GS(ph)PNTASAEATLPR_	726.33	1.11
Q7RTP6	2002	S	_GFSLNWS(ph)_	445.68	1.11
Q8NBN3	540	S	_WVEENVPSSVTDVALPALLDS(ph)DE	950.77	1.11
Q8TBE0	184	S	_DLS(ph)PEPAPDEGPR_	487.21	1.11
Q8TC76	301	S	_ANS(ph)DIISLNFR_	443.88	1.11
Q8WW12	119	S	_TLSVAAAFNEDEDS(ph)EPEEMPPEAI	672.28	1.11
Q96JG6	546	S	_DEETEDVLASNGYES(ph)DEQEK_	789.64	1.11
Q96RT1	440	S	_TEDVM(ox)FIS(ph)DNESFNPSLWEEC	923.72	1.11
Q9BTC0	809	S	_QEAIPLDLED(ph)PPVS(ph)DSEEQQE	939.38	1.11
Q9BZ23	169	S	_ASS(ph)ASVPAVGASAEGTR_	799.36	1.11
Q9GZR7	82	S	_AQAVS(ph)EEEEEEEGK_	822.32	1.11
Q9H4L7	124	S	_DTVIIVS(ph)EPS(ph)EDEESQGLPTM/	888.38	1.11
Q9H4L7	127	S	_DTVIIVS(ph)EPS(ph)EDEESQGLPTM/	888.38	1.11
Q9UGH3	71	S	_SS(ph)LAETLDS(ph)T(ph)GSLDPQR_	1008.9	1.11
Q9UGV2	352	S	_SVTSNQS(ph)DGTQESCESPDVLDLDR_	831	1.11
Q9Y6M7	84	S	_ESDKEDGRES(ph)PSYDTPSQR_	566.48	1.11
A0FGR8	758	S	_EPTPSIAS(ph)DIS(ph)LPIATQELR_	766.69	1.12
O14874	31	S	_S(ph)TSATDTHHVEMAR_	811.84	1.12
O94915	1959	T	_SNT(ph)LDIMDGR_	601.25	1.12
O95831	268	S	_SLS(ph)AIDR_	421.19	1.12
P07814	886	S	_EYIPGQPPLSQSSDSS(ph)PTR_	1063.5	1.12
P08559	295	S	_YHGHSMS(ph)DPGVSYR_	418.92	1.12
P11388	1525	S	_YLEES(ph)DEDDL_	727.77	1.12
P35222	552	S	_RTS(ph)MGQTQQQFVEGVVR_	930.92	1.12
Q0GE19	279	S	_S(ph)LT(ph)LGIPM(ox)LK_	624.79	1.12
Q0GE19	281	T	_S(ph)LT(ph)LGIPM(ox)LK_	624.79	1.12
Q13439	41	S	_TSS(ph)FTEQLDEGTPNR_	881.37	1.12
Q14980	1757	S	_TQPDGTSVPGEPAS(ph)PISQR_	1002.5	1.12
Q16515	198	S	_CYMFNS(ph)GEDGK_	694.24	1.12

Q4G0J3	298	S	_S(ph)SSEDAESLAPR_	664.77	1.12
Q5SW79	930	S	_DNS(ph)IS(ph)PES(ph)DVDTASTISLV	955.05	1.12
Q6Y7W6	236	S	_WRPHS(ph)PDGPR_	428.86	1.12
Q8IY95	229	S	_TIS(ph)SLEEIVEK_	443.22	1.12
Q8TB72	182	S	_QAS(ph)PTEVVER_	598.27	1.12
Q8WWM7	111	S	_GPPQS(ph)PVFEGVYNNR_	914.41	1.12
Q96P16	156	S	_VDENENCSSLGS(ph)PSEPPQTLDLVI	908.4	1.12
Q9BXW6	499	S	_S(ph)FEEEGEHLGSR_	728.79	1.12
Q9NQQ7	336	S	_GLGS(ph)SPDLELLLR_	725.37	1.12
Q9NYF8	297	S	_YS(ph)PSQNSPIHHIPS(ph)R_	940.4	1.12
Q9Y606	426	T	_VSPLEGSEGDDGT(ph)D_	777.8	1.12
A2RRP1	473	S	_AGEEDEGEEDS(ph)DSDYEISAK_	752.27	1.13
O43149	2443	S	_GDREEVERPVVS(ph)SPGDPEQK_	774.01	1.13
O60231	103	S	_LLEDS(ph)EES(ph)SEETVSR_	935.36	1.13
O75420	157	S	_SQS(ph)WDDRGER_	658.26	1.13
P02545	390	S	_LRLS(ph)PSPTSQR_	441.23	1.13
P36915	51	S	_EEQTDTS(ph)DGESVTHHIR_	674.28	1.13
P42677	78	S	_LTEGCS(ph)FR_	525.21	1.13
P49736	139	S	_GLLYDS(ph)DEEDEERPAR_	987.41	1.13
P61978	284	S	_RDYDDMS(ph)PR_	412.16	1.13
Q09666	218	T	_LPSGSGAASPT(ph)GSAVDIR_	861.91	1.13
Q12873	1605	S	_METEADAPS(ph)PAPS(ph)LGER_	959.37	1.13
Q13371	293	S	_NSATCHS(ph)EDS(ph)DLEID_	926.8	1.13
Q13501	266	S	_S(ph)RLTPVS(ph)PESSSTEEK_	631.93	1.13
Q15149	4030	T	_QIT(ph)MEELVR_	599.78	1.13
Q15185	151	S	_FSEMMNNMGDEDVDLPEVDGADDI	946.08	1.13
Q1KMD3	161	S	_S(ph)GDETPGSEVPGDK_	727.79	1.13
Q7Z4V5	137	S	_GVM(ox)AVTAVTATAAS(ph)DR_	808.87	1.13
Q8N6H7	432	S	_AIS(ph)SDMFFGR_	605.75	1.13
Q8WXI9	129	S	_LTPSPDIIVLS(ph)DNEAS(ph)SPR_	724.33	1.13
Q92597	328	T	_T(ph)AS(ph)GSSVTSLDGTR_	749.79	1.13
Q9BXK5	420	S	_EES(ph)LVEELSPASEK_	542.91	1.13
Q9H5H4	125	S	_YEPQS(ph)PGYEPR_	701.79	1.13
Q9H7L9	49	T	_GRES(ph)DEDT(ph)EDAS(ph)ETDLAK	1104.4	1.13
Q9P0P8	110	S	_VDEEDSDEES(ph)HHDEMS(ph)EQEE	738.87	1.13
Q9P0P8	116	S	_VDEEDSDEES(ph)HHDEMS(ph)EQEE	738.87	1.13
Q9Y4B4	1169	S	_PVS(ph)PDS(ph)PEIISELQQYADVAA/	872.73	1.13
Q9Y4B4	1172	S	_PVS(ph)PDS(ph)PEIISELQQYADVAA/	872.73	1.13
Q9Y6X9	615	S	_S(ph)PPLPAVIR_	343.85	1.13
O75396	137	S	_NLGS(ph)INTELQDVQR_	556.26	1.14
P35269	385	S	_GNS(ph)RPGT(ph)PSAEGGSTSSTLR	693.62	1.14
P62995	264	S	_RS(ph)PS(ph)PYYSR_	424.83	1.14
P62995	266	S	_S(ph)PS(ph)PYYSR_	372.8	1.14
Q13557	337	T	_ESTESSNTT(ph)IEDEDVK_	621.92	1.14
Q7Z5K2	81	S	_VEEESTGDPFGFDSDES(ph)LPVSS	664.02	1.14
Q8TBF4	210	S	_STYFS(ph)DEEELS(ph)D_	791.25	1.14
Q8TBF4	216	S	_STYFS(ph)DEEELS(ph)D_	791.25	1.14
Q9BXP5	67	S	_ERFS(ph)PPR_	323.48	1.14
Q9BXY0	232	S	_EFVEDGEVDES(ph)DIS(ph)DFEDMDr	870.64	1.14
Q9BZC7	2419	S	_ALVADEPEDLDT(ph)EDEGLIS(ph)FEf	961.06	1.14
Q9BZQ8	926	S	_EGEGGQESFPELPS(ph)EE_	900.85	1.14

Q9H3Z4	161	S	_APEGEETEFYVSPEDLEAQLQS(ph)DI	737.81	1.14
Q9H8W4	239	S	_SPLNDMS(ph)DDDDDDSS(ph)D_	1009.3	1.14
Q9H8W4	248	S	_SPLNDMS(ph)DDDDDDSS(ph)D_	1009.3	1.14
Q9Y2W1	379	S	_GSFS(ph)DTGLGDGK_	610.75	1.14
A6NDB9	544	S	_TQGTEGDLNLEQGS(ph)R_	842.86	1.15
O00567	570	S	_EEPVS(ph)S(ph)GPEEAVGK_	394.41	1.15
P17812	575	S	_SGS(ph)SS(ph)PDSEITELK_	798.81	1.15
P29317	898	T	_LPST(ph)SGSEGVFPR_	471.89	1.15
P42167	67	S	_GPPDFS(ph)S(ph)DEER_	698.23	1.15
P46379	973	S	_ENAS(ph)PAPGTTAEEAM(ox)SR_	907.87	1.15
P52943	115	S	_ASS(ph)VTTFTGEPNTCPR_	902.88	1.15
P62070	186	S	_FQEQECPPS(ph)PEPTR_	891.36	1.15
Q12873	1601	S	_METEADAPS(ph)PAPS(ph)LGER_	959.37	1.15
Q13283	149	S	_YQDEVFGGFVTEPQEES(ph)EEVEE	1099.4	1.15
Q13595	202	T	_AHT(ph)PTPGIYMGR_	460.88	1.15
Q15019	218	S	_IYHLPDAES(ph)DEDEDFK_	668.27	1.15
Q15185	148	S	_FSEMMNMGDEDVDLPEVDGADDI	946.08	1.15
Q5H9R7	579	S	_FADQDDIGNVS(ph)FDR_	839.84	1.15
Q5T200	198	S	_KEVS(ph)PEVVR_	374.86	1.15
Q7KZF4	426	S	_PAS(ph)PATETVPAFSER_	820.37	1.15
Q7Z4V5	454	S	_S(ph)EGFSMDR_	504.68	1.15
Q7Z4V5	625	S	_GESAEKHEEGRDS(ph)EEGPR_	465.39	1.15
Q86WB0	354	S	_S(ph)WDSSSPVDRPEPEAAS(ph)PTT	811.33	1.15
Q8N3X1	499	S	_IDENS(ph)DKEMEVEES(ph)PEK_	542.71	1.15
Q96A49	248	T	_T(ph)PPVVIK_	278.49	1.15
Q96RS0	89	S	_GIGLDES(ph)ELDS(ph)EAELMR_	1012.4	1.15
Q9BRD0	271	S	_HDS(ph)PDLAPNVTYSLPR_	621.29	1.15
Q9BVS4	332	S	_EGS(ph)EFS(ph)FS(ph)DGEVAEK_	619.87	1.15
Q9BVS4	335	S	_EGS(ph)EFS(ph)FS(ph)DGEVAEK_	619.87	1.15
Q9BVS4	337	S	_EGS(ph)EFS(ph)FS(ph)DGEVAEK_	619.87	1.15
Q9BXF6	307	S	_TYS(ph)DEANQMR_	647.74	1.15
Q9C0C2	1620	S	_VPS(ph)S(ph)DEEVVEEPQSR_	923.86	1.15
Q9H7N4	965	S	_GAEETSWS(ph)GEER_	473.18	1.15
Q9NZJ4	1779	S	_IADLQS(ph)PLFR_	620.31	1.15
O00203	276	S	_NFYES(ph)DDDQKEK_	400.16	1.16
P04792	15	S	_GPS(ph)WDPFR_	521.21	1.16
P27816	1150	T	_EAQTLDSQIQET(ph)SI_	821.86	1.16
P31943	104	S	_HTGPNS(ph)PDTANDGFVR_	588.92	1.16
P42167	66	S	_GPPDFS(ph)S(ph)DEER_	698.23	1.16
P43487	188	S	_LEALS(ph)VK_	420.22	1.16
Q03135	37	S	_AMADELS(ph)EK_	537.21	1.16
Q12888	500	S	_NS(ph)PEDLGLSLTGDSCK_	591.59	1.16
Q13523	292	S	_S(ph)RS(ph)PVDLR_	363.82	1.16
Q13523	294	S	_S(ph)RS(ph)PVDLR_	363.82	1.16
Q6N075	440	S	_VPS(ph)PTEEPYAPEL_	503.56	1.16
Q6ZS81	2013	S	_DTVLS(ph)TLYSS(ph)LNK_	800.85	1.16
Q86VP1	666	S	_VPS(ph)WGLEDNVVCSQPAR_	665.3	1.16
Q86VR2	258	S	_AM(ox)DNHS(ph)DS(ph)EEELAAFCPC	1028.7	1.16
Q86VR2	260	S	_AM(ox)DNHS(ph)DS(ph)EEELAAFCPC	1028.7	1.16
Q8N1F8	398	S	_AS(ph)ISEPSDTPDPEPR_	790.83	1.16
Q96B36	247	S	_LNTS(ph)DFQK_	516.72	1.16

Q9BWH2	31	S	_ADPLRVS(ph)SR_	360.84	1.16
Q9P2D1	2956	S	_DGETLEGS(ph)DAEESLDK_	592.23	1.16
Q9UHY8	135	S	_GVSDSLLFDTS(ph)DDEELR_	989.42	1.16
Q9Y2X3	502	S	_EEPLS(ph)EEEPCTSTAIASPEK_	761.99	1.16
Q9Y4E8	961	S	_GASAATGIPLES(ph)DEDS(ph)NDNDM	903.08	1.16
Q9Y4E8	965	S	_GASAATGIPLES(ph)DEDS(ph)NDNDM	903.08	1.16
A0FGR8	761	S	_EPTPSIAS(ph)DIS(ph)LPIATQELR_	766.69	1.17
O15243	127	S	_GDDFS(ph)WEQW_	625.21	1.17
O94842	176	T	_LSTT(ph)PS(ph)PTSS(ph)LHEDGVED	805.64	1.17
O95400	49	S	_HSLDS(ph)DEEEDDDGGSSK_	1008.8	1.17
P06748	125	S	_CGSGPVHISGQHLVAVEEDAES(ph)E	865.86	1.17
P17812	573	S	_SGS(ph)SS(ph)PDSEITELK_	798.81	1.17
P19634	703	S	_IGS(ph)DPLAYEPK_	423.86	1.17
P42167	306	S	_HAS(ph)PILPITEFSDIPR_	624.98	1.17
P42566	796	S	_LDS(ph)PDPFK_	499.72	1.17
P49768	366	S	_AAVQELSS(ph)S(ph)ILAGEDPEER_	1081	1.17
Q02156	729	S	_GFS(ph)YFGEDLMP_	671.76	1.17
Q08945	444	S	_EGMNPSYDEYADS(ph)DEDQHDAYLE	977.03	1.17
Q09666	5749	S	_AS(ph)LGS(ph)LEGEAEAEASS(ph)PK	658.25	1.17
Q13112	410	S	_GSS(ph)PGPR_	369.15	1.17
Q14004	383	S	_GGDVS(ph)PSPYSSSSWR_	824.84	1.17
Q5JSH3	262	S	_S(ph)ELEFETLK_	392.51	1.17
Q5SW79	879	S	_S(ph)ESLDPDSSMDTTLILK_	644.62	1.17
Q8WWQ0	1783	S	_TAFYNEDDS(ph)EEEQR_	604.89	1.17
Q96D46	470	T	_DSAIPVES(ph)DT(ph)DDEGAPR_	967.36	1.17
Q96KR1	1054	S	_RRDS(ph)DGVDGFEAEGK_	430.18	1.17
Q9H6H4	194	S	_AGGLQDS(ph)DTEDECWSDTEAVPR	840	1.17
Q9Y5B0	869	S	_EVDDILGEGS(ph)DDS(ph)DSEK_	985.35	1.17
Q9Y5B0	872	S	_EVDDILGEGS(ph)DDS(ph)DSEK_	985.35	1.17
Q9Y6M7	1213	S	_YVDAETS(ph)L_	489.2	1.17
O43633	203	S	_AEAAAS(ph)ALADADADLEER_	934.9	1.18
O75190	277	S	_HAPHCLS(ph)EEEGEQDRPR_	532.47	1.18
P16949	25	S	_RAS(ph)GQAFELILS(ph)PR_	852.9	1.18
P49768	367	S	_AAVQELSS(ph)S(ph)ILAGEDPEER_	1081	1.18
P78362	380	S	_DEDDVDQELANIDPTWIES(ph)PK_	837.03	1.18
Q13242	189	S	_STS(ph)YGYSR_	500.69	1.18
Q13501	272	S	_LTPVS(ph)PESSSTEEK_	785.85	1.18
Q16643	337	S	_S(ph)PSDSSTASTPVAEQIER_	971.43	1.18
Q69YH5	710	S	_AGTDS(ph)PVSCASVTEER_	873.36	1.18
Q8IVP5	13	S	_NPPPQDYES(ph)DDDSYEVLDLTEYA	971.07	1.18
Q8NEF9	264	S	_EYFDDS(ph)TEER_	685.74	1.18
Q8TEW0	852	S	_S(ph)MDLGIADETK_	420.51	1.18
Q96CV9	526	S	_TS(ph)DSDQQAYLVQR_	795.84	1.18
Q96E09	143	S	_IDFIPVS(ph)PAPS(ph)PTR_	828.88	1.18
Q96E09	147	S	_IDFIPVS(ph)PAPS(ph)PTR_	828.88	1.18
Q9C0H5	604	S	_AFS(ph)EDEALAQQENR_	563.24	1.18
Q9H1E3	144	S	_DS(ph)GS(ph)DEDFLMEDDDDS(ph)D	890.26	1.18
Q9NUN5	528	S	_SVIEGVDEDS(ph)DIS(ph)DDEPSVYS/	829.98	1.18
Q9NUN5	531	S	_SVIEGVDEDS(ph)DIS(ph)DDEPSVYS/	1244.5	1.18
Q9NYV4	333	S	_S(ph)S(ph)SPFLSK_	338.13	1.18
Q9NZM1	963	S	_AAS(ph)PSELTCPPGWEWEDDAWSY	1044.8	1.18

Q9Y5Q3	313	S	_EAGSTS(ph)DSPSS(ph)PEFFL_	909.33	1.18
Q9Y5Q3	318	S	_EAGSTS(ph)DSPSS(ph)PEFFL_	909.33	1.18
Q9Y6D5	277	S	_GSS(ph)LSGTDDGAQEVVK_	815.35	1.18
O75683	138	S	_ELS(ph)PAALEK_	346.5	1.19
P06493	15	Y	_IGEGT(ph)Y(ph)GVVYK_	449.19	1.19
P08670	73	S	_SS(ph)VPGVR_	391.18	1.19
P11717	2479	S	_LVS(ph)FHDDS(ph)DEDLLHI_	638.92	1.19
P18615	113	S	_S(ph)ISADDDLQESSR_	751.8	1.19
P21333	2327	S	_FNEEHIPDSPFVVPVAS(ph)PSGDAR_	849.72	1.19
P23588	597	S	_YAALS(ph)VDGEDENEGEDYAE_	1078.4	1.19
P46821	831	S	_SLMS(ph)S(ph)PEDLTK_	684.26	1.19
P46821	832	S	_SLMS(ph)S(ph)PEDLTK_	684.26	1.19
P50402	171	S	_DSAYQSITHYRPVS(ph)ASR_	673.31	1.19
Q09666	212	S	_LPSGS(ph)GAAS(ph)PTGSAVDIR_	901.89	1.19
Q6P6C2	69	S	_YQEDS(ph)DPERS(ph)DYEEQQLQK_	849.66	1.19
Q96JM3	651	S	_GQES(ph)SS(ph)DQEQVDVESIDFSK_	791.97	1.19
Q96JM3	653	S	_GQES(ph)SS(ph)DQEQVDVESIDFSK_	791.97	1.19
Q96KC8	479	S	_DFDIAEQNES(ph)S(ph)DEESLR_	1072.4	1.19
Q96KC8	480	S	_DFDIAEQNES(ph)S(ph)DEESLR_	1072.4	1.19
Q96QG7	548	S	_QLAELETEDGMQES(ph)P_	878.85	1.19
Q99613	39	S	_QPLLLS(ph)EDEEDTK_	532.91	1.19
Q9BXY0	229	S	_EFVEDGEVDES(ph)DIS(ph)DFEDMDr	870.64	1.19
Q9C0C2	1621	S	_VPS(ph)S(ph)DEEVVEEPQSR_	923.86	1.19
Q9H4L7	132	S	_DTVIVS(ph)EPS(ph)EDEES(ph)QGLP	915.03	1.19
Q9NTI5	1257	S	_GHTAS(ph)ES(ph)DEQQWPEEK_	673.25	1.19
Q9UBH6	690	T	_VLIEDT(ph)DDEANT_	707.78	1.19
Q9ULJ3	435	S	_TEPSS(ph)PLSDPSDIIR_	565.26	1.19
Q9UQ35	351	S	_SATRPS(ph)PS(ph)PER_	448.85	1.19
Q9UQ35	353	S	_SATRPS(ph)PS(ph)PER_	448.85	1.19
Q9Y2W1	53	S	_S(ph)YS(ph)PAHNR_	546.19	1.19
Q9Y2W1	55	S	_S(ph)YS(ph)PAHNR_	546.19	1.19
O15013	59	S	_YDTNNNEEEEGEQDFDFS(ph)GDEIP	1082.1	1.2
O60763	952	S	_DLGHPVEEEDLELES(ph)GDQEDEDDE	999.88	1.2
P09603	533	S	_ADS(ph)PLEQPEGSPLTQDDR_	678.96	1.2
P28331	627	S	_ALS(ph)EIAGM(ox)T(ph)LPYDTLDQVF	1135	1.2
P31751	451	T	_YFDEFTAQSITIT(ph)PPDR_	732.66	1.2
Q14160	835	S	_MVEPENAVTITPLRPEDDYS(ph)PR_	870.4	1.2
Q15836	63	S	_ADALQAGASQFETS(ph)AAK_	437.2	1.2
Q4LE39	295	S	_EKEDNS(ph)S(ph)EEEEIEPFPEER_	870.99	1.2
Q5JTD0	300	S	_GS(ph)PEEELPLPAFEK_	541.58	1.2
Q5SW79	928	S	_DNS(ph)IS(ph)PES(ph)DVDTASTISLV	955.05	1.2
Q641Q2	539	S	_GLFS(ph)DEEDSEDLFSSQSASK_	753.31	1.2
Q6Y7W6	201	S	_SES(ph)ENWR_	494.18	1.2
Q76FK4	365	S	_VSCHDS(ph)DDDIMR_	765.27	1.2
Q7Z7N9	214	S	_GDPEWSSETDALVGS(ph)R_	595.92	1.2
Q8TF01	290	S	_FDS(ph)DEEEEDTENVEAASSGK_	756.62	1.2
Q92882	202	S	_TLS(ph)NAEDYLDEEDS(ph)D_	931.3	1.2
Q96EB6	719	T	_AGGAGFGT(ph)DGDDQEAINAISVK_	768	1.2
Q96QT6	131	S	_TTS(ph)PSSDTDLLDR_	744.32	1.2
Q96ST2	235	S	_HQAS(ph)DS(ph)ENEELPKPR_	632.92	1.2
Q96ST2	237	S	_HQAS(ph)DS(ph)ENEELPKPR_	632.92	1.2

Q9NRA8	353	S	_SSS(ph)LGSTPHEELER_	804.85	1.2
Q9UIG0	947	S	_DHTVS(ph)GDEDYCPR_	815.8	1.2
O00264	57	S	_GDQPAASGDS(ph)DDDEPPPLPR_	705.95	1.21
P08559	293	S	_YHGHS(ph)MSDPGVSYR_	558.22	1.21
P11831	224	S	_ALIQTCLNSPDS(ph)PPR_	874.91	1.21
P21675	1155	S	_DDDTASVTS(ph)LNSSATGR_	888.87	1.21
P34932	76	S	_AFS(ph)DPFVEAEK_	440.52	1.21
P43487	60	S	_FAS(ph)ENDLPEWK_	472.53	1.21
P46821	1797	S	_ESSPLYS(ph)PTFSDSTSAVK_	661.63	1.21
P48634	761	S	_SDS(ph)GGSSEPFDR_	704.26	1.21
Q02156	710	T	_EEPVLTPH)LVDEAIVK_	545.61	1.21
Q09666	501	S	_IS(ph)MQDVDLS(ph)LGSPK_	825.35	1.21
Q09666	508	S	_IS(ph)MQDVDLS(ph)LGSPK_	550.57	1.21
Q09666	511	S	_IS(ph)MQDVDLS(ph)LGSPK_	550.57	1.21
Q14676	453	S	_SQTTERDS(ph)DT(ph)DVEEEELPVE	947.04	1.21
Q14676	455	T	_SQTTERDS(ph)DT(ph)DVEEEELPVE	947.04	1.21
Q16204	323	S	_QLS(ph)ESESLEMDDER_	917.86	1.21
Q16630	407	T	_T(ph)PLSEAEFEEIMNR_	873.38	1.21
Q709C8	737	S	_TTNSS(ph)LEEIMDK_	724.3	1.21
Q8N3D4	191	S	_PSDVGNLDDFAES(ph)DEDEAHGPG/	720.04	1.21
Q8N612	596	S	_S(ph)LLPEEDRNNVGEHEEEELGR_	817.69	1.21
Q96EV8	158	Y	_HMQS(ph)QQLENY(ph)K_	783.3	1.21
Q9BQE3	439	S	_DYEEVGADS(ph)ADGEDEGEEY_	1079.9	1.21
Q9BTU6	462	S	_SSS(ph)ESYTQSFQSR_	787.31	1.21
Q9H0G5	275	T	_VIET(ph)PENDFK_	636.28	1.21
Q9NQC3	181	S	_RGS(ph)S(ph)GSVDETLFALPAASEPV	840.39	1.21
Q9NQC3	182	S	_RGSS(ph)GS(ph)VDETLFALPAASEPV	630.54	1.21
Q9NYF8	385	S	_AEGEWEDQEALDYFS(ph)DK_	1056.4	1.21
Q9UHB6	490	S	_ETPHS(ph)PGVEDAPIAK_	543.25	1.21
Q9Y2X7	388	S	_SQSDLDDQHDYDS(ph)VAS(ph)DEDT	1047.4	1.21
Q9Y519	403	S	_TLLLS(ph)S(ph)DDEF_	650.24	1.21
O15027	1149	S	_FTGS(ph)FDDDPDHRDPYGEEVDR_	662.27	1.22
P20042	111	T	_IES(ph)DVQEPT(ph)EPEDDLDIMLGN	662.52	1.22
P51809	167	S	_TENLVDS(ph)SVTFK_	710.32	1.22
Q07960	51	S	_SSS(ph)PELVTHLK_	639.31	1.22
Q12888	552	S	_IDEDGENTQIEDTEPMS(ph)PVLNSK_	881.05	1.22
Q13206	7	S	_TANS(ph)PGSGAR_	499.21	1.22
Q13283	231	S	_S(ph)S(ph)SPAPADIAQTVQEDLR_	682.29	1.22
Q13523	142	S	_VQSGMGLILQGYES(ph)GS(ph)EEEG|	956.07	1.22
Q13523	144	S	_VQSGMGLILQGYES(ph)GS(ph)EEEG|	717.3	1.22
Q16512	916	S	_TDVSNFDEEFTGEAPTLS(ph)PPR_	1195	1.22
Q4LE39	296	S	_EKEDNS(ph)S(ph)EEEEIEPFPEER_	870.99	1.22
Q7KZ85	125	S	_MS(ph)DDEDDDEEYGKEEHEK_	602.96	1.22
Q7Z5K2	459	S	_YFGFDDLS(ph)ES(ph)EDDEDDDCQV	948.98	1.22
Q7Z5K2	461	S	_YFGFDDLS(ph)ES(ph)EDDEDDDCQV	948.98	1.22
Q86VR2	320	S	_GQTPLTEGSEDLDGHS(ph)DPEESFA	885.37	1.22
Q86WR0	204	S	_VENMSSNQDGNDS(ph)DEFM(ox)_	1007.8	1.22
Q96P48	229	S	_LFPEFDDS(ph)DYDEVPEEGPGAPAR	878.03	1.22
Q9GZR7	295	S	_AEAES(ph)DALPDDTVIESEALPSDIA/	989.11	1.22
Q9NWZ5	539	S	_YFGTDAVPDGS(ph)DEEEVAYTG_	1101.4	1.22
Q9UGQ3	496	S	_SLEQIES(ph)FFR_	668.3	1.22

Q9UIG0	1468	S	_LADEGDS(ph)EPEAVGQSR_	623.59	1.22
Q9UJ14	72	S	_LPS(ph)SSSEMGSDGSPLR_	907.88	1.22
Q9Y6N8	784	S	_LAEMYGGGES(ph)DKDS_	769.79	1.22
O75475	273	S	_TGVSTSTS(ph)DS(ph)EEEGDDQEGEK	753.93	1.23
O75475	275	S	_TGVSTSTS(ph)DS(ph)EEEGDDQEGEK	753.93	1.23
O94842	178	S	_LSTT(ph)PS(ph)PTSS(ph)LHEDGVED	805.64	1.23
O94842	182	S	_LSTTPS(ph)PTSS(ph)LHEDGVEDFR_	778.99	1.23
O95218	188	S	_YNLDAS(ph)EEEDSNK_	531.87	1.23
P15407	101	S	_RPCEQIS(ph)PEEEER_	580.24	1.23
P27824	554	S	_QKS(ph)DAEEDGGTVSQEEEDR_	547.97	1.23
P42167	160	T	_SST(ph)PLPTISSAENTR_	864.4	1.23
Q03468	429	S	_VPVQEIDDDFFPS(ph)S(ph)GEEAEAA	807.08	1.23
Q03468	430	S	_VPVQEIDDDFFPS(ph)S(ph)GEEAEAA	807.08	1.23
Q14247	417	S	_LPS(ph)SPVYEDAASF_	530.91	1.23
Q14CW9	131	S	_SES(ph)DQEDNDINDNDWSYGSEK_	881.32	1.23
Q8N573	355	S	_EELVSS(ph)DELR_	628.77	1.23
Q8TAD8	394	S	_KDEDEEEEEVVS(ph)DS_	932.31	1.23
Q9BXJ9	856	S	_ITVNGDS(ph)S(ph)AEAEELANEI_	1011.4	1.23
Q9C0C2	494	S	_LDS(ph)PPPS(ph)PITEASEAAEAAEA(	999.78	1.23
Q9C0C2	498	S	_LDS(ph)PPPS(ph)PITEASEAAEAAEA(	999.78	1.23
Q9NRX5	347	T	_LTLT(ph)SDESTLIEDGGAR_	929.43	1.23
Q9UPN7	635	S	_IQQFDDDEEEEEDEEEAQGS(ph)GES(	1037.1	1.23
Q9UPN7	638	S	_IQQFDDDEEEEEDEEEAQGS(ph)GES(	1037.1	1.23
Q9Y232	88	S	_GYDS(ph)EDDTWEPEQHLVNCEEYIH	870.1	1.23
O43399	21	S	_GLLSDS(ph)MTDVPVDTGVAAR_	992.46	1.24
O43852	44	S	_VHNDAS(ph)FDY(ph)DHDAFLGAE	880.34	1.24
O60832	494	S	_AGLESGAEPGDGDS(ph)DTTK_	893.85	1.24
O75151	882	S	_DSDYVYPSLES(ph)DEDNPIFK_	771.65	1.24
P09651	4	S	_S(ph)ES(ph)PKEPEQLR_	730.3	1.24
P11717	2484	S	_LVS(ph)FHDDS(ph)DEDLLHI_	638.92	1.24
P17302	372	S	_AS(ph)S(ph)RPRPDDLEI_	505.88	1.24
P40818	718	S	_SYS(ph)SPDITQAIQEEEK_	635.61	1.24
P49841	216	Y	_GEPNVS(ph)ICSR_	454.52	1.24
Q01804	1023	S	_EES(ph)S(ph)EDENEVSNILR_	955.36	1.24
Q09666	177	S	_DIDISS(ph)PEFK_	615.77	1.24
Q14498	136	S	_S(ph)PVREPIDNLTPEER_	611.29	1.24
Q6ZNE5	416	S	_ADLEESMEFVDPGVAGES(ph)DES(ph	944.02	1.24
Q6ZNE5	419	S	_ADLEESMEFVDPGVAGES(ph)DES(ph	944.02	1.24
Q7Z6E9	861	S	_ENFS(ph)PER_	320.13	1.24
Q8NEJ9	142	S	_LS(ph)S(ph)EDEEEDAEDDQSEASGI	820.28	1.24
Q8NEJ9	143	S	_LS(ph)S(ph)EDEEEDAEDDQSEASGI	820.28	1.24
Q8TCT7	500	T	_RELGVFWT(ph)GS(ph)GFAK_	857.87	1.24
Q8TCT7	502	S	_RELGVFWT(ph)GS(ph)GFAK_	857.87	1.24
Q8WZ73	240	S	_AS(ph)LSDLTDLEDIEGLTVR_	1014	1.24
Q9H7N4	734	S	_EVLYDS(ph)EGLS(ph)GEER_	871.83	1.24
Q9NS91	471	S	_NDLQDTEIS(ph)PR_	684.3	1.24
Q9NTJ3	41	S	_TES(ph)PATAAETASEELDNR_	986.41	1.24
Q9UNX4	241	S	_GS(ph)SPGIQDTLEAEDGAFETDEAPI	939.39	1.24
O60927	77	S	_AFGESSTES(ph)DEEEEGCGHTHCV	940.34	1.25
O75436	315	S	_FES(ph)PESQASAEQPEM_	873.83	1.25
O75448	862	S	_LLS(ph)SNEDDANILSSPTDR_	1014	1.25

P11717	2409	S	_ALSSLHGDDQDS(ph)EDEVLTPEVK_	859.72	1.25
P27348	232	S	_DNLTWTSDDS(ph)AGEECDAAEGAEN	1268	1.25
P46821	992	S	_RES(ph)VAS(ph)GDDRAEEDMDEAIEI	628.75	1.25
P49761	283	S	_S(ph)VEDDKEGHLVCR_	541.9	1.25
P62258	210	S	_AAFDDAIAELDTLS(ph)EESYK_	723.32	1.25
Q09666	135	S	_LKS(ph)EDGVEGDLGETQSR_	633.95	1.25
Q14847	146	S	_RDS(ph)QDGSSYR_	417.5	1.25
Q5JTV8	154	S	_DS(ph)HSS(ph)EEDEASSQTDLSQTIS	847.66	1.25
Q5JTV8	220	T	_VNFSEGET(ph)EEDDQDSSHSSVTT	709.79	1.25
Q5T200	879	S	_SLSPS(ph)HLTEDR_	661.29	1.25
Q86UP2	75	S	_EIQGNLHES(ph)DSESVPR_	995.93	1.25
Q8IZ21	516	S	_EEEEKESDS(ph)DSEGPIQYR_	736.29	1.25
Q8TAQ2	286	S	_TLTDEVNSPDS(ph)DRR_	842.86	1.25
Q92614	2020	S	_SLAPDRS(ph)DDEHDPLDNTSRPR_	619.02	1.25
Q96MU7	308	S	_GIS(ph)PIVFDR_	361.85	1.25
Q9BWU0	312	S	_MLGEDS(ph)DEEEEMDTSER_	694.58	1.25
Q9H7N4	738	S	_EVLYDS(ph)EGLS(ph)GEER_	871.83	1.25
Q9UDY2	244	S	_S(ph)IDQDYER_	553.21	1.25
Q9Y608	328	S	_GS(ph)GDTSSLIDPDTSLSELR_	1015.5	1.25
Q9Y6E2	412	S	_FVEWLQNAEEES(ph)ES(ph)EGEEN_	1207.9	1.25
Q9Y6E2	414	S	_FVEWLQNAEEES(ph)ES(ph)EGEEN_	1207.9	1.25
Q9Y6M7	233	S	_S(ph)FADIGK_	409.18	1.25
O43852	47	Y	_VHNDASQ(ph)FDY(ph)DHDAFLGAE	880.34	1.26
O95365	549	S	_HFKDEDEDEDVAS(ph)PDGLGR_	737.63	1.26
O95425	968	S	_YGS(ph)FEEAEASYPILNR_	642.62	1.26
P00533	693	T	_ELVEPLT(ph)PSGEAPNQALLR_	705.36	1.26
P17302	373	S	_AS(ph)S(ph)RPRPDDLEI_	505.88	1.26
P18206	290	S	_DPSAS(ph)PGDAGEQAIR_	775.83	1.26
P46100	729	S	_QSETVDQNS(ph)DS(ph)DEMLAILK_	761.64	1.26
P46100	731	S	_QSETVDQNS(ph)DS(ph)DEMLAILK_	761.64	1.26
Q13177	143	T	_YLS(ph)FT(ph)PPEK_	414.5	1.26
Q16566	360	S	_DPS(ph)PIQDGNEDMK_	763.3	1.26
Q5T0N5	501	S	_ES(ph)PEGSYTDDANQEV_	938.87	1.26
Q5UIP0	1579	S	_SNES(ph)VDIQDQEEK_	800.82	1.26
Q7Z7N9	205	S	_GDPEWS(ph)S(ph)ETDALVGS_	622.57	1.26
Q8TEU7	230	S	_LPEGPVDS(ph)EDDEEEDEEIDR_	799.64	1.26
Q96K76	910	S	_STETSDFENIES(ph)PLNER_	683.29	1.26
Q96T23	604	S	_LS(ph)PIPEEVPK_	396.87	1.26
Q96T76	1027	S	_GEWFLLGS(ph)PGS_	615.27	1.26
Q9H6H4	152	S	_SFS(ph)MQDLR_	532.22	1.26
Q9NTI5	1407	S	_ENDSS(ph)EEVDVFQGSPPVDDIPQE	1026.7	1.26
Q9Y2D5	152	S	_DALGDSLQVPVS(ph)PSSTTSSR_	695.32	1.26
O00567	519	S	_EELMS(ph)S(ph)DLEETAGSTSIPK_	546.72	1.27
O15173	104	S	_DFS(ph)LEQLR_	544.24	1.27
O75362	441	S	_GEGGS(ph)EDGS(ph)EDGLPEGIHLDI	753.29	1.27
O75362	445	S	_GEGGS(ph)EDGS(ph)EDGLPEGIHLDI	753.29	1.27
O95297	219	S	_S(ph)PSDTEGLVK_	556.75	1.27
O95425	707	S	_S(ph)FDEQNVPK_	381.83	1.27
Q09666	5752	S	_AS(ph)LGS(ph)LEGEAEAEASS(ph)PK	658.25	1.27
Q14938	288	S	_S(ph)IDDSEMES(ph)PVDDVFYPGTGF	1238.5	1.27
Q92882	213	S	_TLS(ph)NAEDYLDEDS(ph)D_	621.2	1.27

Q96N67	900	S	_SLSNS(ph)NPDISGTPTS(ph)PDDEVR	1174.5	1.27
Q9BUL5	64	S	_EESDWPASGSSS(ph)PLR_	842.85	1.27
Q9BUL5	74	S	_GESAADS(ph)DGWDSAPSDLR_	958.37	1.27
Q9GZV5	393	S	_S(ph)EPFLTWL_	536.74	1.27
Q9P0P8	106	S	_VDEEDS(ph)DEESHHEMSEQEEELE	903.35	1.27
Q9UQ35	2692	S	_S(ph)LS(ph)YS(ph)PVER_	639.22	1.27
Q9UQ35	2694	S	_SLS(ph)YS(ph)PVER_	599.23	1.27
Q9UQ88	271	S	_DLLSDLQDIS(ph)DS(ph)ER_	589.24	1.27
O43815	245	S	_FLESAADFS(ph)DEDEDDVDGR_	799.97	1.28
O60238	168	S	_SVSLS(ph)MR_	430.19	1.28
P36021	80	T	_VHEPEPT(ph)PTVETR_	786.36	1.28
P55081	116	S	_IVEPEVVGES(ph)DS(ph)EVEGDAWR_	787.99	1.28
P55884	154	S	_ALENGDAEPSFS(ph)DPEDFVDDVS	939.64	1.28
P55884	164	S	_ALENGDAEPSFS(ph)DPEDFVDDVS	939.64	1.28
Q16643	339	S	_SPS(ph)DSSTASTPVAEQIER_	971.43	1.28
Q5T200	1065	S	_KEDTAFS(ph)DWS(ph)DEDVPDR_	724.6	1.28
Q6PKG0	774	S	_S(ph)LPTTVPES(ph)PNYR_	810.84	1.28
Q96T37	568	T	_DRT(ph)PPLLYR_	404.2	1.28
Q9UBB9	210	S	_TTQSMQDFPVVDS(ph)EEEEEEEFQK	928.38	1.28
Q9UKA4	1242	S	_SVS(ph)PTFLNPSDENLK_	576.6	1.28
Q9UQ88	265	S	_DLLS(ph)DLQDIS(ph)DSER_	589.24	1.28
O43598	169	S	_YFEADPPGQVAAS(ph)PDPTT_	971.91	1.29
O96028	544	T	_IQDPTEDAEAEDT(ph)PR_	883.86	1.29
P18583	1697	S	_ESDQTLAALLS(ph)PK_	484.9	1.29
P38432	122	T	_AFQLEEGEET(ph)EPDCK_	621.24	1.29
Q13439	266	S	_EENPES(ph)DGEPVVEDGTSVK_	1048.9	1.29
Q14160	1220	S	_NS(ph)LESISSIDR_	650.79	1.29
Q14204	4368	S	_TDS(ph)TSDGRPAWMR_	520.55	1.29
Q15084	428	S	_DGELPVEDDIDLS(ph)DVELDDLKDE	946.75	1.29
Q15154	643	S	_S(ph)S(ph)LVDEHPEDAEFEQK_	673.93	1.29
Q15154	644	S	_S(ph)S(ph)LVDEHPEDAEFEQK_	673.93	1.29
Q16513	958	T	_EDVSNFDDEFTSEAPILT(ph)PPR_	820.36	1.29
Q5TCZ1	567	S	_YEEPEYDIPAFGFDS(ph)EPELSEEPV	1090.1	1.29
Q86YD1	36	S	_S(ph)WPASPR_	440.69	1.29
Q8NFG4	302	S	_LADLEEESESWDNS(ph)EAEEEEK_	850	1.29
Q8TEQ0	810	S	_NVEPQS(ph)GDL_	519.71	1.29
Q8WUX9	417	S	_IS(ph)DAELEAELEK_	476.22	1.29
Q9UHY8	134	T	_GVSDSLLFDT(ph)SDDEELR_	989.42	1.29
O43765	77	S	_EMPQDLRS(ph)PAR_	460.54	1.3
O43847	94	S	_RGS(ph)LSNAGDPEIVK_	761.87	1.3
P16070	718	S	_ESS(ph)ETPDQFMTADETR_	962.37	1.3
P17302	306	S	_QAS(ph)EQNWANYSAEQNR_	988.4	1.3
P20810	366	S	_SES(ph)ELIDELSEDFDR_	932.38	1.3
P27816	507	S	_DMS(ph)PLS(ph)ETEMALGK_	834.82	1.3
P27816	521	T	_DVT(ph)PPPETEVLIK_	539.61	1.3
P40222	515	S	_RPEGPGAQAPSS(ph)PR_	743.84	1.3
P49959	702	S	_GVDFES(ph)S(ph)EDDDDDPFMNTSS	906.63	1.3
P51809	168	S	_TENLVDS(ph)S(ph)VTFK_	500.54	1.3
P82094	344	S	_S(ph)VSEINS(ph)DDELSGK_	547.21	1.3
Q01831	94	S	_VIKDEALS(ph)DGDDLRL_	542.59	1.3
Q13530	367	S	_LTLIS(ph)GSDS(ph)VILGDTTSGASDI	990.08	1.3

Q13530	371	S	_LTLS(ph)GSDS(ph)VILGDTTTTSGASDI	990.08	1.3
Q14694	576	S	_NHSVNEEEQEEQEGEGS(ph)EDEWEC	1036.4	1.3
Q15424	601	S	_S(ph)VVS(ph)FDK_	471.17	1.3
Q15642	298	S	_APS(ph)DS(ph)SLGTPSDGRPELR_	667.95	1.3
Q15642	299	S	_APS(ph)DS(ph)SLGTPSDGRPELR_	667.95	1.3
Q5UIP0	1688	S	_RDS(ph)FDNCSLGESSK_	841.33	1.3
Q7Z6Z7	1907	S	_GSGTAS(ph)DDEFENLR_	789.31	1.3
Q8NDT2	532	T	_DRT(ph)PPHLLYSDR_	388.18	1.3
Q8TAD8	396	S	_KDEDEEEEEVSDS(ph)_	932.31	1.3
Q99567	517	S	_EDVEVAES(ph)PLR_	662.3	1.3
Q9NYF8	512	S	_DLFDYS(ph)PPLHK_	353.66	1.3
Q9UNS1	1173	S	_QLLDS(ph)DEEQEEDGR_	624.58	1.3
O15400	144	S	_NLVS(ph)WESQTQPQVQVQDEEITEC	1056.1	1.31
P08581	997	S	_SVSPTTEMVS(ph)NES(ph)VDYR_	1030.9	1.31
P08758	135	S	_QVYEEYGS(ph)SLEDDVVGDTSGYY	990.07	1.31
P46821	1792	S	_ES(ph)SPLYS(ph)PTFSDSTSAVK_	688.28	1.31
P54578	143	S	_AS(ph)GEM(ox)ASAQYITAALR_	579.26	1.31
Q12888	1056	T	_SEDPPTT(ph)PIR_	596.77	1.31
Q13547	421	S	_IACEEFS(ph)DS(ph)EEEGEGGRK_	580.21	1.31
Q13547	423	S	_IACEEFS(ph)DS(ph)EEEGEGGRK_	580.21	1.31
Q14678	325	S	_SYS(ph)AGNASQLEQLSR_	845.88	1.31
Q5T200	77	S	_S(ph)PERPTGDLR_	403.19	1.31
Q92934	118	S	_MS(ph)DEFVDSFK_	428.83	1.31
Q96PK6	206	T	_QPT(ph)PPFFGR_	563.76	1.31
Q99549	84	T	_GYT(ph)SDDDTWEPEIHLEDCK_	797.31	1.31
Q9BRJ6	175	S	_ELDEEGS(ph)DPPLPGR_	530.89	1.31
Q9BXS9	752	S	_PVPDS(ph)PVS(ph)VTR_	657.28	1.31
Q9GZP1	157	S	_AEPLDPEADS(ph)HVEVFGDEPEQQL	1077.8	1.31
Q9NPG3	336	S	_DMDDGS(ph)DS(ph)LGVGLDQEFR_	1058.4	1.31
Q9NPG3	338	S	_DMDDGS(ph)DS(ph)LGVGLDQEFR_	1058.4	1.31
Q9Y2W1	928	S	_WAHDKFS(ph)GEEGEIEDDES(ph)GT	933.01	1.31
Q9Y4E1	5	T	_T(ph)TPDQELVPASEPVWERPWSVEI	758.36	1.31
Q9Y4E1	6	T	_T(ph)TPDQELVPASEPVWERPWSVEI	758.36	1.31
O15541	84	S	_AAYGDLS(ph)S(ph)EEEEENEPESLG\	935.38	1.32
O15541	85	S	_AAYGDLS(ph)S(ph)EEEEENEPESLG\	935.38	1.32
O75164	522	S	_DSIS(ph)SDSETSEPLSCR_	925.36	1.32
P11388	1374	S	_S(ph)VVS(ph)DLEADDVK_	479.52	1.32
P35221	658	T	_TS(ph)VQT(ph)EDDQLIAGQSAR_	989.91	1.32
P51532	1627	S	_AKPVVS(ph)DDDS(ph)EEEQEEDR_	746.28	1.32
P51532	1631	S	_AKPVVS(ph)DDDS(ph)EEEQEEDR_	746.28	1.32
Q13501	24	S	_RFS(ph)FCCSPEPEAEAAAGPGPC	954.72	1.32
Q14684	245	S	_VGDGDLS(ph)AEEIPENEVSLR_	1055	1.32
Q15758	493	S	_S(ph)TEPELIQVK_	408.54	1.32
Q15758	494	T	_S(ph)TEPELIQVK_	408.54	1.32
Q8IVF2	294	S	_DAHVVS(ph)PTSTDTEAQLTVER_	751.33	1.32
Q96B97	230	S	_S(ph)IEVENDFLPVEK_	533.58	1.32
Q96K21	354	S	_LPDS(ph)DDDEDEETAQR_	964.38	1.32
Q9H0D6	499	S	_KAEDS(ph)DS(ph)EPEPEDNVR_	988.86	1.32
Q9H3N1	247	S	_VEEQEADEEDVS(ph)EEEAESK_	1195.5	1.32
Q9NQC3	184	S	_RGSS(ph)GS(ph)VDETLFALPAASEPV	630.54	1.32
Q9NW68	418	S	_VDAS(ph)GELEDVEWEDWE_	663.25	1.32

O75533	129	S	_TM(ox)IIS(ph)PER_	521.74	1.33
O95155	105	S	_SQS(ph)MDIDGVSCEK_	768.29	1.33
P05412	73	S	_LAS(ph)PELER_	497.73	1.33
P05455	366	S	_FAS(ph)DDEHDEHDENGATGPVK_	750.63	1.33
P14625	306	S	_EEKEES(ph)DDEAAVEEEEEEEK_	583.97	1.33
P18858	141	S	_TIQEVLEEQS(ph)EDED_	950.4	1.33
P19338	28	S	_EVEEDS(ph)EDEEMS(ph)EDEEDDS(φ	909.05	1.33
P19338	34	S	_EVEEDS(ph)EDEEMS(ph)EDEEDDS(φ	909.05	1.33
P19338	41	S	_EVEEDS(ph)EDEEMS(ph)EDEEDDS(φ	909.05	1.33
P19338	42	S	_EVEEDS(ph)EDEEMS(ph)EDEEDDS(φ	909.05	1.33
P27824	564	S	_SDAEEDGGTVS(ph)QEEEDR_	644.9	1.33
P43243	188	S	_RDS(ph)FDDR_	495.69	1.33
P46783	146	S	_AEAGAGS(ph)ATEFQFR_	507.88	1.33
P46821	1154	S	_DVMSDETNNETES(ph)PSQEFVNIT	941.72	1.33
P46821	1400	S	_S(ph)PPLIGSESAYESFLSADDK_	731.66	1.33
Q01804	1024	S	_EES(ph)S(ph)EDENEVSNILR_	955.36	1.33
Q56P03	109	S	_YYDDIYFDS(ph)DS(ph)EDED_	1103.9	1.33
Q56P03	111	S	_YYDDIYFDS(ph)DS(ph)EDED_	1103.9	1.33
Q8NEY8	133	S	_DNTFFRES(ph)PVGR_	502.22	1.33
Q8WXI9	120	T	_GRLT(ph)PS(ph)PDIIVLS(ph)DNEAS(φ	848.68	1.33
Q8WXI9	122	S	_GRLT(ph)PS(ph)PDIIVLS(ph)DNEAS(φ	848.68	1.33
Q96GN5	21	S	_EVADIFNAPS(ph)DDEEFVGFR_	746.32	1.33
Q96JM3	603	S	_CDILVQEELLAS(ph)PK_	565.61	1.33
Q9H1E3	130	S	_DS(ph)GS(ph)DEDFLMEDDDDS(ph)D'	890.26	1.33
Q9H1E3	132	S	_DS(ph)GS(ph)DEDFLMEDDDDS(ph)D'	890.26	1.33
Q9P2I0	419	S	_EADIDS(ph)S(ph)DES(ph)DIEEDIDQP	928.99	1.33
Q9P2I0	420	S	_EADIDS(ph)S(ph)DES(ph)DIEEDIDQP	928.99	1.33
Q9P2I0	423	S	_EADIDS(ph)S(ph)DES(ph)DIEEDIDQP	928.99	1.33
Q9Y2X3	514	S	_EEPLS(ph)EEEPCTSTAIAS(ph)PEK_	591.74	1.33
Q9Y5T5	415	S	_TVEDEDQDS(ph)EEEKDND SYIK_	823.32	1.33
O43741	184	S	_DLSSS(ph)PPGPYQEMYAFR_	1041.4	1.34
P38159	208	S	_DVYLS(ph)PR_	465.21	1.34
Q32MZ4	733	S	_CTLPEHES(ph)PSQDISDACEAESTEF	943.37	1.34
Q5JTH9	1080	S	_GDSIEEILADS(ph)EDEEDNEEEER_	878	1.34
Q6P4Q7	664	S	_SAS(ph)LSYPDR_	538.23	1.34
Q7L014	804	S	_AALGLQDS(ph)DDEDAAVDIDEQIESM	777.33	1.34
Q7Z6E9	1328	S	_WDKDDFES(ph)EEEDVK_	463.43	1.34
Q86YS7	661	S	_SQSES(ph)S(ph)DEVTELDLSHGK_	527.71	1.34
Q86YS7	662	S	_SQSES(ph)S(ph)DEVTELDLSHGK_	527.71	1.34
Q8N108	172	Y	_YFDTNS(ph)EVEESEEDEDY(ph)IPS	811.8	1.34
Q8N6T3	343	S	_S(ph)PSSDSWTCADTSTER_	933.85	1.34
Q8NBJ4	351	Y	_LRGEDDY(ph)NMDENEAESETDK_	1220.5	1.34
Q96T58	847	S	_EQS(ph)PEKPR_	350.83	1.34
Q9NRG9	495	S	_FS(ph)PVLGR_	428.21	1.34
Q9UQ35	536	S	_S(ph)PQRPGWSR_	384.18	1.34
Q9Y3B9	58	S	_DHFYS(ph)DDDAIEADS(ph)EGDAEPC	920.98	1.34
Q9Y3B9	67	S	_DHFYS(ph)DDDAIEADS(ph)EGDAEPC	920.98	1.34
O60238	166	S	_SVS(ph)LSMR_	430.19	1.35
O76021	361	S	_ATNES(ph)EDEIPQLVPIGK_	960.45	1.35
P43250	484	S	_DVLIDIEQFS(ph)T(ph)VK_	777.33	1.35
P55081	118	S	_IVEPEVVGES(ph)DS(ph)EVEGDAWR_	787.99	1.35

Q13283	232	S	_SSS(ph)PAPADIAQTVQEDLR_	982.95	1.35
Q14160	1566	S	_LS(ph)PDFAEELR_	628.78	1.35
Q8N9T8	171	S	_AFVEDS(ph)EDEDGAGEGGSSLLQK_	773.99	1.35
Q8NFG4	298	S	_LADLEEESES(ph)WDNS(ph)EAEIEEEI	876.65	1.35
Q96CW6	308	S	_EFGYDSPHDLDS(ph)D_	788.78	1.35
Q96RT1	602	S	_HIVNHDDVFEESSEELS(ph)S(ph)DEEM	926.69	1.35
Q96RT1	603	S	_HIVNHDDVFEESSEELS(ph)S(ph)DEEM	926.69	1.35
Q96TC7	46	S	_SQS(ph)LPNSLDYTQTSDPGR_	1023.4	1.35
Q99523	825	S	_SGYHDDS(ph)DEDLLE_	787.78	1.35
Q9NYV4	334	S	_S(ph)SS(ph)PFLSK_	506.69	1.35
Q9UEW8	385	S	_TEDGDWEWS(ph)DDEMDEK_	689.57	1.35
Q9Y2D8	312	S	_VDDSTGTVIS(ph)DVEEDAGELSR_	1137.5	1.35
Q9Y2W1	682	S	_IDIS(ph)PSTFR_	372.51	1.35
Q9Y2X7	385	S	_SQSDLDDQHDYDS(ph)VAS(ph)DEDT	1047.4	1.35
Q9Y5J1	121	S	_VQEHEDS(ph)GDS(ph)EVENEAK_	687.92	1.35
Q9Y5J1	124	S	_VQEHEDS(ph)GDS(ph)EVENEAK_	687.92	1.35
O60271	815	S	_ETDYPAGEDLSES(ph)GQVDK_	673.94	1.36
O75448	873	S	_LLSSNEDDANILSS(ph)PTDR_	1014	1.36
O95453	570	S	_NLS(ph)PSQEEAGLEDGVS(ph)GEISC	1049.7	1.36
P08581	990	S	_SVS(ph)PTTEMVS(ph)NESVDYR_	1030.9	1.36
P10244	241	S	_EEENS(ph)EEELAAATTSK_	606.58	1.36
P40222	514	S	_RPEGPGAQAPS(ph)SPR_	743.84	1.36
P63104	207	S	_TAFDEAIAELDTLS(ph)EESYK_	737.99	1.36
Q6NZI2	202	S	_EGEELGEGERPEEDAAALELS(ph)S(p	1023.4	1.36
Q6NZI2	203	S	_EGEELGEGERPEEDAAALELS(ph)S(p	1023.4	1.36
Q8NE71	228	S	_KAEQGS(ph)EEEEGEGEEEEEGGESI	854.66	1.36
Q96N67	910	S	_SLSNS(ph)NPDISGTPTS(ph)PDDEVR	1174.5	1.36
Q99717	462	S	_VLTQMGSPLNPIS(ph)S(ph)VS_	597.27	1.36
Q99717	463	S	_VLTQMGSPLNPIS(ph)S(ph)VS_	597.27	1.36
Q9BVJ6	29	S	_DYLLS(ph)ES(ph)EDEGDNDGER_	1051.9	1.36
Q9BVJ6	31	S	_DYLLS(ph)ES(ph)EDEGDNDGER_	1051.9	1.36
Q9BXS9	755	S	_PVPDS(ph)PVS(ph)VTR_	657.28	1.36
Q9H8G2	203	S	_ILEGDNGMDS(ph)DMEEEADDGSK_	584.97	1.36
Q9Y4I1	1652	S	_TSS(ph)IADEGTYTLDSILR_	961.44	1.36
P07910	260	S	_M(ox)ES(ph)EGGADDS(ph)AEEGDLLI	778.1	1.37
P08670	325	S	_QVQS(ph)LTCEVDALK_	785.86	1.37
P18858	66	S	_VLGS(ph)EGEEDEALS(ph)PAK_	640.59	1.37
P18858	76	S	_VLGS(ph)EGEEDEALS(ph)PAK_	640.59	1.37
P27816	636	S	_KCS(ph)LPAEEDSVLEK_	562.25	1.37
Q00587	192	S	_SDS(ph)LLS(ph)FR_	542.71	1.37
Q13286	12	S	_RFS(ph)DS(ph)EGEETVPEPR_	632.25	1.37
Q14247	418	S	_LPSS(ph)PVYEDAASFK_	795.86	1.37
Q4G0J3	300	S	_SSS(ph)EDAESLAPR_	664.77	1.37
Q5JSH3	162	S	_LTQTSS(ph)TEQLNVLETETEVLNK_	853.08	1.37
Q6ZW31	681	S	_DFLSGPDYDHVTGS(ph)DS(ph)EDED	1052.7	1.37
Q6ZW31	683	S	_DFLSGPDYDHVTGS(ph)DS(ph)EDED	1052.7	1.37
Q70Z53	278	S	_NS(ph)DEEESASESELWK_	607.24	1.37
Q8IWS0	154	S	_TAHNSEADLEESFNEHELEPS(ph)SP†	556.24	1.37
Q8NC44	385	S	_QALDS(ph)EEEEEDVAAK_	581.57	1.37
Q92538	1298	S	_ADAPDAGAQS(ph)DSELPSYHQNDV€	946.73	1.37
Q99543	63	S	_ELS(ph)EES(ph)EDEELQLEEFMMLK_	646.76	1.37

Q9BUR4	491	S	_VFPEPTES(ph)GDEGEELGLPLLSTR_	1276.6	1.37
Q9HB90	95	S	_MSPNETLFLES(ph)TNK_	845.87	1.37
Q9NY61	203	S	_AGDRNS(ph)EDDGVVMTFSSVK_	698.63	1.37
Q9P035	114	S	_WLDES(ph)DAEMELR_	787.32	1.37
Q9UN86	141	S	_YEDEVFGDS(ph)EPELDEES(ph)EDE\	1184.1	1.37
Q9UN86	149	S	_YEDEVFGDS(ph)EPELDEES(ph)EDE\	1184.1	1.37
O60832	513	S	_EVELVS(ph)E_	442.69	1.38
O95602	1429	S	_EKQEEEVDYES(ph)EEEEER_	755.96	1.38
P11388	1377	S	_S(ph)VVS(ph)DLEADDVK_	479.52	1.38
P17275	255	T	_DAT(ph)PPVS(ph)PINMEDQER_	979.88	1.38
Q13188	316	S	_ELEEEEENS(ph)DEDELDSHTM(ox)Vr	868.33	1.38
Q5HYJ3	193	S	_ISNLS(ph)PEEEQGLWK_	855.39	1.38
Q5VT52	374	S	_DVEDMELS(ph)DVEDDGSK_	621.57	1.38
Q76FK4	888	T	_FLET(ph)DS(ph)EEEQEEVNEK_	705.6	1.38
Q76FK4	890	S	_FLET(ph)DS(ph)EEEQEEVNEK_	705.6	1.38
Q8IVF2	260	S	_ERLS(ph)WPK_	332.5	1.38
Q8N3X1	116	S	_ATGGLCLLGAYADS(ph)DDDDNDVSE	861.01	1.38
Q96A49	269	S	_TQEDEEEISTS(ph)PGVSEFVSDAFDA	1271.2	1.38
Q99871	26	S	_GGDDYS(ph)EDEGDSSVSR_	877.8	1.38
Q9H6Y2	14	S	_TCEERPAEDGS(ph)DEEDPDSMEAPT	935.02	1.38
Q9UKL0	257	S	_EREES(ph)EDELEEANGNNPIDIEVDQ	619.87	1.38
Q9UKV3	216	S	_GDS(ph)DDEKPR_	549.71	1.38
Q9Y6N7	1240	T	_MYLQQDELEEEEDERGPT(ph)PPVR_	914.07	1.38
O14497	1755	S	_VSS(ph)PAPMEGGEEEEELLGPK_	722.32	1.39
O15320	139	S	_SNS(ph)ELEDEILCLEK_	586.92	1.39
O75400	888	S	_SDSPES(ph)DAEREK_	715.28	1.39
P08559	300	S	_YHGHS(ph)MSDPGVS(ph)YR_	876.82	1.39
P22059	190	S	_MLAES(ph)DES(ph)GDEESVSQTDK_	739.6	1.39
P22059	193	S	_MLAES(ph)DES(ph)GDEESVSQTDK_	739.6	1.39
Q01831	883	S	_SEAAAPHTDAGGGLS(ph)S(ph)DEEEI	1016.7	1.39
Q01831	884	S	_SEAAAPHTDAGGGLS(ph)S(ph)DEEEI	1016.7	1.39
Q13043	320	S	_EVDQDDEENS(ph)EEDEMDSGMTMVR	1320	1.39
Q86SQ0	489	S	_LQLS(ph)DEESVFEEALMSPDTR_	792.68	1.39
Q8IWA0	779	S	_EIPEDVDMEEEKES(ph)EDS(ph)DEEM	820.05	1.39
Q8IWA0	782	S	_EIPEDVDMEEEKES(ph)EDS(ph)DEEM	820.05	1.39
Q8NC44	330	T	_ATT(ph)PQLTDVSEDLQQLPSEPEI	1056.1	1.39
Q99543	60	S	_ELS(ph)EES(ph)EDEELQLEEFMLK_	646.76	1.39
Q9BRR8	6	S	_DS(ph)DS(ph)EEDLVSYGTGLEPLEEC	971.07	1.39
Q9BRR8	8	S	_DS(ph)DS(ph)EEDLVSYGTGLEPLEEC	971.07	1.39
Q9H0D6	501	S	_KAEDS(ph)DS(ph)EPEPEDNVR_	988.86	1.39
Q9NPG3	493	S	_DRICS(ph)DEEEDEEK_	578.55	1.39
Q9UQ35	876	S	_SCFESS(ph)PDPELK_	738.29	1.39
O43823	328	S	_VDESEGDFS(ph)ENDDAAGDFR_	1013.4	1.4
P45973	14	S	_TADSSSS(ph)EDEEEYVVEK_	661.92	1.4
P46821	1949	T	_T(ph)PEEGGYSDISEK_	827.83	1.4
P51946	307	S	_S(ph)KHEEEEW(ph)DDDLVESL_	740.95	1.4
P62805	97	T	_T(ph)LYGFGG_	397.66	1.4
Q02880	1613	S	_YFAES(ph)DEEEDDVDFAMFN_	1126.9	1.4
Q6UN15	492	S	_DHS(ph)PTPSVFNS(ph)DEER_	938.84	1.4
Q6ZRP7	578	S	_DNLLDTYSADQGDS(ph)SEGGTLAR_	789	1.4
Q7Z6E9	984	T	_DDAT(ph)PVRDEPMDAESITFK_	554.99	1.4

Q8WZ73	226	S	_VPAEDETQS(ph)IDS(ph)EDSFVPGR_	779.98	1.4
Q96JM3	476	S	_GGS(ph)PDLWK_	313.8	1.4
Q96JM3	627	S	_DNQESS(ph)DAELS(ph)SSEYIK_	1031.4	1.4
Q99717	465	S	_VLTQM(ox)GSPLNPIS(ph)SVS(ph)_	602.6	1.4
Q9NTI5	1176	S	_LDS(ph)SEMDHS(ph)ENEDYTMSSPLI	910.34	1.4
Q9NTI5	1182	S	_LDS(ph)SEMDHS(ph)ENEDYTMSSPLI	910.34	1.4
Q9UQ35	1124	S	_GEFSAS(ph)PMLK_	382.83	1.4
Q9Y4W2	617	S	_MEVGPFSTGQES(ph)PTAENAR_	1044.4	1.4
O00567	569	S	_EEPVS(ph)S(ph)GPAAVVGK_	394.41	1.41
O43237	194	S	_DFQDYMEPEEGCQGS(ph)PQR_	1126.9	1.41
O43314	38	S	_HFFHHADEDEEEDDS(ph)PPER_	844.98	1.41
O60678	25	S	_GAVENEEDLPELS(ph)DS(ph)GDEAA\	929.36	1.41
O60678	27	S	_GAVENEEDLPELS(ph)DS(ph)GDEAA\	929.36	1.41
P05412	243	S	_EEPQTVPEMPGETPPLS(ph)PIDMES(	1001.8	1.41
P08581	1000	S	_SVSPTTEMVS(ph)NES(ph)VDYR_	1030.9	1.41
P23588	406	S	_HPS(ph)WRS(ph)EETQER_	567.89	1.41
P23588	409	S	_HPS(ph)WRS(ph)EETQER_	567.89	1.41
P26358	714	S	_EADDDEEVDDNIPEMPS(ph)PK_	556.97	1.41
P46821	936	S	_FEDEGAGFEES(ph)SETGDYEEK_	584.47	1.41
Q13177	141	S	_YLS(ph)FT(ph)PPEK_	414.5	1.41
Q13286	14	S	_RFS(ph)DS(ph)EGEETVPEPR_	632.25	1.41
Q14676	168	S	_LLLAEDS(ph)EEEVDFLSER_	691.98	1.41
Q53T59	194	S	_GEDAEES(ph)LEEEALDPLGIM(ox)R	1214.5	1.41
Q5H9R7	617	S	_IQQFDDGGS(ph)DEEDIWEEK_	740.63	1.41
Q5T200	364	T	_TLT(ph)PPLR_	439.23	1.41
Q8TD57	346	T	_WNEEHLHT(ph)VNPMMLR_	662.96	1.41
Q96B23	66	S	_RDS(ph)SESQLASTESDKPTTGR_	558.75	1.41
Q96J84	558	T	_EPLTMHSDREDDT(ph)ASVSTATR_	800.34	1.41
Q96S82	230	S	_DMPGGFLFEGLS(ph)DDEDDFHPNTF	897.7	1.41
Q9UDY2	933	T	_LISDFEDTDGEGGAYT(ph)DNELDEP/	941.91	1.41
Q9UNZ2	114	S	_S(ph)PNELVDDLK_	678.81	1.41
Q9UPN9	1102	T	_TFAPLPEFEQEEDDGEVT(ph)EDS(ph)	1182.1	1.41
Q9UQ35	2132	S	_S(ph)PGMLEPLGSSR_	437.53	1.41
P20042	67	S	_DAS(ph)DDLDDLNFFNQK_	459.94	1.42
P29692	162	S	_PATPAEDEDDDDIDLFGS(ph)DNEEEI	883.11	1.42
P51956	479	T	_LEPGLDEEDT(ph)DFEEEDDNPDWV€	1049.1	1.42
Q15648	1561	S	_LS(ph)PDFMIGEEDDDLM(ox)DVALIGI	835.69	1.42
Q16513	583	S	_ASS(ph)LGEIDESSELR_	786.84	1.42
Q86UE4	568	S	_SETSWES(ph)PK_	377.48	1.42
Q92733	267	S	_QITQEEDDS(ph)DEEVAPENFFSLPEK	719.81	1.42
Q96T23	1345	S	_IES(ph)DEEEDFENVGK_	430.67	1.42
Q9H7D0	1287	S	_DS(ph)YYVYTQQELK_	808.85	1.42
Q9NYF8	658	S	_IDIS(ph)PSTLR_	361.18	1.42
O60231	106	S	_LLEDS(ph)EES(ph)SEETVSR_	935.36	1.43
P13861	78	S	_VADAKGDS(ph)ES(ph)EEDEDLEVPVf	878.36	1.43
P23634	1181	T	_T(ph)PLLDEEEENPDK_	579.91	1.43
P35221	641	S	_TPEELDDS(ph)DFETEDFDVR_	1119.9	1.43
P35222	191	S	_S(ph)PQMVSAIVR_	584.28	1.43
P51636	23	S	_ADVQLFMDDDSYS(ph)HHS(ph)GLEY	1010.4	1.43
Q06210	261	S	_VDS(ph)TTCLFPVEEK_	401.93	1.43
Q15459	329	S	_FGESEEVEM(ox)EVES(ph)DEEDDKQ	679.01	1.43

Q6PKG0	766	S	_S(ph)LPTTVPESPNYR_	770.86	1.43
Q6UN15	500	S	_DHS(ph)PTPSVFNS(ph)DEER_	626.23	1.43
Q86VM9	117	S	_DEAS(ph)SVTR_	472.69	1.43
Q86VM9	118	S	_DEAS(ph)SVTR_	472.69	1.43
Q96F63	257	S	_LLQQQEEEEACLEEEEEEDS(ph)DE	862.58	1.43
Q96T88	91	S	_DSELS(ph)DTDSGCCCLGQSESDK_	757.28	1.43
Q9NU22	4752	S	_MHDGEELEEQEEDDEKS(ph)DS(ph)EG	749.77	1.43
Q9UPN9	1105	S	_TFAPLPEFEQEEDDGEVT(ph)EDS(ph)	1182.1	1.43
Q9Y2W1	939	S	_FSGEEGEIEDDES(ph)GTENR_	1040.4	1.43
O15320	137	S	_S(ph)NSELEDEILCLEK_	586.92	1.44
P16949	38	S	_ESVPEFPLS(ph)PPK_	352.42	1.44
P29475	856	Y	_FNSVSS(ph)Y(ph)S(ph)DS(ph)QK_	834.74	1.44
P35367	230	S	_S(ph)LPS(ph)FSEIK_	389.83	1.44
P35367	233	S	_S(ph)LPS(ph)FSEIK_	389.83	1.44
P51636	20	S	_ADVQLFMDDDSY(ph)S(ph)HHS(ph)Gl	778.04	1.44
P52948	623	S	_DSENLAS(ph)PSEYPENGER_	658.6	1.44
Q7Z5K2	77	S	_VEEESTGDPFGFDS(ph)DDESLPVSS	885.03	1.44
Q92804	375	S	_RNS(ph)CNQCNEPRPEDSR_	525.46	1.44
Q96JM3	632	S	_DNQESS(ph)DAELS(ph)SSEYIK_	1031.4	1.44
Q96NB3	351	S	_KEENADS(ph)DDEGELQDLLSQDWI	701.04	1.44
Q96ST3	832	S	_GDLS(ph)DVEEEEEEMDVDEATGAV	677.02	1.44
Q9Y520	1246	S	_S(ph)ESSDFEVVPK_	652.28	1.44
O60716	349	S	_GSLAS(ph)LDSLRL_	549.76	1.45
O75381	335	S	_REDKEDEEEDDDVS(ph)HVDEEDC	868.59	1.45
O75976	1370	T	_SLLSHEFQDET(ph)DT(ph)EEETLYSS	916.7	1.45
P13861	80	S	_VADAKGDS(ph)ES(ph)EEDEDLEVPVf	878.36	1.45
P49761	224	S	_S(ph)PS(ph)FGEDYYGPSR_	811.28	1.45
P49761	226	S	_S(ph)PS(ph)FGEDYYGPSR_	811.28	1.45
P51636	18	S	_ADVQLFMDDDS(ph)Y(ph)S(ph)HHSGl	778.04	1.45
Q13501	332	S	_IALESEGRPEEQMESDNCS(ph)GGDC	712.69	1.45
Q15054	307	S	_VALS(ph)DDETKETENMR_	909.38	1.45
Q8NDI1	171	S	_ATDEDMQS(ph)LAS(ph)LMSMK_	639.91	1.45
Q8NDI1	174	S	_ATDEDMQS(ph)LAS(ph)LMSMK_	639.91	1.45
Q9BW71	530	S	_TLDS(ph)DEERPR_	649.27	1.45
Q9H0B6	589	S	_S(ph)VEEPTQPGGTGLSDSR_	898.89	1.45
O00264	178	T	_EGEPT(ph)VYSDEEHPKDESAR_	792.65	1.46
P46108	41	S	_DSS(ph)TSPGDYVLSVSENSR_	990.42	1.46
Q05209	435	S	_NLS(ph)FEIK_	465.72	1.46
Q5JTV8	156	S	_DSHS(ph)S(ph)EEDEASSQTDLSQTIS	847.66	1.46
Q5JTV8	157	S	_DSHS(ph)S(ph)EEDEASSQTDLSQTIS	847.66	1.46
Q5T200	993	S	_GNIETTSEDGQVFS(ph)PK_	596.93	1.46
Q76FK4	378	S	_EYDS(ph)GDT(ph)DEIIAMK_	873.81	1.46
Q8N163	675	S	_S(ph)VAS(ph)NQS(ph)EMEFSSLQDMI	589.46	1.46
Q8N163	678	S	_S(ph)VAS(ph)NQS(ph)EMEFSSLQDMI	589.46	1.46
Q96EB6	159	S	_DNLLFGDEIITNGFHS(ph)CES(ph)DEf	991.38	1.46
Q96EB6	162	S	_DNLLFGDEIITNGFHS(ph)CES(ph)DEf	991.38	1.46
Q99614	83	S	_S(ph)NEDVNSSELDEEYLIELEK_	812.35	1.46
Q9NX63	50	S	_YS(ph)GAYGASVSDEELK_	828.35	1.46
O43818	50	S	_MNEEIS(ph)S(ph)DS(ph)EESLAPR_	1060.9	1.47
O43818	51	S	_MNEEIS(ph)S(ph)DS(ph)EESLAPR_	1060.9	1.47
O43818	53	S	_MNEEIS(ph)S(ph)DS(ph)EESLAPR_	707.58	1.47

O60231	160	S	_QQTEKPES(ph)EDEWER_	935.88	1.47
P49959	688	S	_GVDFES(ph)S(ph)EDDDDDPFMNTSS	906.63	1.47
P49959	689	S	_GVDFES(ph)S(ph)EDDDDDPFMNTSS	906.63	1.47
Q13895	98	S	_M(ox)PQDGS(ph)DDEDEEWPTLEK_	739.61	1.47
Q4LE39	790	S	_DIEVLS(ph)EDT(ph)DYEEDEVTK_	572.97	1.47
Q5T1M5	1161	S	_S(ph)S(ph)LSGDEEDELFK_	539.2	1.47
Q8NBJ4	362	T	_LRGEDDYNMDENEAESET(ph)DK_	813.98	1.47
Q9P1Y6	991	S	_VVELRPPS(ph)R_	378.2	1.47
Q9UBF8	428	S	_S(ph)VENLPECGITHEQR_	924.9	1.47
Q9UQ35	1320	S	_ELSNS(ph)PLR_	498.23	1.47
Q9UQ35	2449	S	_S(ph)PVPSAFSDQSR_	679.29	1.47
O00505	60	S	_NVPQEESELEDS(ph)DVDADFK_	706.29	1.48
P13591	784	S	_DES(ph)KEPIVEVR_	690.82	1.48
P17275	259	S	_DAT(ph)PPVS(ph)PINMEDQER_	979.88	1.48
P46100	677	S	_RPTETNPVTSNS(ph)DEECNETVK_	829.68	1.48
P46821	1881	S	_S(ph)PDEEDYDYESYEK_	924.82	1.48
P52701	227	S	_SEEDNEIES(ph)EEEVQPK_	985.89	1.48
Q00587	350	S	_AS(ph)WES(ph)LDEEWR_	784.28	1.48
Q32P44	176	S	_AIS(ph)SANLLVR_	562.3	1.48
Q8WWI1	805	S	_MYS(ph)FDDVLEEGK_	756.8	1.48
Q9UDY2	394	S	_DSQQTLINIPS(ph)LNDS(ph)DSEIEDIE	856.12	1.48
Q9Y3T9	672	S	_DLFDLNS(ph)S(ph)EEDDTEGFSE	788.95	1.48
Q9Y6G9	207	S	_DFQEYVEPGEDFPAS(ph)PQR_	1096	1.48
Q12888	380	S	_STPFIVPSS(ph)PTEQEGR_	604.61	1.49
Q15185	113	S	_DWEDDS(ph)DEDMSNFDR_	652.55	1.49
Q6PKG0	627	S	_NTFTAWS(ph)DEES(ph)DYEIDDR_	1176.9	1.49
Q86XP3	96	S	_ANFDEENAYFEDEEEDSSNVDPYIP/	1296.2	1.49
Q92995	122	T	_IFLDLDT(ph)DDDLNSDDYEYEDEAK_	945.04	1.49
Q9H6F5	102	S	_QQDLHLES(ph)PQR_	715.82	1.49
Q9P1Y6	917	T	_GAVAAEGASDT(ph)ER_	657.27	1.49
O75379	30	S	_NLLEDDS(ph)DEEEDFFLR_	1033.4	1.5
O95747	339	S	_TEDGGWEWS(ph)DDEFDEESEEGK_	1278.4	1.5
Q00587	190	S	_S(ph)DSLLSFR_	502.73	1.5
Q15477	255	S	_AS(ph)SLEDLVLK_	385.53	1.5
Q7Z333	1017	S	_GQVIIIIS(ph)DS(ph)DDDDDER_	651.25	1.5
Q7Z333	1019	S	_GQVIIIIS(ph)DS(ph)DDDDDER_	651.25	1.5
Q92615	498	S	_KNS(ph)FGYR_	317.81	1.5
Q92625	663	S	_SPS(ph)FASEWDEIEK_	802.83	1.5
Q9C0C2	836	S	_S(ph)QEADVQDWEFR_	530.55	1.5
Q9H501	663	S	_ALAEAS(ph)EEELPS(ph)DVDLNDPY	1057.1	1.5
Q9UK76	87	S	_RNS(ph)SEASSGDFLDLK_	853.38	1.5
P06748	70	S	_DELHIVEAEAMNYEGS(ph)PIK_	742.33	1.51
P22059	351	S	_GDMS(ph)DEDDENEFFDAPEIITMPEN	819.58	1.51
P48634	1089	S	_S(ph)EGS(ph)EYEEIPK_	714.25	1.51
P52948	888	S	_YGLQDS(ph)DEEEEEHPSK_	657.92	1.51
Q4LE39	793	T	_DIEVLS(ph)EDT(ph)DYEEDEVTK_	572.97	1.51
Q5T200	877	S	_SLS(ph)PSHLTEDR_	661.29	1.51
Q76FK4	381	T	_EYDS(ph)GDT(ph)DEIIAMK_	873.81	1.51
Q8NE71	140	S	_GGNVFAALIQQDS(ph)EEEEEEEK_	811.01	1.51
Q92769	422	S	_IACDEEFS(ph)DS(ph)EDEGEGGRR_	773.27	1.51
O00264	181	S	_EGEPTVYS(ph)DEECPKDESAR_	1188.5	1.52

P16070	706	S	_S(ph)QEM(ox)VHLVNK_	427.53	1.52
P55081	52	S	_RPDYAPMES(ph)S(ph)DEEDEEFQFIK	908.01	1.52
P55081	53	S	_RPDYAPMES(ph)S(ph)DEEDEEFQFIK	908.01	1.52
Q04637	1187	S	_SFS(ph)KEVEER_	595.76	1.52
Q13085	23	S	_FIIGS(ph)VSEDNS(ph)EDEISNLVK_	785.67	1.52
Q13085	29	S	_FIIGSVS(ph)EDNS(ph)EDEISNLVK_	589.51	1.52
Q15149	4386	S	_SSS(ph)VGSSSSYPISPAVSR_	917.91	1.52
Q16637	28	S	_GTGQS(ph)DDS(ph)DIWDDTALIK_	1048.9	1.52
Q6PD62	925	T	_GGEFDEFVNDT(ph)DDDLPIK_	769.98	1.52
Q8WXH0	6361	S	_LTCTPGLEDEKEAS(ph)ENETDMED	978.39	1.52
Q9NYF8	402	T	_FNDS(ph)EGDDT(ph)EETEDYR_	1041.3	1.52
Q9UDY2	398	S	_DSQQTINIPSLNDS(ph)DS(ph)EIEDIE	1141.2	1.52
Q9UDY2	400	S	_DSQQTINIPSLNDS(ph)DS(ph)EIEDIE	1141.2	1.52
O60341	137	S	_EMDESLANLS(ph)EDEYYS(ph)EEER_	1299.5	1.53
O75494	131	S	_S(ph)RS(ph)FDYNYR_	456.5	1.53
O75976	1368	T	_SLLSHEFQDET(ph)DT(ph)EEETLYSS	916.7	1.53
P49792	2668	S	_NRPDYVS(ph)EEEEDEDFETAVK_	866.01	1.53
Q16828	300	S	_S(ph)VT(ph)VTVAYLM(ox)QK_	758.33	1.53
Q16828	302	T	_S(ph)VT(ph)VTVAYLM(ox)QK_	758.33	1.53
Q7Z2W4	284	S	_AS(ph)LEDAPVDDLTR_	494.56	1.53
O43719	721	S	_LFDEEEDS(ph)S(ph)EKLFDDS(ph)DE	636.97	1.54
O60885	1117	S	_IHS(ph)PIIR_	458.24	1.54
Q01813	386	S	_S(ph)FAGNLNTYK_	398.84	1.54
Q14137	126	S	_IGDEYAEDS(ph)S(ph)DEEDIR_	1001.8	1.54
Q14137	127	S	_IGDEYAEDS(ph)S(ph)DEEDIR_	1001.8	1.54
Q99549	85	S	_GYTS(ph)DDDTWEPEIHLEDCK_	797.31	1.54
Q9H2P0	953	S	_LMHNAS(ph)DS(ph)EVDQDDVVEWK_	594.98	1.54
Q9H2P0	955	S	_LMHNAS(ph)DS(ph)EVDQDDVVEWK_	594.98	1.54
Q9H501	657	S	_ALAEAS(ph)EEELPS(ph)DVDLNDPY	1057.1	1.54
Q9Y2W1	575	S	_M(ox)DS(ph)FDEDLAR_	647.74	1.54
Q9Y2W1	684	S	_IDISPS(ph)TFR_	558.26	1.54
P27824	583	S	_AEDEILNRS(ph)PR_	503.56	1.55
Q02880	1466	S	_FDS(ph)NEEDSASVFSPFGLK_	714.97	1.55
Q8NAV1	193	S	_VSALEEDMDDVES(ph)S(ph)EEEEEEI	1077.4	1.55
Q8NAV1	194	S	_VSALEEDMDDVES(ph)S(ph)EEEEEEI	1077.4	1.55
Q99549	51	S	_GAEAFGDS(ph)EEDGEDVFEVEK_	560.47	1.55
Q9NYF8	222	S	_SSATSGDIWPGLSAYDNS(ph)PR_	1081	1.55
Q9NYF8	389	S	_AEGEWEDQEALDYFS(ph)DKES(ph)C	864.99	1.55
Q9NYF8	531	S	_STFREES(ph)PLR_	434.53	1.55
Q9UJV9	23	S	_S(ph)EAEDEDEDYVPYVPLR_	740.97	1.55
Q9UQ35	1693	S	_S(ph)SPELTR_	435.19	1.55
Q9UQ35	1694	S	_S(ph)SPELTR_	435.19	1.55
O95218	120	S	_EES(ph)DGEYDEFGR_	756.76	1.56
P27816	510	S	_DMS(ph)PLS(ph)ETEMALGK_	834.82	1.56
P48634	1092	S	_S(ph)EGS(ph)EYEEIPK_	714.25	1.56
P54105	102	S	_FEEESKEPVADEEEEDS(ph)DDDVEP	1132.1	1.56
Q5VSL9	59	S	_KDS(ph)EGYSESPDLEFEYADTDK_	627	1.56
Q8IZ21	514	S	_EEEEKES(ph)DSDSEGPIQYR_	736.29	1.56
Q96A57	25	T	_LS(ph)ST(ph)DDGYIDLQFK_	587.91	1.56
O95391	235	S	_DHNS(ph)EDEDEDKYADDIDMPGQNF	778.04	1.57
P08670	56	S	_SLYASS(ph)PGGVYATR_	754.84	1.57

Q04637	1185	S	_S(ph)FSKEVEER_	397.51	1.57
Q96GN5	117	S	_ASLVS(ph)EEEEDEEEDKATPR_	748.31	1.57
Q9BV36	337	S	_ASS(ph)ESQIFELNK_	716.82	1.57
Q9C0B5	380	S	_GDS(ph)LKEPTSIAESSR_	828.88	1.57
Q9H1E3	113	S	_EMLMEDVGS(ph)EEEQEEDEAPFQ	979.71	1.57
Q9NZN4	438	S	_GPDEAM(ox)EDGEEGS(ph)DDEAEW'	1296	1.57
Q9UKV3	365	S	_TTS(ph)PLEEEER_	635.76	1.57
Q9UP95	967	S	_LESLYS(ph)DEEDESAVGADK_	1018.9	1.57
P27824	562	T	_QKS(ph)DAEEDGGT(ph)VSQEEEDR_	756.94	1.58
Q06210	262	T	_VDST(ph)TCLFPVEEK_	802.85	1.58
Q6PKG0	631	S	_NTFTAWS(ph)DEES(ph)DYEIDDR_	1176.9	1.58
Q86XP3	185	S	_YMAENPTAGVVQEEEDNLEYDS(ph)	902.13	1.58
Q92545	1341	S	_HS(ph)S(ph)EDS(ph)DITSLIEAMDK_	706.59	1.58
Q92545	1342	S	_HS(ph)S(ph)EDS(ph)DITSLIEAMDK_	706.59	1.58
Q92545	1345	S	_HS(ph)S(ph)EDS(ph)DITSLIEAMDK_	706.59	1.58
Q92769	424	S	_IACDEEFS(ph)DS(ph)EDEGEGGRR_	773.27	1.58
O60341	131	S	_EMDESLANLS(ph)EDEYYS(ph)EEER_	1299.5	1.59
P23396	221	T	_DEILPTT(ph)PISEQK_	517.58	1.59
Q02880	1522	S	_VVEAVNS(ph)DS(ph)DSEFGIPK_	976.9	1.59
Q02880	1524	S	_VVEAVNS(ph)DS(ph)DSEFGIPK_	976.9	1.59
Q5T1M5	1162	S	_SS(ph)LS(ph)GDEEDELFK_	808.29	1.59
Q5T1M5	1164	S	_SS(ph)LS(ph)GDEEDELFK_	808.29	1.59
Q8N1G1	610	S	_EVDFDS(ph)DPMEELR_	607.9	1.59
Q9NQ29	363	S	_S(ph)EEKEAGEI_	357.81	1.59
Q9NYV4	332	S	_S(ph)SS(ph)PFLSK_	506.69	1.59
Q86YR5	492	S	_APS(ph)S(ph)DEECFFDLLTK_	640.25	1.6
Q92890	299	S	_FVAFSGEGQS(ph)LR_	689.31	1.6
P46821	937	S	_FEDEGAGFEES(ph)ETGDYEEK_	778.95	1.61
Q12888	379	S	_STPFIVPS(ph)SPTEQEGR_	906.41	1.61
Q8N163	681	S	_S(ph)VAS(ph)NQS(ph)EMEFSSLQDMI	589.46	1.61
Q96EV2	41	S	_AAEDWDS(ph)ELEDDLGEDLLSGK	872.37	1.61
Q9BV36	336	S	_AS(ph)SESQIFELNK_	478.22	1.61
Q9Y3T9	673	S	_DLFDLNS(ph)S(ph)EEDDTEGFSE	591.97	1.61
Q9Y6N8	788	S	_LAEMYGGESDKDS(ph)_	769.79	1.61
O75494	133	S	_S(ph)FDYNYR_	522.69	1.62
P51116	601	S	_TDGS(ph)IS(ph)GDRQPVTVADYISR_	1149	1.62
P51116	603	S	_TDGS(ph)IS(ph)GDRQPVTVADYISR_	766.33	1.62
P52756	624	S	_GLVAAYSGDS(ph)DNEEELVER_	711.64	1.62
Q5VUA4	173	S	_LGS(ph)PVDNLEMDRDDLTDSDVFT	935.74	1.62
Q86YR5	493	S	_APS(ph)S(ph)DEECFFDLLTK_	640.25	1.62
Q8IYB3	872	T	_KET(ph)ES(ph)EAEDNLDDLEK_	675.59	1.62
Q9NQZ2	365	S	_TSAACAVTDLS(ph)DDS(ph)DFDEK_	759.94	1.62
Q9NQZ2	368	S	_TSAACAVTDLS(ph)DDS(ph)DFDEK_	759.94	1.62
Q9Y3T9	678	T	_DLFDLNS(ph)SEEDDT(ph)EGFSE	1182.9	1.62
O43719	642	S	_VFDES(ph)DEKEDEEYADEK_	568.71	1.63
Q03701	629	S	_SQLDDHPES(ph)DDEENFIDANDED	1044.7	1.63
Q16204	325	S	_QLSES(ph)ESSLEMDDER_	917.86	1.63
Q8N108	160	S	_YFDTNS(ph)EVEEES(ph)EEDEDYIPS	1082.1	1.63
Q96EV2	205	S	_DIKEES(ph)DEEEDDEESGR_	740.6	1.63
P25788	250	S	_ESLKEEDES(ph)DDDNM_	868.3	1.64
P51636	19	Y	_ADVQLFMDDDS(ph)Y(ph)S(ph)HHSGL	778.04	1.64

Q9BWU0	466	S	_NWEDEDFYDS(ph)DDDTFLDR_	792.95	1.64
Q9UQ35	1233	S	_EQNSALPTSS(ph)QDEELMEVVEK_	815.02	1.64
O60524	417	S	_NPYLLS(ph)EEEDDDVDGDVNVEK_	825.34	1.65
P20042	105	S	_IES(ph)DVQEPT(ph)EPEDDLDIMLGN	662.52	1.65
Q9BW71	223	S	_SLKES(ph)EQES(ph)EEEILAQK_	712.97	1.65
Q9UH62	61	S	_YNDWS(ph)DDDDDSNESK_	628.87	1.65
Q9Y520	1242	S	_EES(ph)ETRS(ph)ESSDFEVVPK_	705.61	1.65
O00505	56	S	_NVPQEES(ph)LESDVDADFK_	1058.9	1.66
Q00587	353	S	_AS(ph)WES(ph)LDEEWR_	784.28	1.66
Q16637	31	S	_GTGQS(ph)DDS(ph)DIWDDTALIK_	1048.9	1.66
Q8IYB3	874	S	_KET(ph)ES(ph)EAEDNLDDLEK_	675.59	1.66
Q96G23	346	T	_LVEDERS(ph)DREET(ph)ES(ph)S(ph)I	782.78	1.66
Q96G23	348	S	_LVEDERS(ph)DREET(ph)ES(ph)S(ph)I	782.78	1.66
Q96G23	349	S	_LVEDERS(ph)DREET(ph)ES(ph)S(ph)I	782.78	1.66
Q99733	125	S	_EFITGDVEPTDAESEWHS(ph)ENEEEE	1006.1	1.66
Q9UQ35	1208	T	_DTLRT(ph)PPR_	345.84	1.66
O00410	827	S	_QDEDYDEQVEES(ph)LQDEDDNDVYI	1076.4	1.67
Q969E4	121	S	_GTDDS(ph)PKDSQEDLQER_	633.92	1.67
Q96PZ0	90	S	_NSEAQLDEEEEEEDGLS(ph)EECEE	1031.9	1.67
Q9BW71	227	S	_ESEQES(ph)EEEILAQK_	864.86	1.67
P12694	347	S	_S(ph)VDEVNYWDK_	667.77	1.68
P20700	575	T	_TTIPEEEEEEEEEAAAGVVVEELFHQQ	1164.5	1.68
P50402	141	S	_QSVTSFPDADAFHHQVHDDDLLS(ph)	986.13	1.68
P50402	142	S	_QSVTSFPDADAFHHQVHDDDLLS(ph)	986.13	1.68
P50402	143	S	_QSVTSFPDADAFHHQVHDDDLLS(ph)	986.13	1.68
Q5T200	1452	S	_LDDAHS(ph)LGS(ph)GAGEGYEPIS(ph)	907.86	1.68
Q5T200	1455	S	_LDDAHS(ph)LGS(ph)GAGEGYEPIS(ph)	907.86	1.68
Q5T200	1465	S	_LDDAHS(ph)LGS(ph)GAGEGYEPIS(ph)	907.86	1.68
Q96A57	23	S	_LS(ph)S(ph)TDDGYIDLQFK_	881.35	1.68
Q9H4L4	73	S	_PSFDAS(ph)AS(ph)EEEEEEEEEEDEE	1230.8	1.68
Q9H4L4	75	S	_PSFDAS(ph)AS(ph)EEEEEEEEEEDEE	1230.8	1.68
Q9H6F5	110	S	_QPEYS(ph)PES(ph)PR_	675.24	1.68
P05387	105	S	_KEES(ph)EES(ph)DDDMGFGLFD_	703.9	1.69
O00567	520	S	_EELMS(ph)S(ph)DLEETAGSTSIPK_	546.72	1.7
P49756	583	S	_QEPES(ph)EEEEEEKQEK_	489.95	1.7
A4D1E1	877	S	_NQESLGS(ph)PHICDLGK_	867.88	1.72
P25205	711	S	_DGDSYDPYDFS(ph)DT(ph)EEEMPQV	1014.7	1.72
Q7Z5L9	175	S	_LEEPELNQRS(ph)PNPR_	619.29	1.72
Q08AD1	1148	S	_YDGES(ph)DKEQFDDDQK_	633.57	1.74
Q8IXM2	96	S	_VYEDSGIPLPAES(ph)PK_	421.2	1.74
Q8N108	166	S	_YFDTNS(ph)EVEEES(ph)EEDEDYIPS	1082.1	1.74
P05387	102	S	_KEES(ph)EES(ph)DDDMGFGLFD_	703.9	1.75
P25205	713	T	_DGDSYDPYDFS(ph)DT(ph)EEEMPQV	1014.7	1.75
Q02880	1375	S	_YTFDFS(ph)EEEDDDADDDDDNNDL	1103.4	1.75
O00566	163	S	_S(ph)PVFS(ph)DEDS(ph)DLDFDISK_	719.25	1.76
O00566	167	S	_S(ph)PVFS(ph)DEDS(ph)DLDFDISK_	719.25	1.76
O00566	171	S	_S(ph)PVFS(ph)DEDS(ph)DLDFDISK_	719.25	1.76
O43815	369	S	_DVDELPS(ph)LQPS(ph)VGSPSR_	971.91	1.76
O43815	373	S	_DVDELPS(ph)LQPS(ph)VGSPSR_	971.91	1.76
O43823	339	S	_S(ph)GDEEFKGEDELCDSGR_	670.59	1.76
P25205	722	T	_DGDSYDPYDFS(ph)DTEEMPQVHT	988.03	1.76

P55081	267	T	_SLAALDALNT(ph)DDEENDEEEYEAWK	1361.1	1.77
Q9NPQ8	436	S	_GLMAGGRPEGQYS(ph)EDED(ph)D1	941.68	1.78
Q9NPQ8	441	T	_GLMAGGRPEGQYS(ph)EDED(ph)D1	941.68	1.78
P48634	350	S	_LKFS(ph)DEEDGRDS(ph)DEEGAEGH	846.65	1.79
P55010	389	S	_EAEES(ph)S(ph)GEEEDENIEVV	954.68	1.79
P55010	390	S	_EAEES(ph)S(ph)GEEEDENIEVV	954.68	1.79
Q96A57	24	S	_LSS(ph)TDDGYIDLQFK_	841.37	1.79
Q9H2G4	16	S	_RLS(ph)SSES(ph)PQR_	653.76	1.79
Q9H2G4	20	S	_RLS(ph)SSES(ph)PQR_	436.18	1.79
Q9UPU7	957	S	_DTSPDKGELVS(ph)DEEEDT_	649.25	1.79
O60763	942	S	_DLGHPVEEEDLES(ph)GDQEDEDDE	999.88	1.8
O60841	113	S	_QSFDNDS(ph)EELEDKDSK_	694.27	1.8
Q05519	434	S	_DYDEEEQGYDS(ph)EK_	843.79	1.8
Q8NHW5	307	S	_VEAKES(ph)EES(ph)DEDM(ox)GFGI	813.62	1.8
Q9UQ35	1103	S	_S(ph)SS(ph)PVTELASR_	647.26	1.8
Q12888	294	S	_S(ph)PEPEVLSTQEDLFDQSNK_	748.33	1.81
Q9UQ35	1101	S	_S(ph)SS(ph)PVTELASR_	647.26	1.81
O95218	153	S	_EVEDKES(ph)EGEEDEDEDLSK_	605.73	1.82
Q9BVV8	117	S	_YGLLANTEDPTEMAS(ph)LDS(ph)DEE	1060.4	1.83
Q9BVV8	120	S	_YGLLANTEDPTEMAS(ph)LDS(ph)DEE	1060.4	1.83
Q9H6F5	50	S	_ALVEFESNPEETREPGSPPS(ph)VQR	879.07	1.83
P08670	430	S	_ETNLDS(ph)LPLVDTHSK_	437.96	1.84
Q14938	280	S	_S(ph)IDDSEMESPVDDVFYPGTGR_	1198.5	1.85
O14737	119	S	_VMDS(ph)DEDDY_	642.19	1.86
Q96QD8	19	S	_FSISPDESSS(ph)YS(ph)SNSDFNYS	995.37	1.86
P08670	55	S	_SLYAS(ph)SPGGVYATR_	754.84	1.87
P16949	46	S	_DLS(ph)LEEIQK_	385.52	1.88
Q01831	122	S	_GATMNEDS(ph)NEEEES(ph)ENDWE	1352.5	1.88
Q01831	129	S	_GATMNEDS(ph)NEEEES(ph)ENDWE	1352.5	1.88
Q5T200	362	T	_T(ph)LTPPLRR_	345.19	1.88
Q9NYF8	397	S	_FNDS(ph)EGDDT(ph)EETEDYR_	694.56	1.88
Q9H6F5	47	S	_ALVEFESNPEETREPGS(ph)PPSVQR	879.07	1.89
Q9H6F5	113	S	_QPEYS(ph)PES(ph)PR_	675.24	1.89
P07910	253	S	_M(ox)ES(ph)EGGADDS(ph)AEEGDLLI	778.1	1.9
P48634	342	S	_LKFS(ph)DEEDGRDS(ph)DEEGAEGH	846.65	1.9
Q9UQ35	2397	T	_T(ph)SPLLDR_	489.74	1.9
Q8TEP8	373	S	_NTS(ph)PEHGGR_	517.71	1.91
O15371	528	S	_VYSLPDGTFS(ph)S(ph)DEDEEEEEEE	932.82	1.94
O15371	529	S	_VYSLPDGTFS(ph)S(ph)DEDEEEEEEE	1243.4	1.94
Q9UK76	88	S	_RNSS(ph)EASSGDFLDLK_	853.38	1.95
P51858	165	S	_RAGLLEDS(ph)PK_	427.53	1.96
O00193	17	S	_SAS(ph)PDDDLGSSNWEAADLGNEEI	1258	1.97
Q9H1E3	19	S	_VVDYSQFQES(ph)DDADEDYGR_	1159.4	1.98
O43719	624	S	_EFDEDS(ph)DEKEEEDTYEK_	782.62	2.01
Q13442	60	S	_SLDS(ph)DES(ph)EDEEDDYQQK_	1096.4	2.04
Q13442	63	S	_SLDS(ph)DES(ph)EDEEDDYQQK_	1096.4	2.04
P26368	79	S	_EEHGGLIRS(ph)PR_	444.21	2.05
P46821	995	S	_RES(ph)VAS(ph)GDDRAEEDMDEAIEI	628.75	2.06
Q9UQ35	2044	S	_S(ph)RS(ph)PLAIR_	353.83	2.07
Q9UQ35	2046	S	_S(ph)RS(ph)PLAIR_	353.83	2.07
Q9UQ35	1492	T	_ALPQT(ph)PRPR_	372.53	2.1

Q9UQ35	1064	S	_GQSQTS(ph)PDHR_	596.74	2.11
Q9HCG8	28	S	_NSS(ph)PEDRYEEQER_	573.56	2.15
Q9UGP8	597	S	_DS(ph)DREQDEK_	401.15	2.17
Q8NHW5	304	S	_VEAKEES(ph)EES(ph)DEDM(ox)GFGL	813.62	2.2
Q9UQ35	1857	S	_TS(ph)PAPWK_	433.69	2.2
Q9UQ35	1329	S	_ENSFGS(ph)PLEFR_	454.86	2.21
Q04727	269	S	_GS(ph)PAHS(ph)PR_	484.67	2.24
Q9UQ35	1856	T	_S(ph)RT(ph)SPAPWK_	397.16	2.28
Q66PJ3	332	S	_S(ph)AGEEEDGPVLTDEQK_	446.69	2.29
O14737	125	Y	_KVMSDEDDDY(ph)_	706.23	2.34
P51858	132	S	_GNAEGS(ph)S(ph)DEEGKLVIDEPAK_	551.98	2.34
P51858	133	S	_GNAEGS(ph)S(ph)DEEGKLVIDEPAK_	551.98	2.34
Q92598	809	S	_IES(ph)PKLER_	351.18	2.37
Q9UQ35	2100	S	_NHS(ph)GS(ph)RT(ph)PPVALNSSR_	960.38	2.39
Q9UQ35	2102	S	_NHS(ph)GS(ph)RT(ph)PPVALNSSR_	960.38	2.39
Q9UQ35	2104	T	_T(ph)PPVALNSSR_	374.52	2.39
Q04727	273	S	_GS(ph)PAHS(ph)PR_	484.67	2.54
Q9UQ35	2032	S	_S(ph)RT(ph)PLLPR_	367.17	2.55
Q9UQ35	2034	T	_S(ph)RT(ph)PLLPR_	367.17	2.55
Q9UQ35	1854	S	_S(ph)RT(ph)SPAPWK_	397.16	2.62
Q96FV9	560	S	_TGEDEDEEDNDALLKENES(ph)PDVR	675.53	2.64
Q9UQ35	1063	T	_GQSQT(ph)SPDHR_	596.74	2.89
Q9UQ35	2067	S	_S(ph)LT(ph)RS(ph)PPAIR_	446.52	2.89
Q9UQ35	2069	T	_S(ph)LT(ph)RS(ph)PPAIR_	446.52	2.89
Q9UQ35	2071	S	_S(ph)LT(ph)RS(ph)PPAIR_	446.52	2.89
Q9Y383	383	S	_SEDRRS(ph)S(ph)EER_	705.76	4.24
Q9Y383	384	S	_SEDRRS(ph)S(ph)EER_	705.76	4.24
Q8NC56	499	S	_WTKPSSFS(ph)DSER_	753.82	33.53
Q8N4C6	1145	S	_HVLS(ph)DLEDDEV_	753.83	Inf
A0FGR8	755	S	_EPTPS(ph)IAS(ph)DIS(ph)LPIATQELR	793.35	
A1L170	223	S	_ASS(ph)PSLIER_	520.24	
A1L170	258	S	_TSS(ph)LDNEGPHPDLLSFE_	646.61	
A2AJT9	15	S	_S(ph)LS(ph)PVPR_	458.19	
A2AJT9	17	S	_S(ph)LS(ph)PVPR_	458.19	
A2AJT9	192	S	_RGS(ph)EDFETR_	392.83	
A6NCL7	45	S	_GAQVEEDPADYEEFEDFSS(ph)LPDT	942.71	
A6NDB9	301	T	_VPEVVQT(ph)SSPR_	426.87	
A6NDB9	420	S	_DEAEMS(ph)PVVER_	671.27	
A8MVW0	789	S	_RDS(ph)LTSPEDELGAEVGDEAGDK_	790.67	
A9Z1Z3	759	S	_DDFS(ph)YFQLR_	635.76	
B2RUZ4	22	S	_DGVS(ph)LGAVS(ph)STEEASR_	862.84	
B2RUZ4	27	S	_DGVS(ph)LGAVS(ph)STEEASR_	862.84	
C9JLW8	21	S	_S(ph)PPSSSEIFTPAHEENV_	688.64	
O00148	171	T	_NCPHVVGVT(ph)PGR_	458.21	
O00220	463	S	_FIYLEDGTGS(ph)AVS(ph)LE_	880.86	
O00220	466	S	_FIYLEDGTGS(ph)AVS(ph)LE_	880.86	
O00444	718	S	_CILM(ox)ENS(ph)PGADFEVWFYDGV	644.02	
O00488	132	T	_LAVPTEVSTEVPEMDT(ph)ST_	662.63	
O00488	133	S	_LAVPTEVSTEVPEMDT(ph)ST_	662.63	
O00499	296	S	_S(ph)PSPPDGSPAATPEIR_	553.59	
O00499	298	S	_S(ph)PSPPDGSPAATPEIR_	553.59	

O00767	199	T	_GS(ph)TLDLSDEAEK_	486.55
O14497	1754	S	_VS(ph)SPAPMEGGEEEEELLGPK_	722.32
O14513	945	Y	_PS(ph)Y(ph)DYS(ph)PAPSS(ph)T(ph)k	900.24
O14513	954	T	_PS(ph)Y(ph)DYS(ph)PAPSS(ph)T(ph)k	900.24
O14545	326	S	_ALPSLNTGSS(ph)SPR_	456.22
O14545	327	S	_ALPSLNTGSS(ph)SPR_	683.82
O14545	414	T	_LDSQPQET(ph)SPELPR_	838.88
O14646	1700	T	_S(ph)TPEHTWSSR_	423.17
O14647	1364	S	_EEHGIELS(ph)SPR_	667.29
O14647	1365	S	_LKEEHGIELS(ph)SPR_	394.44
O14745	290	S	_SAS(ph)SDTSEELNSQDSPPK_	653.6
O14874	32	T	_ST(ph)SATDTHHVEM(ox)AR_	410.42
O14874	33	S	_STS(ph)ATDTHHVEMAR_	406.42
O14874	35	T	_STSAT(ph)DTHHVEMAR_	541.56
O14979	241	S	_VFVGGLS(ph)PDTSEEQIK_	595.95
O15027	1147	T	_FT(ph)GSFDDDPDPHR_	529.2
O15047	916	T	_PST(ph)PAEEDDDPEQEK_	632.57
O15061	777	S	_VEEVEDVS(ph)PGPWGLVK_	607.29
O15085	255	S	_TS(ph)PVIMAR_	477.73
O15085	589	S	_LS(ph)TGSFPEDLLES DSSR_	640.61
O15085	590	T	_LS(ph)TGSFPEDLLES DSSR_	640.61
O15085	592	S	_LS(ph)TGSFPEDLLES DSSR_	640.61
O15085	633	S	_S(ph)RSDVMDAAA EATR_	558.9
O15085	1461	T	_SLGGES(ph)S(ph)GGTTPVGSFHTEA	755.65
O15085	1462	T	_SLGGES(ph)S(ph)GGTTPVGSFHTEA	755.65
O15126	112	S	_EMQNLS(ph)QHGR_	427.18
O15127	319	S	_AAS(ph)SAAQGAFQGN_	630.26
O15127	320	S	_AASS(ph)AAQGAFQGN_	630.26
O15173	90	S	_GLGAGAGAGEES(ph)PATSLPR_	593.28
O15173	211	T	_LLKPGEEPSEYT(ph)DEEDTK_	720.65
O15258	95	S	_VDPSLMEDS(ph)DDGPSLPTK_	661.61
O15320	590	S	_APS(ph)DTGS(ph)LS(ph)PPWDQDR_	656.9
O15320	594	S	_APSDTGS(ph)LS(ph)PPWDQDR_	630.24
O15320	596	S	_APSDTGS(ph)LS(ph)PPWDQDR_	630.24
O15344	96	S	_ASVSGPNS(ph)PSETR_	684.79
O15417	1857	S	_ALS(ph)PGLEESGLGLLAR_	554.95
O15541	253	S	_YGVYEDENYEVGS(ph)DDEEIPFK_	645.01
O43240	267	S	_YM(ox)S(ph)WINK_	346.48
O43318	389	S	_MS(ph)ADMSEIEAR_	660.25
O43318	439	S	_S(ph)IQDLTVTGTEPGQVSSR_	652.31
O43379	1068	T	_HHFETLT(ph)ESPCR_	531.89
O43432	1409	S	_LDFIESDS(ph)PCSSEALSK_	655.61
O43598	128	S	_VLS(ph)AMIR_	435.22
O43707	159	S	_FAIQDIS(ph)VEETSAK_	539.92
O43741	183	S	_DLSS(ph)SPPGPYQEMYAFR_	694.63
O43765	81	T	_T(ph)PPSEEDSAEAER_	499.86
O43847	96	S	_RGSLS(ph)NAGDPEIVK_	508.25
O43896	674	S	_LYADS(ph)DS(ph)GDDSDKR_	568.53
O43896	676	S	_LYADS(ph)DS(ph)GDDSDKR_	568.53
O43909	808	Y	_Y(ph)YAYLYS(ph)YVM(ox)PQAIR_	1038.9
O43909	809	Y	_Y(ph)YAYLYS(ph)YVM(ox)PQAIR_	1038.9

O43909	811	Y	_Y(ph)YAYLYS(ph)YVM(ox)PQAIR_	1038.9
O43909	814	S	_Y(ph)YAYLYS(ph)YVM(ox)PQAIR_	1038.9
O60220	96	S	_SKPVFSESLs(ph)D_	638.28
O60231	107	S	_LLEDs(ph)EES(ph)S(ph)EETVSR_	650.56
O60264	116	S	_TPTS(ph)PLK_	275.14
O60291	523	S	_AASIENVLQDS(ph)SPEHCGR_	683.96
O60292	170	S	_S(ph)SSEITLSECDAGEPR_	711.62
O60292	171	S	_S(ph)SSEITLSECDAGEPR_	711.62
O60293	766	T	_ENDPLRT(ph)PEALPEEK_	606.62
O60307	726	S	_S(ph)FSEDREEGWER_	536.21
O60333	1452	T	_M(ox)SDT(ph)GSPGM(ox)QR_	639.73
O60333	1487	S	_GDS(ph)LILEHQWELEK_	592.94
O60361	105	S	_NIHGS(ph)DSVK_	383.85
O60502	364	S	_LENEGS(ph)DEDIETDVLVSPQMALK_	669.8
O60504	544	S	_HPS(ph)SPSALR_	344.49
O60504	545	S	_HPSS(ph)PSALR_	344.49
O60524	747	S	_DELNEELIQEES(ph)S(ph)EDEGEYEE	733.28
O60524	748	S	_DELNEELIQEES(ph)S(ph)EDEGEYEE	733.28
O60566	1042	T	_LT(ph)SPGALLFQ_	563.78
O60566	1043	S	_LTS(ph)PGALLFQ_	563.78
O60664	216	T	_IAT(ph)SLDGFVDVASVQQQR_	638.97
O60664	217	S	_IAT(ph)SLDGFVDVASVQQQR_	638.97
O60716	230	S	_HYEDGYPGGSDNYGS(ph)LSR_	685.27
O60716	288	S	_S(ph)MGYDDLDYGMMSDYGTAR_	743.27
O60716	859	S	_S(ph)QSSHS(ph)YDDSTLPLIDR_	694.28
O60716	861	S	_SQS(ph)SHS(ph)YDDSTLPLIDR_	694.28
O60749	119	S	_SMS(ph)APVIFDR_	601.77
O60941	608	S	_ELHS(ph)AEEGAEIEEEK_	599.24
O75122	594	T	_VLNT(ph)GSDVEEAVADALK_	604.29
O75151	879	S	_DSDYVYPS(ph)LESDEDNPIFK_	578.99
O75182	79	T	_SQSIDT(ph)PGVIR_	418.2
O75324	49	S	_ISQSEDEES(ph)IVGDGETK_	634.93
O75362	409	T	_AGAES(ph)PTMSVDGR_	679.28
O75369	2478	S	_LVS(ph)PGSANETSSILVESVTR_	709.35
O75376	2120	S	_VS(ph)PENLVDK_	360.84
O75400	787	S	_EPAFEDITLES(ph)ER_	539.23
O75400	933	S	_DSGNWDTS(ph)GS(ph)ELS(ph)EGEL	760.59
O75400	935	S	_DSGNWDTS(ph)GS(ph)ELS(ph)EGEL	760.59
O75400	938	S	_DSGNWDTS(ph)GS(ph)ELS(ph)EGEL	760.59
O75448	863	S	_LLSS(ph)NEDDANILSSPTDR_	676.3
O75475	105	S	_QSNAS(ph)SDVEVEEK_	501.21
O75475	115	T	_ET(ph)SVSKEDTDHEEK_	429.18
O75475	116	S	_ET(ph)SVSKEDTDHEEK_	429.18
O75475	122	T	_EDT(ph)DHEEKAS(ph)NEDVTK_	502.44
O75475	208	S	_QPCPSES(ph)DIITEEDK_	609.92
O75475	522	S	_ETEIS(ph)LK_	300.48
O75494	158	S	_S(ph)HS(ph)DNDRFK_	633.22
O75494	160	S	_S(ph)HS(ph)DNDRFK_	633.22
O75509	541	S	_LENSALLTVEPS(ph)PQDK_	607.63
O75533	223	T	_LSSWDQAET(ph)PGHT(ph)PSLR_	681.29
O75533	227	T	_LSSWDQAET(ph)PGHT(ph)PSLR_	681.29

O75533	303	T	_DT(ph)PGHGSGWAETPR_	516.55
O75533	313	T	_DTPGHGSGWAET(ph)PR_	516.55
O75569	20	T	_EDSGT(ph)FSLGK_	374.16
O75665	774	S	_MPLPS(ph)PTESR_	597.76
O75717	407	S	_EEEEDGQEGS(ph)IHNLPLVTSQR_	816.36
O75822	109	T	_VLT(ph)PEEQLADK_	441.55
O94762	815	S	_YTGEEDGAGGHS(ph)PAPPQTEECLF	846.68
O94808	244	S	_LDS(ph)SACLHAVGDK_	484.88
O94808	245	S	_LDSS(ph)ACLHAVGDK_	484.88
O94842	180	T	_LSTTPSPT(ph)SS(ph)LHEDGVEDFR_	778.99
O94842	181	S	_LSTTPSPTS(ph)S(ph)LHEDGVEDFR_	778.99
O94880	298	S	_S(ph)NEDS(ph)LILEK_	436.51
O94880	302	S	_S(ph)NEDS(ph)LILEK_	436.51
O94880	835	S	_S(ph)FVPEEEKHEER_	399.67
O94885	405	T	_T(ph)CSFGGFDLTNR_	485.53
O94885	407	S	_T(ph)CSFGGFDLTNR_	485.53
O94888	278	S	_S(ph)ESLIDASEDSQLEAAIR_	671.97
O94915	1957	S	_S(ph)NTLDIMDGR_	601.25
O95071	327	S	_WLDGAS(ph)FDNER_	695.28
O95071	1306	T	_T(ph)ASPEDSDMPDHDLEPPR_	696.95
O95155	103	S	_S(ph)QSMDIDGVSCEK_	512.53
O95235	532	S	_EHSLQVS(ph)PSLEK_	359.17
O95239	394	S	_NQS(ph)LVEENEK_	423.85
O95239	1225	S	_ALASNTSFFSGCS(ph)PIEEEEAH_	745.31
O95297	204	S	_DYTGCS(ph)TSESLSPVK_	570.9
O95297	223	T	_SPSDT(ph)EGLVK_	371.5
O95297	260	S	_SES(ph)VVYADIR_	609.77
O95359	2512	S	_FSS(ph)PTEELDYR_	712.29
O95405	668	S	_PCLALAPDS(ph)PDNDLR_	578.59
O95425	237	S	_DS(ph)SFTEVPR_	373.16
O95425	238	S	_DS(ph)SFTEVPR_	373.16
O95425	914	S	_FSSS(ph)IENS DSPVR_	752.82
O95453	583	S	_NLS(ph)PSQEEAGLEDGVS(ph)GEISC	1049.7
O95453	587	S	_NLS(ph)PSQEEAGLEDGVS(ph)GEISC	1049.7
O95453	589	T	_NLS(ph)PSQEEAGLEDGVS(ph)GEISC	1049.7
O95453	619	S	_ELS(ph)PAGSISK_	356.84
O95453	628	S	_NS(ph)PATLFEVPDTW_	778.84
O95613	1653	S	_RES(ph)EVLDLK_	390.19
O95613	2738	S	_S(ph)QLSELQK_	338.16
O95613	2741	S	_S(ph)QLSELQK_	338.16
O95677	361	S	_NNPS(ph)PPDSDLER_	759.32
O95685	74	S	_S(ph)LPSS(ph)PER_	516.69
O95685	78	S	_S(ph)LPSS(ph)PER_	516.69
O95696	1051	T	_VHGEPT(ph)SDLSDID_	732.8
O95714	2928	S	_AEEEDLAAVPFLAS(ph)DNEEEEDEK_	665.53
O95772	39	S	_IES(ph)YEGR_	467.19
O95793	390	S	_VTFEFGS(ph)GDENGTSNKEDEFR_	636.27
O95816	20	S	_SSS(ph)MADR_	417.15
O95835	612	T	_QITT(ph)SPITVR_	399.21
O95835	613	S	_QITTS(ph)PITVR_	399.21
O95999	136	S	_S(ph)NSDESNFSEK_	662.24

O96007	20	S	_LPLS(ph)PPLVEDSAFEPSR_	645.32
O96017	260	S	_FAIGS(ph)AR_	401.19
O96017	398	S	_LAPEVLVS(ph)VG_	550.26
P00533	995	S	_MHLPS(ph)PTDS(ph)NFYR_	575.56
P00533	1025	S	_ALMDEEDM(ox)DDVVDADEYLIPQQG	741.51
P00533	1026	S	_ALM(ox)DEEDM(ox)DDVVDADEYLIPC	744.71
P00533	1029	T	_ALM(ox)DEEDM(ox)DDVVDADEYLIPC	930.64
P00533	1030	S	_ALMDEEDM(ox)DDVVDADEYLIPQQG	926.64
P00533	1046	T	_TPLSSLSATSNNNS(ph)T(ph)VACIDR_	789.68
P02545	428	S	_S(ph)SFSQHAR_	333.81
P02545	458	S	_S(ph)NEDQSMGNWQIK_	539.55
P03951	158	S	_QFPS(ph)LEHR_	365.17
P04049	640	T	_AAHTEDINACTLT(ph)TSPR_	646.62
P04075	39	S	_GILAADESTGS(ph)IAK_	706.84
P04424	3	S	_(ac)MAS(ph)ESGK_	416.15
P04626	1054	S	_S(ph)GGDLTLGLEPSEEEAPR_	997.44
P06733	419	S	_IEEELGS(ph)K_	492.72
P06748	67	Y	_DELHIVEAEAMNY(ph)EGSPIK_	742.33
P07355	12	S	_LS(ph)LEGDHSTPPSAYGSVK_	642.29
P07355	184	S	_AEDGS(ph)VIDYELIDQDAR_	994.93
P07900	709	S	_LGLGIDEDDPTADDTTS(ph)AAVTEEMF	1209.8
P08238	261	S	_IEDVGS(ph)DEEDDS(ph)GKDK_	633.23
P08473	100	T	_RNVIPET(ph)SSR_	413.53
P08473	101	S	_RNVIPET(ph)SSR_	413.53
P08473	102	S	_RNVIPET(ph)SSR_	413.53
P08581	988	S	_S(ph)VSPTTEM(ox)VSNESVDYR_	666.28
P08651	323	S	_NWTEDEMEGGISS(ph)PVK_	577.24
P08670	8	S	_SVSS(ph)SSYR_	476.69
P08670	9	S	_SVSS(ph)SSYR_	476.69
P08670	72	S	_LRS(ph)SVPGVR_	350.85
P08670	205	S	_EEAENTLQS(ph)FR_	702.3
P08670	426	T	_ET(ph)NLDSLPLVDTHSK_	583.61
P08670	436	T	_ETNLDSLPLVDT(ph)HSKR_	476.98
P08670	438	S	_ETNLDSLPLVDT(ph)HSKR_	476.98
P09874	75	S	_HPDVEVDGFS(ph)ELR_	527.23
P09874	274	S	_QQVPS(ph)GESAILDR_	740.35
P09972	45	S	_RLS(ph)QIGVENTEENR_	575.6
P0DJ93	58	S	_ELVGDTGSQEGDHEPS(ph)GS(ph)ET	829.82
P0DJ93	60	S	_ELVGDTGSQEGDHEPS(ph)GS(ph)ET	829.82
P0DJ93	62	T	_ELVGDTGSQEGDHEPS(ph)GS(ph)ET	829.82
P10243	626	S	_S(ph)LVLDNWEK_	395.18
P11021	64	S	_ITPS(ph)YVAFTPEGER_	549.59
P11137	1782	S	_VDHGAEIITQS(ph)PGR_	520.58
P12694	338	T	_IGHHS(ph)TSDDSSAYR_	538.22
P13716	215	S	_SS(ph)PAFGDR_	458.68
P13797	339	S	_AES(ph)MLQQADK_	600.75
P14921	251	S	_LGGQDS(ph)FESIESYDSCDR_	715.61
P15056	729	S	_SAS(ph)EPSLNR_	520.72
P15374	130	S	_FLEESVSMS(ph)PEER_	540.56
P15407	265	S	_SSSSSGDPSSDPLGS(ph)PTLLAL_	1028
P15408	120	S	_RDEQLS(ph)PEEEEEK_	523.55

P15408	310	S	_SSSS(ph)GDQSSDSLNS(ph)PTLLAL_	709.29
P15408	320	S	_SSSS(ph)GDQSSDSLNS(ph)PTLLAL_	709.29
P15531	120	S	_NIIHGS(ph)DSVESAEK_	522.57
P15531	122	S	_NIIHGSDS(ph)VESAEK_	522.57
P16070	182	S	_TNPEDIYPSNPTDDDVSSGS(ph)SSEF	883.69
P16070	717	S	_ES(ph)SETPDQFMTADETR_	641.92
P16157	1686	S	_ITHS(ph)PTVSQVTER_	512.25
P16435	62	S	_IQT LTS(ph)SVR_	542.77
P16435	63	S	_IQT LTS(ph)SVR_	542.77
P16615	663	S	_EFDELNPS(ph)AQR_	462.53
P17152	17	S	_LPGSSGGS(ph)AR_	513.22
P17302	255	S	_SDPYHATSGALS(ph)PAK_	396.18
P17302	365	S	_LAAGHELQPLAIVDQRPSS(ph)R_	560.29
P17987	544	S	_HGS(ph)YEDAVHSGALND_	551.22
P18031	352	S	_GS(ph)PLNAAPYGIESMSQDTEVR_	768.01
P18583	1766	S	_S(ph)AASPVVSSMPER_	466.54
P18583	1948	S	_S(ph)FS(ph)IS(ph)PSR_	560.68
P18583	1950	S	_S(ph)FS(ph)IS(ph)PSR_	560.68
P18583	1952	S	_S(ph)FS(ph)IS(ph)PSR_	560.68
P18583	2009	S	_S(ph)FS(ph)IS(ph)PVR_	566.7
P18583	2011	S	_S(ph)FS(ph)IS(ph)PVR_	566.7
P18583	2013	S	_S(ph)FS(ph)IS(ph)PVR_	566.7
P18669	23	S	_FS(ph)GWYDADLSPAGHEEAK_	687.29
P19174	1263	S	_IS(ph)QEHLADHFDSR_	545.57
P19338	580	S	_GLS(ph)EDTTEETLK_	701.8
P19338	619	S	_GFGFVDFNS(ph)EEDAK_	547.89
P19532	567	S	_S(ph)SFSMEEES_	556.68
P19532	568	S	_RSS(ph)FSMEEES_	634.73
P20700	210	S	_S(ph)MYEEEINETR_	740.79
P20810	364	S	_S(ph)ESELIDELSEDFDR_	621.92
P21291	192	S	_GFGFGQGAGALVHS(ph)E_	505.22
P21359	2543	S	_S(ph)FDHLISDTK_	621.77
P21731	329	S	_S(ph)LSLQPQLTQR_	450.9
P21796	104	S	_LTFDSSFS(ph)PNTGK_	494.22
P22059	377	T	_T(ph)GSNIS(ph)GASSDISLDEQYK_	711.29
P22059	379	S	_T(ph)GSNIS(ph)GASSDISLDEQYK_	711.29
P22059	382	S	_T(ph)GSNIS(ph)GASSDISLDEQYK_	711.29
P22314	46	S	_NGS(ph)EADIDEGLYSR_	803.33
P22626	198	S	_QEMQEVQS(ph)SR_	651.26
P23396	220	T	_DEILPT(ph)TPISEQK_	517.58
P24534	95	S	_YGPADVEDTTGSGATDS(ph)K_	617.58
P25054	131	T	_EST(ph)GYLEELEK_	459.87
P25054	1861	S	_NDS(ph)LSSLDFDDDDVDLSR_	703.28
P25054	2449	S	_EAPS(ph)PTLR_	475.72
P25106	350	S	_VS(ph)ETEYSALEQSTK_	551.24
P25106	352	T	_VSET(ph)EYSALEQSTK_	551.24
P26373	77	S	_GFS(ph)LEELR_	515.73
P27816	1145	S	_EAQTLDS(ph)QIQETSI_	821.86
P28066	16	S	_GVNTFS(ph)PEGR_	381.83
P28066	55	T	_IT(ph)SPLMEPSSIEK_	504.57
P28066	56	S	_IT(ph)SPLMEPSSIEK_	504.57

P28331	633	T	_ALS(ph)EIAGM(ox)T(ph)LPYDTLDQVF	1135
P28331	638	T	_ALS(ph)EIAGM(ox)T(ph)LPYDTLDQVF	1135
P28482	190	T	_VADPDHDHTGFLTEYVAT(ph)R_	742
P28715	562	S	_FDSSLLS(ph)S(ph)DDETK_	535.2
P28715	563	S	_FDSSLLS(ph)S(ph)DDETK_	535.2
P29317	570	S	_ARQS(ph)PEDVYFSK_	502.89
P29317	594	Y	_TYVDPHTY(ph)EDPNQAVLK_	690.65
P29317	899	S	_LPSTS(ph)GSEGVVFR_	471.89
P29401	287	T	_ILAT(ph)PPQEDAPSVDIANIR_	700.68
P29401	295	S	_ILATPPQEDAPS(ph)VDIANIR_	700.68
P29590	518	S	_AVS(ph)PPHLDGPPS(ph)PR_	529.56
P29590	527	S	_AVS(ph)PPHLDGPPS(ph)PR_	529.56
P29590	530	S	_S(ph)PVIQSEVFLPNSNHVASGAGEAF	911.76
P29692	129	T	_ATAPQT(ph)QHVSPM(ox)R_	380.67
P29966	101	S	_GEPAAAAAPEAGAS(ph)PVEK_	426.45
P30305	375	S	_S(ph)LCHDEIENLLDSDHR_	678.29
P30414	463	S	_ILIPS(ph)DISSK_	427.88
P30559	366	S	_S(ph)NSSS(ph)FVLSHR_	460.85
P30559	370	S	_S(ph)NSSS(ph)FVLSHR_	460.85
P31629	565	S	_GSHS(ph)FDER_	338.79
P31943	63	S	_PSGEAFVELES(ph)EDEVK_	615.6
P31949	6	S	_ISS(ph)PTETER_	550.24
P32418	284	S	_GMIIHEGDRPS(ph)SK_	409.69
P32418	285	S	_GMIIHEGDRPS(ph)SK_	409.69
P33527	930	S	_HHNS(ph)TAELQK_	415.52
P34932	647	S	_FVSEDDRNS(ph)FTLK_	546.58
P35221	654	T	_T(ph)SVQT(ph)EDDQLIAGQSAR_	660.28
P35251	108	S	_QDPVTYIS(ph)ETDEEDDFMCK_	801.31
P35269	156	T	_TLT(ph)AEEAEEEWER_	836.84
P35269	221	S	_IHDLEDDLEMSSDAS(ph)DAS(ph)GEE	899
P35269	224	S	_IHDLEDDLEMSSDAS(ph)DAS(ph)GEE	899
P35269	396	S	_GNS(ph)RPGTPSAEGGS(ph)TSSTLR	1039.9
P35269	445	T	_T(ph)TPNSGDVQVTEDAVR_	590.26
P35367	378	S	_S(ph)GSNTGLDYIK_	412.18
P35367	380	S	_S(ph)GSNTGLDYIK_	412.18
P35579	1714	S	_DELADEIANSS(ph)GK_	476.87
P35580	1952	S	_QLHLEGAS(ph)LELS(ph)DDDTESK_	749.64
P37275	995	S	_EAEERDS(ph)TEQEEAGPEILSNEHVC	741.32
P37802	163	S	_NFS(ph)DNQLQEGK_	453.86
P38159	249	S	_DYGHS(ph)SSRDDYPSR_	574.56
P38159	250	S	_DYGHS(ph)SSRDDYPSR_	574.56
P38159	251	S	_DYGHSS(ph)SRDDYPSR_	574.56
P38398	1524	S	_NYPS(ph)QEELIK_	434.2
P39023	13	S	_HGS(ph)LGFLPR_	355.17
P40189	667	S	_SHIAQWS(ph)PHTPPR_	531.92
P40189	839	S	_QVSS(ph)VNEEDFVR_	744.82
P40818	719	S	_S(ph)YSSPDITQAIQEEEEKR_	515.98
P40855	147	S	_NATDLQNSS(ph)M(ox)SEEELTK_	664.94
P41440	223	S	_CETS(ph)ASELER_	631.24
P42166	424	S	_FQETEFLS(ph)PPR_	477.55
P42167	158	S	_S(ph)STPLPTISSAENTR_	576.6

P42167	159	S	_S(ph)STPLPTISSAENTR_	576.6
P42167	264	T	_VET(ph)SEHFR_	362.15
P42566	562	S	_S(ph)SPELLPSGVTDENEVTTAVTEK_	828.39
P42566	563	S	_S(ph)SPELLPSGVTDENEVTTAVTEK_	828.39
P42858	1874	S	_LLSPQMS(ph)GEEEDSDLAAK_	667.29
P43250	485	T	_DVLIDIEQFS(ph)T(ph)VK_	777.33
P43490	472	S	_SYS(ph)FDEIR_	548.72
P43897	324	T	_FECGEGEEAAET(ph)E_	769.26
P45973	92	S	_S(ph)NFSNSADDIK_	639.26
P45985	393	S	_ILDQMPATPS(ph)SPMYVD_	615.6
P45985	394	S	_ILDQMPATPSS(ph)PMYVD_	615.6
P46013	2085	T	_ELFQT(ph)PDHTEESTTDDK_	691.62
P46013	2827	S	_S(ph)SPELEDTATSSK_	477.87
P46013	2828	S	_S(ph)SPELEDTATSSK_	477.87
P46087	732	S	_GTDTQTPAVLS(ph)PSK_	494.57
P46100	213	S	_YYMSDDISRDS(ph)DGMDEQCR_	808.29
P46100	849	S	_DFDS(ph)S(ph)EDEK_	616.18
P46100	850	S	_DFDS(ph)S(ph)EDEK_	616.18
P46100	1348	S	_LTVS(ph)DGES(ph)GEEK_	705.76
P46100	1352	S	_LTVS(ph)DGES(ph)GEEK_	705.76
P46100	1527	S	_EVIEIEDAS(ph)PTK_	470.88
P46108	40	S	_DS(ph)STSPGDYVLSVSENSR_	660.61
P46108	42	T	_DS(ph)STSPGDYVLSVSENSR_	660.61
P46108	43	S	_DSSTS(ph)PGDYVLSVSENSR_	660.61
P46821	1156	S	_DVMSDETNNREETES(ph)PSQEFVNIT_	706.54
P46821	1631	S	_S(ph)RTPVQDHR_	392.52
P46821	1633	T	_SRT(ph)PVQDHR_	392.52
P46821	1782	S	_S(ph)DISPLTPR_	533.25
P46821	1785	S	_SDIS(ph)PLTPR_	533.25
P46821	1793	S	_ESS(ph)PLYS(ph)PTFSDSTSAVK_	688.28
P46937	109	S	_QAS(ph)TDAGTAGALTPQHVR_	620.96
P48307	168	S	_DEGLCS(ph)ANVTR_	651.26
P48651	423	T	_TYSECEDGT(ph)YSPEISWHHR_	609.24
P49023	126	S	_S(ph)AEPS(ph)PTVMSTS(ph)LGSNLS	840
P49023	130	S	_S(ph)AEPS(ph)PTVMSTS(ph)LGSNLS	840
P49023	137	S	_S(ph)AEPS(ph)PTVMSTS(ph)LGSNLS	840
P49321	421	S	_LVPS(ph)QEETK_	555.76
P49585	342	T	_T(ph)SPPCSPANLSR_	456.2
P49716	191	S	_GPDRGS(ph)PEYR_	405.17
P49736	25	T	_RGNDPLT(ph)SSPGR_	446.21
P49736	26	S	_GNDPLTS(ph)SPGR_	394.17
P49736	39	T	_RTDALT(ph)SSPGR_	414.19
P49756	703	S	_FEDEDS(ph)DDVPR_	468.5
P49759	140	S	_S(ph)VEDDEEGHLICQSGDVLSAR_	799.34
P49760	50	S	_EDS(ph)YHVR_	329.13
P49761	157	S	_YRS(ph)PEPDPYLSYR_	574.92
P49768	365	S	_AAVQELS(ph)S(ph)SILAGEDPEER_	720.97
P49790	209	S	_NTSLPPLWS(ph)PEAER_	838.89
P49790	333	S	_IPSIVS(ph)SPLNS(ph)PLDR_	585.61
P49790	338	S	_IPSIVS(ph)SPLNS(ph)PLDR_	585.61
P49792	788	S	_YLS(ph)PSK_	287.8

P49792	2250	S	_EDALDDSVSSSSVHASPLAS(ph)SPVF	831.71
P49792	2251	S	_EDALDDSVSSSSVHASPLAS(ph)SPVF	831.71
P49810	19	S	_TS(ph)LMS(ph)AES(ph)PTPR_	758.76
P49810	22	S	_TS(ph)LMS(ph)AES(ph)PTPR_	758.76
P49810	25	S	_TS(ph)LMS(ph)AES(ph)PTPR_	758.76
P49815	1132	S	_SMS(ph)GGHGLR_	327.8
P49815	1420	S	_SQS(ph)GTLDGESAAWSASGEDSR_	726.63
P49915	331	T	_TLNMTT(ph)SPEEK_	665.78
P49915	332	S	_TLNMTTS(ph)PEEK_	665.78
P50548	431	S	_VEPIS(ph)EGESEEEVEVDIS(ph)DEDE	850.84
P50548	444	S	_VEPIS(ph)EGESEEEVEVDIS(ph)DEDE	850.84
P50613	170	T	_AYT(ph)HQVVTR_	385.52
P50876	6	Y	_MTTT(ph)RZR_	504.72
P50990	380	S	_GS(ph)TDNLMDDIER_	723.28
P51151	175	T	_VLAT(ph)EDRSDHLIQTDTVNLHR_	629.06
P51151	179	S	_S(ph)DHLIQTDTVNLHR_	576.94
P51610	597	S	_VAS(ph)SPVMVSNPATR_	499.24
P51636	36	S	_FADS(ph)DQDRDPHR_	385.41
P51798	801	S	_GLEELS(ph)LAQT_	570.76
P51812	415	S	_NS(ph)IQFTDGYEVK_	740.82
P52272	701	S	_FES(ph)PEVAER_	572.24
P52597	104	S	_HSGPNS(ph)ADSANDGFVR_	570.9
P52756	621	S	_GLVAAYS(ph)GDS(ph)DNEEELVER_	738.29
P52943	114	S	_AS(ph)SVTTFTGEPNTCPR_	602.26
P52948	612	S	_NLNNSNLFS(ph)PVNR_	523.58
P52948	1000	T	_ASLLT(ph)DEEDVDMALDQR_	667.62
P53999	118	S	_EQIS(ph)DIDDAVR_	447.53
P55011	265	S	_EPFEDGFANGEES(ph)TPTR_	654.93
P55040	23	S	_WS(ph)IPADGR_	491.21
P55196	246	S	_PDS(ph)GGTLR_	441.69
P55196	1081	T	_T(ph)SSVVTLEVAK_	405.21
P55196	1082	S	_T(ph)SSVVTLEVAK_	405.21
P55196	1083	S	_TSS(ph)VVTLEVAK_	607.31
P55198	220	S	_S(ph)ASPSTQQEK_	381.5
P55198	222	S	_S(ph)ASPSTQQEK_	381.5
P55198	224	S	_S(ph)ASPSTQQEK_	381.5
P55198	225	T	_S(ph)ASPSTQQEK_	381.5
P55201	460	S	_LPALS(ph)HS(ph)EGEEDEDEEEDEGI	835.3
P55201	462	S	_LPALS(ph)HS(ph)EGEEDEDEEEDEGI	835.3
P57059	435	S	_PVS(ph)PSSLLDTAISEEAR_	617.96
P57768	108	S	_DTEEQNPETVNWEDRPS(ph)TPTILG	911.9
P57768	109	T	_DTEEQNPETVNWEDRPS(ph)TPTILG	911.9
P58340	34	S	_SFS(ph)EPFGR_	503.71
P61019	67	S	_LQIWDTAGQES(ph)FR_	544.25
P61254	23	S	_HFNAPS(ph)HIR_	386.84
P61266	14	S	_SAKDS(ph)DDEEEVVHVDR_	478.2
P61313	34	S	_QLS(ph)ALHR_	302.15
P61619	408	S	_ETS(ph)MVHELNR_	648.28
P61966	147	S	_AIEQADLLQEEDES(ph)PR_	641.62
P61978	39	T	_NT(ph)DEMVELR_	593.74
P62241	130	T	_LT(ph)PEEEEEILNK_	465.55

P62263	140	T	_IEDVTPIPSDST(ph)R_	503.9
P62280	67	S	_CPFTGNVS(ph)IR_	410.85
P62750	42	T	_IRT(ph)SPTFR_	353.18
P62750	43	S	_IRT(ph)SPTFR_	353.18
P62834	39	S	_YDPTIEDS(ph)YRK_	489.54
P62857	23	S	_TGS(ph)QGQCTQVR_	434.51
P62979	57	S	_TLS(ph)DYNIQK_	581.26
P62995	103	T	_HSHS(ph)HSPMST(ph)R_	475.17
P63104	232	T	_DNLTWTSDDT(ph)QGDEAEAGEGGEI	830.33
P78317	94	S	_LPQDHADSCVVS(ph)S(ph)DDEELSR_	806.98
P78317	95	S	_LPQDHADSCVVS(ph)S(ph)DDEELSR_	806.98
P78362	494	S	_TVS(ph)AS(ph)STGDLPK_	441.51
P78362	496	S	_TVS(ph)AS(ph)STGDLPK_	441.51
P78362	497	S	_TVSASS(ph)TGDLPK_	621.78
P78527	3205	S	_LTPLPEDNS(ph)MNVDQDGDPSDR_	799
P78536	791	S	_S(ph)FEDLTDHPVTR_	748.82
P78552	413	T	_EET(ph)DSVVLINLK_	523.59
P78552	415	S	_EETDS(ph)VVLINLK_	523.59
P82094	333	S	_IDSFSVQS(ph)LDS(ph)R_	505.2
P82094	336	S	_IDSFSVQS(ph)LDS(ph)R_	505.2
P82094	338	S	_S(ph)VSEINS(ph)DDELSGK_	547.21
P84098	12	S	_LAS(ph)SVLR_	413.22
P84098	13	S	_LAS(ph)SVLR_	413.22
P84157	191	S	_ETFGEMS(ph)DGDVQEQLR_	640.93
P85037	445	S	_EGS(ph)PIPHDPEFGSK_	526.23
P98175	733	S	_GLVAAYS(ph)GES(ph)DSEEEQER_	705.93
Q00341	31	S	_VATLNS(ph)EEESDPPTYK_	620.6
Q00341	944	S	_DCDPGS(ph)PR_	492.17
Q01105	63	S	_LNEQAS(ph)EEILK_	677.32
Q01130	29	T	_TSPDT(ph)LRR_	342.5
Q01201	573	S	_EAAFGGGLLS(ph)PGPEAT_	518.57
Q01433	188	T	_T(ph)DSDSDLQLYK_	455.53
Q01664	123	S	_FIQELSGS(ph)SPK_	424.87
Q01804	443	S	_ESNYFGLS(ph)PEER_	754.31
Q01814	18	S	_NES(ph)SHGGFEGCTMEELR_	673.92
Q01814	19	S	_NES(ph)SHGGFEGCTMEELR_	673.92
Q02156	368	S	_ALS(ph)FDNR_	451.69
Q02241	912	S	_SS(ph)T(ph)VAPAQPDGAESEWTDVE	831.67
Q02241	913	T	_SS(ph)T(ph)VAPAQPDGAESEWTDVE	831.67
Q02790	451	S	_SNTAGS(ph)QSQVETEA_	744.8
Q02880	1424	S	_DEYTFS(ph)PGK_	375.15
Q02880	1471	S	_FDS(ph)NEEDS(ph)ASVFSPSFLK_	741.62
Q03001	3970	S	_SFS(ph)EDVISHK_	410.18
Q03135	14	Y	_YVDSEGHLY(ph)TVPIR_	576.94
Q03188	331	T	_T(ph)ISPAESTALLQGR_	508.59
Q03468	158	S	_IIEQLS(ph)PQAATSR_	498.58
Q04727	205	S	_SS(ph)SVSPSASFR_	596.26
Q04727	210	S	_SSVS(ph)PSASFR_	596.26
Q04727	245	S	_YDS(ph)DGEKS(ph)DDNLVVDVSNED	993.7
Q04727	250	S	_YDS(ph)DGEKS(ph)DDNLVVDVSNED	993.7
Q04727	264	S	_YDS(ph)DGEKS(ph)DDNLVVDVSNED	993.7

Q05209	603	S	_TPLSFTNPLHS(ph)DDS(ph)DSDER_	764.96
Q05209	606	S	_TPLSFTNPLHS(ph)DDS(ph)DSDER_	764.96
Q06587	38	S	_TPQEAIMDGTEIAVS(ph)PR_	632.29
Q07157	277	S	_ATLLNVPDLSDS(ph)IHS(ph)ANASER_	593.26
Q07157	280	S	_ATLLNVPDLSDS(ph)IHS(ph)ANAS(ph)	613.26
Q07157	284	S	_ATLLNVPDLSDS(ph)IHS(ph)ANAS(ph)	613.26
Q07666	20	S	_SGS(ph)MDPSGAHPSVR_	732.8
Q07866	460	S	_VDS(ph)PTVTTTLK_	414.54
Q07866	521	S	_S(ph)RES(ph)LNVDVVK_	469.21
Q07889	1082	S	_IPESETESTASAPNS(ph)PR_	618.27
Q07960	49	S	_S(ph)SPELVTHLK_	426.54
Q07960	50	S	_S(ph)SPELVTHLK_	426.54
Q08170	112	S	_LIVENLS(ph)SR_	555.78
Q08170	113	S	_LIVENLS(ph)SR_	555.78
Q08945	659	S	_QLSES(ph)FK_	306.8
Q08999	966	S	_DSS(ph)PVMR_	436.17
Q08AD1	1321	S	_SESVGFLSPS(ph)R_	687.8
Q09666	38	T	_DDGVFVQEVV(ph)QNSPAAR_	638.29
Q09666	176	S	_DIDIS(ph)SPEFK_	615.77
Q09666	5110	S	_AEAPLPS(ph)PK_	330.49
Q09666	5729	T	_GGVT(ph)GSPEASISGSK_	471.88
Q0JRZ9	403	S	_NLS(ph)NEELTK_	376.5
Q10570	765	S	_S(ph)SQPPADRDPAFR_	540.91
Q10570	766	S	_S(ph)SQPPADRDPAFR_	540.91
Q12767	797	S	_S(ph)SWSS(ph)DEGIGEVLEK_	594.9
Q12767	798	S	_S(ph)SWSS(ph)DEGIGEVLEK_	594.9
Q12767	801	S	_S(ph)SWSS(ph)DEGIGEVLEK_	594.9
Q12802	1565	S	_HS(ph)WGPGK_	283.45
Q12802	1642	S	_VDS(ph)LVS(ph)LSEEDLESDQR_	694.28
Q12802	1645	S	_VDS(ph)LVS(ph)LSEEDLESDQR_	694.28
Q12802	1647	S	_VDSLVS(ph)LS(ph)EEDLESDQR_	694.28
Q12873	79	S	_RDS(ph)EEFSGS(ph)ERDEYR_	688.58
Q12888	208	S	_LS(ph)DVDANTAIK_	409.53
Q12888	635	S	_S(ph)EALS(ph)SVLDQEEAMEIK_	680.28
Q12888	639	S	_SEALS(ph)S(ph)VLDQEEAMEIK_	680.28
Q12888	640	S	_SEALS(ph)S(ph)VLDQEEAMEIK_	680.28
Q12888	727	S	_ECSEAMEVETSVIDS(ph)PQK_	773.66
Q12888	809	S	_S(ph)VEYEGDLK_	373.83
Q12983	61	S	_S(ph)SHCDSPPR_	374.81
Q12983	62	S	_S(ph)SHCDSPPR_	374.81
Q13017	1202	S	_GSEEDPLLS(ph)PVETWK_	589.6
Q13033	229	S	_NLEQILNGGES(ph)PK_	493.57
Q13042	581	T	_QTAETGLT(ph)PLETSR_	571.6
Q13085	25	S	_FIIGSVS(ph)EDNS(ph)EDEISNLVK_	589.51
Q13111	206	S	_S(ph)CELTSGPR_	592.24
Q13112	429	S	_TQDPS(ph)SPGTPPQAR_	540.57
Q13136	244	S	_SSDGS(ph)LS(ph)HEEDLAK_	545.54
Q13136	708	S	_IPHS(ph)PAR_	286.47
Q13136	763	S	_GALHTVS(ph)HEDIR_	472.22
Q13137	445	S	_QIFEDHVFCHS(ph)L_	537.89
Q13185	97	S	_SLSDS(ph)ESDDSK_	417.15

Q13206	831	S	_SNS(ph)EVEDVGPTSHNR_	569.9
Q13315	1883	S	_S(ph)TTPANLDSESEHFFR_	639.94
Q13315	1884	T	_S(ph)TTPANLDSESEHFFR_	639.94
Q13315	1885	T	_S(ph)TTPANLDSESEHFFR_	639.94
Q13330	449	S	_SNMS(ph)PHGLPAR_	416.18
Q13356	519	S	_GFGDFSS(ph)W_	491.67
Q13425	395	S	_S(ph)PSLGSDLTFATR_	477.89
Q13428	1378	S	_LGAGEGGEASVS(ph)PEK_	734.32
Q13435	311	T	_SSLGQSAS(ph)ETEEDTVSVSK_	674.29
Q13439	39	T	_T(ph)SSFTEQLDEGTPNR_	587.92
Q13439	40	S	_T(ph)SSFTEQLDEGTPNR_	587.92
Q13442	57	S	_S(ph)LDSDES(ph)EDEEDDYQQK_	548.68
Q13459	1114	S	_SPLEHS(ph)SPEK_	397.51
Q13459	1353	T	_RT(ph)SFSTSDVSK_	432.19
Q13459	1354	S	_RT(ph)SFSTSDVSK_	432.19
Q13464	1101	T	_LLDLSDEST(ph)SVAS(ph)FPSAETD_	995.09
Q13501	28	S	_RFS(ph)FCCSPEPEAEAAAGPG_	716.29
Q13501	277	S	_LTPVS(ph)PESSS(ph)TEEK_	550.89
Q13523	277	S	_S(ph)PIINESR_	498.23
Q13523	431	S	_DAS(ph)PINR_	426.68
Q13557	334	S	_ESTEES(ph)NTTIEDEDVK_	621.92
Q13586	618	S	_SHS(ph)PSSPDPDTPSPVGDSR_	667.94
Q13586	620	S	_SHS(ph)PSSPDPDTPSPVGDSR_	667.94
Q13586	621	S	_SHS(ph)PSSPDPDTPSPVGDSR_	667.94
Q13595	91	Y	_S(ph)YTPEY(ph)R_	538.18
Q13625	480	S	_NQS(ph)SEDILR_	571.25
Q13627	529	S	_S(ph)DPTHQHR_	353.15
Q13641	418	S	_LTNLSSNS(ph)DV_	565.24
Q13671	333	S	_GS(ph)PATS(ph)PHLGR_	620.25
Q13671	337	S	_GS(ph)PATS(ph)PHLGR_	620.25
Q13765	161	T	_QTPT(ph)VQEESEEEEEVDETGVEVK_	985.94
Q13765	166	S	_TQTPTVQEES(ph)EEEEVDETGVEVK_	788.95
Q13769	328	T	_RPT(ph)LGVQLDDK_	441.22
Q13813	1217	S	_S(ph)LQQLAEER_	577.27
Q13868	124	S	_S(ph)AEDELAM(ox)R_	559.22
Q13873	680	S	_ES(ph)SDENLMEHSLK_	533.55
Q13873	681	S	_ES(ph)SDENLMEHSLK_	533.55
Q14004	325	S	_DDS(ph)PVSHR_	496.7
Q14118	790	T	_LTLEDQAT(ph)FIK_	453.56
Q14126	712	S	_GQHEM(ox)S(ph)EM(ox)DGR_	463.49
Q14151	201	T	_VT(ph)PDIEESLLEPENЕК_	641.29
Q14151	513	S	_HHS(ph)VEIK_	310.48
Q14160	1232	S	_ELS(ph)PEGPGK_	331.81
Q14204	4366	T	_T(ph)DSTSDGRPAWMR_	520.55
Q14241	149	S	_S(ph)YSPDHR_	471.18
Q14247	426	S	_LPS(ph)SPVYEDAAS(ph)FK_	557.56
Q14493	182	S	_S(ph)WDQQIK_	492.71
Q14517	2660	S	_ES(ph)LIGLENEFFT(ph)FFVR_	703.31
Q14517	2670	T	_ES(ph)LIGLENEFFT(ph)FFVR_	703.31
Q14562	460	S	_QSMDS(ph)PIK_	372.82
Q14566	762	S	_EIESEIDS(ph)EEELINK_	619.61

Q14596	656	S	_S(ph)LTLDAAPDHNPPCR_	581.92
Q14596	658	T	_SLT(ph)LDAAPDHNPPCR_	581.92
Q14669	1317	S	_EDDEDS(ph)DDDGS(ph)DEEIDES_	1149.4
Q14669	1322	S	_EDDEDS(ph)DDDGS(ph)DEEIDES_	1149.4
Q14671	75	S	_S(ph)QDDAMVDYFFQR_	567.89
Q14671	709	S	_RDS(ph)LTGSSDLYK_	474.55
Q14676	299	S	_SQPPGEDS(ph)DTDVDSDSRPPGR_	774.64
Q14676	331	T	_AQPFGFIDS(ph)DT(ph)DAEEER_	696.26
Q14678	323	S	_S(ph)YSAGNASQLEQLSR_	564.25
Q14739	97	S	_S(ph)ASASHQADIK_	398.84
Q14847	104	T	_GFSVVADT(ph)PELQR_	500.24
Q14865	264	S	_RDS(ph)FSGVK_	325.81
Q14934	333	T	_RT(ph)SSEQAVALPR_	465.56
Q14978	607	T	_LQT(ph)PNT(ph)FPK_	402.5
Q14978	610	T	_LQT(ph)PNT(ph)FPK_	402.5
Q14978	622	S	_RAS(ph)S(ph)PFR_	327.46
Q14978	623	S	_RAS(ph)S(ph)PFR_	327.46
Q14C86	566	S	_FS(ph)LCS(ph)DNLEGISEGPSNR_	714.61
Q14C86	569	S	_FS(ph)LCS(ph)DNLEGISEGPSNR_	714.61
Q14C86	747	T	_LQELESCSGLGST(ph)SDDTDVDR_	750.31
Q15021	1333	S	_YQPLASTAS(ph)DNDFVTPEPR_	729.99
Q15022	539	S	_AS(ph)MSEFLES(ph)EDGEVEQQR_	744.28
Q15046	595	T	_ENVATTDTLLESTTVGT(ph)SV_	635.62
Q15046	596	S	_ENVATTDTLLESTTVGT(ph)SV_	635.62
Q15059	261	S	_S(ph)ESPPPLSDPK_	411.85
Q15149	4384	S	_S(ph)SSVGSSSSYPISPAVSR_	612.28
Q15149	4385	S	_S(ph)SSVGSSSSYPISPAVSR_	612.28
Q15149	4389	S	_SSS(ph)VGS(ph)SSSYPISPAVSR_	957.9
Q15154	93	S	_YMSQMS(ph)VPEQAELEK_	617.26
Q15154	110	S	_INFS(ph)DLDQR_	594.26
Q15154	861	S	_QGLAETAS(ph)PVAVSLR_	526.93
Q15154	1369	S	_STEISS(ph)ETGS(ph)DFSMFEALR_	751.96
Q15154	1373	S	_STEISS(ph)ETGS(ph)DFSMFEALR_	751.96
Q15311	27	T	_T(ph)PSSEEISPTK_	419.19
Q15311	30	S	_TPSS(ph)EEISPTK_	419.19
Q15311	461	S	_IAQEIAS(ph)LSK_	380.53
Q15361	487	S	_YLSADSGDADDS(ph)DADLGSAVK_	717.96
Q15361	872	S	_DIFYYEDDS(ph)EGEDIEK_	682.93
Q15366	188	S	_PSS(ph)SPVIFAGGQDR_	499.9
Q15417	323	S	_DYQYS(ph)DQGIDY_	723.76
Q15424	195	S	_ETINNLDTS(ph)SSDFTILQEIEEPSLEI	876.15
Q15424	246	S	_EESSELEQPFAQDTS(ph)SVGPDOR_	796.67
Q15464	312	S	_GIQLYDTPYEPEGQSVSDS(ph)EST	759.83
Q15464	388	S	_HGS(ph)PEFCGILGER_	513.55
Q15477	256	S	_ASS(ph)LEDLVLK_	577.79
Q15545	213	S	_QGHDS(ph)LEHDELOR_	505.88
Q15678	314	S	_ICTEQSNS(ph)PPPIR_	526.9
Q15678	577	T	_PAT(ph)STPDLASHR_	444.87
Q15678	579	T	_PATST(ph)PDLASHR_	444.87
Q15678	594	S	_YVSGSS(ph)PDLVTR_	680.81
Q15742	162	S	_S(ph)PLELGEK_	476.72

Q15751	1493	T	_SESLT(ph)AESR_	530.22
Q15785	186	S	_VPS(ph)AGDVEK_	327.81
Q15831	31	S	_IDS(ph)TEVIYQPR_	700.83
Q15904	465	S	_GPTIS(ph)LTQIV_	554.79
Q15942	267	S	_FS(ph)PVT(ph)PK_	312.46
Q15942	270	T	_FS(ph)PVT(ph)PK_	312.46
Q15942	344	S	_S(ph)PGAPGPLTLK_	373.19
Q16206	389	S	_EEEMEMS(ph)DDEIEEMTETK_	762.27
Q16512	778	T	_TSTFCGT(ph)PEFLAPEVLTDTSYTR_	891.73
Q16513	582	S	_AS(ph)SLGEIDESSEL_	524.9
Q16513	814	T	_T(ph)STFCGTPEFLAPEVLTETSYTR_	896.4
Q16513	815	S	_T(ph)STFCGTPEFLAPEVLTETSYTR_	896.4
Q16514	51	S	_LS(ph)PENNQVLT_	441.55
Q16539	182	Y	_HTDDEM(ox)TGY(ph)VATR_	531.21
Q16643	346	T	_SPSDSSTAST(ph)PVAEQIER_	647.95
Q1ED39	237	S	_SMES(ph)SPR_	437.16
Q1KMD3	185	S	_AAEEQGDDQDS(ph)EK_	501.18
Q2PPJ7	375	S	_RLSNS(ph)S(ph)LCSIEEEHR_	659.6
Q2PPJ7	376	S	_RLSNS(ph)S(ph)LCSIEEEHR_	659.6
Q32MZ4	16	S	_EIDCLS(ph)PEAQK_	457.2
Q32NC0	195	S	_M(ox)LLS(ph)QNESQK_	425.19
Q3KQU3	70	S	_QLPLEPES(ph)PSGQVGPR_	590.95
Q3KQU3	460	S	_LSASTASELS(ph)PK_	424.2
Q3MHD2	73	T	_T(ph)ETPPPLASLNVS_	511.92
Q3MHD2	75	T	_T(ph)ETPPPLASLNVS_	511.92
Q49A26	167	S	_AQEQS(ph)PR_	448.19
Q49A88	798	S	_RLS(ph)PQPQIR_	392.21
Q4G0J3	299	S	_S(ph)SSEDAESLAPR_	443.52
Q4G0J3	337	S	_DIEIS(ph)T(ph)EEEE_	451.5
Q4G0J3	338	T	_DIEIS(ph)T(ph)EEEE_	451.5
Q52LW3	572	S	_TPS(ph)SGTMSSADDLDER_	874.84
Q52LW3	949	S	_ATS(ph)FEESER_	568.22
Q53EL6	76	S	_GDS(ph)VSDSGSDALR_	673.27
Q53EL6	457	S	_FVS(ph)EGDGGR_	502.2
Q5BKZ1	478	S	_FEIQDHS(ph)QDQQIEGDEEDEEK_	757.05
Q5CZC0	6766	S	_TMPETASS(ph)S(ph)WEEK_	548.2
Q5CZC0	6767	S	_TMPETASS(ph)S(ph)WEEK_	548.2
Q5F1R6	283	S	_EFGDGS(ph)DENEMEEHELK_	692.26
Q5H9R7	631	T	_HIAFT(ph)PESQR_	422.53
Q5JSZ5	556	S	_EVPWS(ph)PSAEK_	403.84
Q5JTH9	66	S	_LHNELQSGS(ph)LR_	445.21
Q5M775	241	S	_ELS(ph)DLEEENR_	657.27
Q5M775	425	S	_TILETS(ph)FHQHR_	483.56
Q5QJE6	141	S	_ESYTEEIVS(ph)EAESHVSGISR_	763.67
Q5SW79	1114	S	_LGEASDS(ph)ELADADK_	500.87
Q5T0N5	295	S	_TIS(ph)DGTISASK_	387.18
Q5T0N5	488	S	_HS(ph)SDINHLVTQGR_	515.24
Q5T200	64	S	_FVHGPS(ph)PR_	326.15
Q5T200	241	S	_TSAVS(ph)SPLLDQQR_	494.57
Q5T200	317	T	_ST(ph)SPAGQHHS(ph)PISSR_	570.23
Q5T200	318	S	_ST(ph)SPAGQHHS(ph)PISSR_	570.23

Q5T200	325	S	_ST(ph)SPAGQHHS(ph)PISSR_	570.23
Q5T200	370	S	_S(ph)AS(ph)PYPSHSLSS(ph)PQR_	920.84
Q5T200	372	S	_S(ph)AS(ph)PYPSHS(ph)LSSPQR_	614.23
Q5T200	381	S	_S(ph)AS(ph)PYPSHSLSS(ph)PQR_	920.84
Q5T200	875	S	_S(ph)LSPSHLTEDR_	441.2
Q5T200	943	S	_AQDIIGHHQS(ph)EDR_	529.23
Q5T200	986	S	_GNIETTS(ph)EDGQVFSPK_	596.93
Q5T200	1436	T	_T(ph)ESLEGDDESK_	430.5
Q5T4S7	178	S	_ELAS(ph)PVS(ph)PELR_	679.29
Q5T4S7	181	S	_ELAS(ph)PVS(ph)PELR_	679.29
Q5T4S7	2715	T	_HVT(ph)LPS(ph)SPR_	385.16
Q5T5P2	169	S	_TRAS(ph)LPVVR_	360.2
Q5T5P2	1568	S	_GEDATDDQFES(ph)PK_	506.86
Q5T5Y3	722	S	_S(ph)PNSHDSEPWTLLR_	573.59
Q5TCZ1	421	S	_AQISS(ph)PNLR_	355.84
Q5THK1	1217	S	_ESTFGIS(ph)SK_	345.82
Q5VST9	7	S	_M(ox)DQPQFS(ph)GAPR_	443.85
Q5VTL8	289	S	_EGHGSS(ph)SFDR_	579.71
Q5VUA4	527	S	_S(ph)FPDIEDEEK_	430.17
Q5VUB5	849	S	_TADAPSEPAAS(ph)PHQR_	538.9
Q5VWQ8	747	S	_SLS(ph)MVDLQDAR_	657.79
Q5VXU3	77	S	_VVS(ph)EEHLR_	350.17
Q5VZ89	505	S	_S(ph)PPLM(ox)AK_	280.46
Q5VZ89	861	T	_T(ph)HSFENVSCHLPDSR_	467.2
Q5VZ89	948	S	_SS(ph)LYGIAK_	459.72
Q5VZ89	1014	S	_S(ph)SSMELHR_	342.81
Q5VZ89	1015	S	_S(ph)SSMELHR_	342.81
Q5VZ89	1016	S	_S(ph)SSMELHR_	342.81
Q5VZ89	1087	S	_S(ph)TSLALVR_	507.25
Q5VZ89	1088	T	_S(ph)TSLALVR_	507.25
Q5VZ89	1089	S	_S(ph)TSLALVR_	507.25
Q5VZK9	967	S	_RS(ph)SGFISELPSEEGK_	568.26
Q5VZK9	968	S	_RS(ph)SGFISELPSEEGK_	568.26
Q641Q2	284	S	_S(ph)RPTSFADLAAR_	500.9
Q641Q2	287	T	_SRPT(ph)SFADLAAR_	750.85
Q641Q2	728	S	_ETVSEAPLLFS(ph)DEEEK_	667.3
Q658Y4	671	S	_KLS(ph)DASDER_	550.73
Q66K74	655	S	_LS(ph)LS(ph)PLR_	473.21
Q66K74	657	S	_LS(ph)LS(ph)PLR_	473.21
Q66K74	729	S	_S(ph)ASPHDVDLCLVSPCFEHR_	812.34
Q66K74	731	S	_S(ph)ASPHDVDLCLVSPCFEHR_	812.34
Q68CZ2	332	S	_WDS(ph)YENLSADGEVLHTQGP_	758.59
Q69YH5	98	S	_GS(ph)PETNHLIR_	401.86
Q6GYQ0	795	S	_S(ph)SSTSDILEPFTVER_	583.26
Q6GYQ0	796	S	_S(ph)SSTSDILEPFTVER_	583.26
Q6GYQ0	797	S	_SSS(ph)TSDILEPFTVER_	874.39
Q6IAA8	56	S	_TDEQALLSS(ph)ILAK_	490.25
Q6IBW4	284	S	_S(ph)PQQAALPR_	378.85
Q6IN85	126	S	_FDDMS(ph)SPGLELPSCELSR_	707.3
Q6KC79	349	S	_AAMYDIIS(ph)SPSK_	454.87
Q6KC79	350	S	_AAMYDIIS(ph)SPSK_	454.87

Q6NXS1	121	S	_IQEQES(ph)S(ph)GEEDSD_	775.29
Q6NXS1	122	S	_IQEQES(ph)S(ph)GEEDSD_	775.29
Q6NYC8	145	S	_EERLS(ph)PR_	322.82
Q6NYC8	224	S	_LS(ph)PGESAYQK_	580.26
Q6NZI2	365	S	_RGS(ph)S(ph)PDVHALLEITE_	685.82
Q6NZI2	366	S	_RGS(ph)S(ph)PDVHALLEITE_	685.82
Q6P0Q8	278	S	_HFS(ph)TESVPDEEGR_	785.31
Q6P1M3	653	S	_SLRQS(ph)FR_	325.16
Q6P9B6	440	S	_EAQALLEIS(ph)GHS(ph)R_	761.34
Q6P9B6	443	S	_EAQALLEIS(ph)GHS(ph)R_	761.34
Q6PD74	310	S	_DRDEIEGLS(ph)S(ph)DEEH_	875.34
Q6PD74	311	S	_GDRDEIEGLS(ph)S(ph)DEEH_	875.34
Q6PID6	197	S	_SEAPAEVTHFS(ph)PK_	493.89
Q6PJG2	461	S	_AS(ph)QEANLLTLAQK_	489.58
Q6PJG9	608	S	_S(ph)HSVHGGLLGAGCR_	496.56
Q6PJG9	610	S	_S(ph)HSVHGGLLGAGCR_	496.56
Q6PKG0	823	S	_HS(ph)SNPPLESHVGVWM_	529.48
Q6PKG0	824	S	_HS(ph)SNPPLESHVGVWM_	529.48
Q6UX04	266	S	_GEDES(ph)AEHDEYIDGDEK_	729.53
Q6UXH1	70	S	_YES(ph)SEIR_	482.19
Q6WCQ1	326	S	_AEHMETNAVGPS(ph)PSSDT_	655.94
Q6Y7W6	382	T	_PGT(ph)PSDHQSQEASQFER_	660.94
Q6ZMV5	601	S	_YNM(ox)LNS(ph)AILELFEYIR_	695.66
Q6ZNE5	425	S	_VS(ph)DEETDLGTDWENLP_	747.32
Q6ZRV2	1003	S	_RLS(ph)LGQGDSTEATEER_	633.95
Q6ZS81	2008	S	_DTVLS(ph)TLYSS(ph)LNK_	800.85
Q6ZS81	2009	T	_DTVLS(ph)TLYSS(ph)LNK_	800.85
Q6ZS81	2012	S	_DTVLS(ph)TLYSS(ph)LNK_	800.85
Q6ZW76	320	S	_DVTS(ph)PINER_	555.74
Q70Z53	283	S	_NS(ph)DEEES(ph)AS(ph)ES_	660.55
Q70Z53	285	S	_NS(ph)DEEES(ph)AS(ph)ES_	660.55
Q765P7	456	S	_GLS(ph)LEHQK_	331.16
Q76FK4	1098	S	_NS(ph)SPGEASLLEK_	437.87
Q76FK4	1099	S	_NS(ph)SPGEASLLEK_	437.87
Q7KZ85	1532	T	_T(ph)PAS(ph)INATPANINLA_	705
Q7KZ85	1535	S	_T(ph)PAS(ph)INATPANINLA_	705
Q7L2J0	60	S	_CAPSAGS(ph)PAAAVGR_	451.2
Q7L4I2	30	S	_EQSEVS(ph)VSPR_	399.84
Q7L4I2	220	T	_T(ph)PS(ph)PPFR_	353.48
Q7L576	582	S	_S(ph)SLEGPTILDIEK_	494.58
Q7L576	583	S	_S(ph)SLEGPTILDIEK_	494.58
Q7L7X3	445	S	_TAS(ph)LVTR_	414.2
Q7L8J4	362	S	_GLSDHVS(ph)LDGQELGTR_	588.6
Q7L9B9	21	S	_DPSDLSHS(ph)R_	365.15
Q7LBC6	798	S	_RFS(ph)LDER_	334.82
Q7RTP6	1310	S	_LGS(ph)PLAVDEALR_	660.83
Q7Z2W4	271	S	_S(ph)CTPS(ph)PDQISHR_	515.52
Q7Z2W4	275	S	_S(ph)CTPS(ph)PDQISHR_	515.52
Q7Z2W4	378	S	_TVFS(ph)PTLPAAR_	413.88
Q7Z2Z1	441	S	_HVLQTAVADS(ph)PR_	458.56
Q7Z2Z1	838	S	_SVSGS(ph)PESDELQELR_	571.58

Q7Z3C6	761	S	_SAS(ph)YPCAAPR_	580.23
Q7Z3G6	753	S	_TVS(ph)DLALQNAFGDR_	793.86
Q7Z3G6	805	T	_YVT(ph)SDELLHK_	428.87
Q7Z3G6	806	S	_YVT(ph)SDELLHK_	428.87
Q7Z417	112	S	_NLS(ph)SDEATNPISR_	742.32
Q7Z4H7	584	T	_T(ph)PENLITEIR_	422.54
Q7Z591	52	S	_LFPNATS(ph)PELLEDFR_	610.29
Q7Z6E9	772	S	_SRS(ph)PQAFR_	343.49
Q7Z6Z7	1903	S	_GS(ph)GTASDDEFENLR_	789.31
Q7Z6Z7	2362	S	_DGGS(ph)GNS(ph)TIIVSR_	711.79
Q7Z6Z7	2365	S	_DGGS(ph)GNS(ph)TIIVSR_	711.79
Q7Z7N9	206	S	_WS(ph)S(ph)ETDALVGSR_	622.57
Q7Z7N9	208	T	_GDPEWSSET(ph)DALVGSR_	893.37
Q86SQ0	468	S	_LS(ph)TGTTVEDVQK_	453.21
Q86SQ0	501	S	_S(ph)DEESVFEEALMS(ph)P_	819.34
Q86TB9	177	S	_S(ph)TSPIIGSPPVR_	430.89
Q86TB9	178	T	_S(ph)TSPIIGSPPVR_	430.89
Q86TB9	179	S	_STS(ph)PIIGS(ph)PPVR_	685.81
Q86TB9	184	S	_STS(ph)PIIGS(ph)PPVR_	685.81
Q86U44	43	S	_NPEAALS(ph)PTFR_	641.8
Q86U70	61	T	_HT(ph)PYGNQTDYR_	477.86
Q86UP2	77	S	_GNLHES(ph)DS(ph)ESVPR_	690.94
Q86UP2	107	T	_QVAPVPLNVVET(ph)SSSVR_	723.36
Q86UP2	1313	S	_VIENS DVS(ph)PETESSEK_	587.25
Q86UU0	118	S	_SVS(ph)VDSGEQR_	572.24
Q86V88	167	S	_S(ph)SLEESPFEA_	588.23
Q86V88	168	S	_S(ph)SLEESPFEA_	588.23
Q86VM9	24	S	_PEDEEQPQGLS(ph)DDDILR_	824.68
Q86VM9	46	S	_AS(ph)DLEDEESAAR_	686.77
Q86VM9	534	S	_LGVSVS(ph)PSR_	491.24
Q86VR2	325	S	_GSEDLDGHSDPEES(ph)FAR_	664.28
Q86VR2	433	S	_S(ph)PSSDLDTDAEGDDF_	1173.8
Q86VR2	435	S	_S(ph)PSSDLDTDAEGDDF_	1173.8
Q86VR2	436	S	_S(ph)PSSDLDTDAEGDD_	880.63
Q86VX9	56	S	_S(ph)YEDLTESEDGAAS_	693.27
Q86VZ5	14	S	_EVVYWS(ph)PK_	363.17
Q86W92	466	S	_SSS(ph)LGNLK_	295.81
Q86W92	794	S	_RPS(ph)DENTIAPSEVQK_	584.27
Q86WB0	321	S	_LPLVPES(ph)PRR_	415.22
Q86WB0	333	T	_SQDAT(ph)FSPGSEQAEK_	554.56
Q86WB0	357	S	_S(ph)WDS(ph)SSPVDRPE_	811.33
Q86WB0	358	S	_S(ph)WDS(ph)SSPVDRPE_	811.33
Q86WB0	395	S	_GDTPGLEVPSS(ph)PLR_	632.95
Q86WC4	322	S	_S(ph)S(ph)TSFANIQENSN_	779.78
Q86WC4	323	S	_S(ph)S(ph)TSFANIQENSN_	779.78
Q86WC4	324	T	_LKS(ph)STS(ph)FANIQENSN_	600.58
Q86XN8	514	S	_HS(ph)PTLPEPGGLR_	447.55
Q86Y82	142	S	_AGSRLS(ph)AEER_	385.84
Q86YP4	100	S	_RPPS(ph)PDVIVLS(ph)DN_	608.26
Q86YP4	107	S	_LS(ph)DNEQPS(ph)SPR_	608.26
Q86YP4	113	S	_LS(ph)DNEQPS(ph)SPR_	608.26

Q86YR5	471	S	_EGSHS(ph)PLDSADVR_	483.87
Q8IVF2	281	S	_SHSS(ph)SEAYEPR_	443.84
Q8IVF2	298	T	_DAHVS(ph)PTST(ph)DTE_	777.98
Q8IVT5	404	T	_T(ph)ESVPSDINNPVDR_	541.57
Q8IWT6	198	S	_S(ph)STVS(ph)EDVEATVP_	670.28
Q8IWT6	199	S	_S(ph)STVS(ph)EDVEATVP_	670.28
Q8IWT6	202	S	_S(ph)STVS(ph)EDVEATVP_	670.28
Q8IXT5	561	S	_HPPEDFRHS(ph)SEDFR_	459.69
Q8IXT5	839	S	_CPS(ph)DEDFR_	553.19
Q8IY18	1046	T	_ENT(ph)SQY(ph)FFIT(ph)PK_	343.73
Q8IY18	1049	Y	_ENT(ph)SQY(ph)FFIT(ph)PK_	343.73
Q8IY18	1053	T	_ENT(ph)SQY(ph)FFIT(ph)PK_	343.73
Q8IY22	377	S	_LLHPS(ph)PDLVSQEATLS_	715.02
Q8IY63	720	S	_DTTIINHHS(ph)R_	379.51
Q8IY81	584	S	_TEIMS(ph)PLYQDEAPK_	567.92
Q8IY95	230	S	_TISS(ph)LEEIVEK_	443.22
Q8IYB3	220	T	_EKT(ph)PELPEPSVK_	478.57
Q8IYB3	429	S	_VS(ph)VS(ph)PGR_	431.17
Q8IYB3	431	S	_VS(ph)VS(ph)PGR_	431.17
Q8IYU2	385	S	_DS(ph)TEITSILLK_	433.89
Q8IZD4	275	S	_SLS(ph)YEEPR_	530.72
Q8IZM8	576	S	_CQTLFGFDS(ph)DDESA_	836.3
Q8N1G0	1057	S	_HGLQLGAQS(ph)PGR_	434.21
Q8N1G4	431	S	_QS(ph)VSGLHR_	321.82
Q8N201	307	S	_LS(ph)PEQEGQLMPR_	488.89
Q8N2F6	45	S	_S(ph)AGALEEGTSEGQLCGR_	901.37
Q8N3U4	1177	S	_EEPIVEDVMMS(ph)SEGR_	879.35
Q8N3X1	429	S	_ALEEGDGSVS(ph)GSSPR_	509.88
Q8N3X1	431	S	_ALEEGDGSVSGS(ph)SPR_	764.32
Q8N488	227	S	_GDMSAVNDES(ph)F_	626.22
Q8N4C8	1008	T	_AHSET(ph)PEIR_	373.83
Q8N573	201	S	_VVS(ph)STSEEEAAAFTEK_	584.58
Q8N573	202	S	_VVS(ph)STSEEEAAAFTEK_	584.58
Q8N573	203	T	_VVS(ph)STSEEEAAAFTEK_	584.58
Q8N5S9	458	S	_S(ph)FGNPFEPQAR_	665.28
Q8N655	273	S	_EITSHHEGGGDVS(ph)PR_	550.56
Q8N6T3	361	S	_SS(ph)DSWEVWGSASTNR_	874.85
Q8N7H5	456	S	_S(ph)DADS(ph)EDDADS(ph)D_	704.47
Q8N7H5	460	S	_S(ph)DADS(ph)EDDADS(ph)D_	704.47
Q8N7H5	466	S	_S(ph)DADS(ph)EDDADS(ph)D_	704.47
Q8NA29	532	S	_SSGCS(ph)ET(ph)DSTELASIL_	740.27
Q8NA29	534	T	_SGCS(ph)ET(ph)DSTELASIL_	740.27
Q8NAF0	194	S	_ES(ph)ESEEAEAGAAELR_	829.33
Q8NB49	1108	S	_AS(ph)DSLSAR_	443.69
Q8NB49	1124	T	_T(ph)FSDESNVL_	546.22
Q8NC44	329	T	_AT(ph)TPQLTDVSEDLDQQS(ph)L_	1082.8
Q8NC44	344	S	_AT(ph)TPQLTDVSEDLDQQS(ph)L_	1082.8
Q8NC51	394	S	_SSAS(ph)APDVDDPEAFP_	920.39
Q8NC56	138	S	_ASVRGS(ph)S(ph)EEDEDAR_	834.3
Q8NC56	139	S	_ASVRGS(ph)S(ph)EEDEDAR_	834.3
Q8ND76	37	T	_EDT(ph)GCNLQHISDR_	542.22

Q8NDI1	377	S	_S(ph)TPPPNNLVNPVQEL_	738.69
Q8NDI1	378	T	_S(ph)TPPPNNLVNPVQELE_	738.69
Q8NDT2	109	S	_ASGDPGASGMS(ph)PR_	635.25
Q8NDT2	265	S	_S(ph)LS(ph)PVAAPPLR_	634.3
Q8NDT2	267	S	_S(ph)LS(ph)PVAAPPLR_	634.3
Q8NDT2	562	S	_RNS(ph)LEGYSR_	387.84
Q8NDV7	739	S	_QNTAWDTETS(ph)PR_	743.3
Q8NFA0	1587	S	_MADTS(ph)SMDEDFESDYK_	650.89
Q8NFA0	1588	S	_MADTS(ph)SMDEDFESDYK_	650.89
Q8NFC6	482	S	_YYS(ph)DSDDELTVQR_	600.57
Q8NFC6	2779	S	_QHYS(ph)S(ph)EDEPDDN_	830.98
Q8NFC6	2780	S	_QHYS(ph)S(ph)EDEPDDN_	830.98
Q8NFW8	303	Y	_EIISY(ph)DVK_	349.5
Q8NHG8	82	S	_S(ph)LGGAVGSVASGAR_	423.54
Q8NHM5	57	S	_YDENEDLS(ph)DVVEIVSVR_	697.63
Q8NHP6	283	S	_ETLETIS(ph)NEEQTPLLK_	642.31
Q8NI08	211	S	_VLSSTS(ph)EEDEPGVVK_	552.59
Q8TAA9	338	S	_RDS(ph)SHNELYEEAEHER_	748.64
Q8TAA9	339	S	_RDS(ph)SHNELYEEAEHER_	748.64
Q8TAM1	719	S	_VHNQDS(ph)EDEL_	633.24
Q8TB03	314	T	_LDSQEPGRQT(ph)PDR_	526.9
Q8TBE7	409	S	_QDYQEILDS(ph)PIK_	510.24
Q8TCG1	904	S	_INPETVNLS(ph)I_	590.29
Q8TD16	582	S	_S(ph)PILLPK_	424.24
Q8TDN4	290	S	_S(ph)SLETLEDIEENAPLR_	632.63
Q8TDN4	291	S	_S(ph)SLETLEDIEENAPLR_	632.63
Q8TDY2	238	T	_ST(ph)ELVLS(ph)PDMPR_	475.55
Q8TDY2	243	S	_S(ph)TELVLS(ph)PDMPR_	502.21
Q8TDY2	266	S	_SVEHVS(ph)PDTADAESGK_	570.24
Q8TDY2	667	S	_MESTAGITTTTS(ph)PR_	511.56
Q8TDY2	1284	S	_GDS(ph)SSLVAELQEK_	481.55
Q8TDY2	1285	S	_GDS(ph)SSLVAELQEK_	481.55
Q8TDY2	1286	S	_GDS(ph)SSLVAELQEK_	481.55
Q8TE77	649	S	_QAS(ph)VHDSGEEGEA_	698.26
Q8TEA7	435	T	_EKDT(ph)EYQLNR_	688.3
Q8TEA8	196	S	_SAS(ph)SGAEGDVSSER_	473.52
Q8TEP8	372	T	_NT(ph)SPEHGGR_	345.47
Q8TEW0	143	S	_RS(ph)SDPALIGLSTSVSDS_	935.76
Q8TEW0	144	S	_RS(ph)SDPALIGLSTSVSDS_	935.76
Q8TF01	211	S	_S(ph)PIALPVK_	302.17
Q8TF01	286	S	_S(ph)KFDSDEEEEDTEN_	621.5
Q8WU79	219	S	_DLDLLASVPS(ph)PSSSGSR_	589.94
Q8WUB8	270	S	_RYS(ph)PDELRL_	372.5
Q8WUM9	335	S	_LPS(ph)VDLK_	426.22
Q8WUY3	699	S	_AS(ph)DSVFQPK_	353.49
Q8WVM8	303	S	_EESGGENS(ph)PAGAR_	599.27
Q8WWI1	1425	T	_STT(ph)ELDDYSTNK_	485.2
Q8WWM7	390	S	_HLDNS(ph)SPGPGSEAR_	598.92
Q8WWM7	594	S	_GLLTSEPMGS(ph)PVSSK_	638.29
Q8WWQ0	1315	S	_AQS(ph)YDIQAWK_	430.52
Q8WX93	1104	S	_S(ph)PSGHPHVR_	351.83

Q8WXE1	518	S	_LS(ph)DGDMTSALR_	623.26
Q8WXF0	105	S	_HPCS(ph)PSDHR_	391.48
Q8WXH0	2781	S	_QQS(ph)VESLAEVVK_	476.22
Q8WXX7	319	S	_APS(ph)PDPDLVQR_	637.79
Q8WY36	40	S	_LLDFS(ph)EEEEEEDEEEE_	807.98
Q8WY54	557	S	_VDS(ph)FTDR_	460.18
Q8WYP5	1295	S	_EHQEMDEGS(ph)QSLEK_	576.23
Q8WYP5	1533	S	_LEAQDS(ph)GEEAR_	642.76
Q8WZ73	232	S	_ETQSIDS(ph)EDS(ph)FVPGR_	779.98
Q8WZA1	66	S	_AIS(ph)EANEDPEPEQDYDE_	810
Q92508	1644	T	_T(ph)ASELLDRR_	418.55
Q92530	152	S	_ANVS(ph)SPHR_	316.47
Q92609	520	S	_S(ph)ESMPVQLNK_	404.85
Q92609	522	S	_SES(ph)MPVQLNK_	404.85
Q92609	541	S	_NISSSPS(ph)VESLPGGR_	783.86
Q92609	554	S	_EFTGS(ph)PPSSATK_	430.19
Q92609	791	S	_DSGFTIVS(ph)PLDI_	672.31
Q92625	661	S	_S(ph)PSFASEWDEIEK_	802.83
Q92667	107	S	_SES(ph)SGILPNTTDMR_	794.34
Q92685	11	S	_S(ph)GSAQAEGGLCK_	420.18
Q92685	13	S	_SGS(ph)AAQAEGGLCK_	629.76
Q92794	1089	S	_RLS(ph)SQDVLR_	385.2
Q92805	41	S	_GADS(ph)GDDFASDGSSSR_	738.94
Q92845	60	S	_S(ph)LNANTDITSLAR_	485.9
Q92878	635	S	_LFDVCGS(ph)QDFESDLDR_	661.6
Q92882	200	T	_T(ph)LSNAEDYLDEEDS(ph)D_	931.3
Q92917	471	S	_HYDAICQYMGPS(ph)DTDDD_	965.38
Q92917	473	T	_HYDAICQYMGPS(ph)DTDDD_	965.38
Q969K3	254	S	_AS(ph)LSDLSSLDDVEG_	654.29
Q969X1	81	S	_AVS(ph)DS(ph)FGPGE_	566.53
Q969X1	83	S	_AVS(ph)DS(ph)FGPGE_	566.53
Q96A23	196	T	_T(ph)EVVM(ox)NNLS(ph)PA_	555.56
Q96A23	204	S	_T(ph)EVVM(ox)NNLS(ph)PA_	555.56
Q96A49	268	T	_TQEDEEEIST(ph)SPGVSEF_	953.65
Q96A49	273	S	_TQEDEEEISTS(ph)PGVSEF_	953.65
Q96A49	277	S	_TQEDEEEIST(ph)SPGVSEF_	953.65
Q96A49	313	S	_TAVLEEDS(ph)ADWEK_	653.6
Q96A57	14	S	_TNLATGIPS(ph)SK_	390.19
Q96AC1	666	S	_DQNES(ph)LDEEMFYK_	576.56
Q96AP0	110	S	_ELILGSETPS(ph)SPR_	489.24
Q96AT1	146	S	_NSSLLS(ph)FDNEDENE_	564.88
Q96B23	143	S	_S(ph)RSESETSTMAAK_	488.87
Q96B36	246	T	_LNT(ph)SDFQK_	344.82
Q96BD0	40	S	_ASPGTPLS(ph)PGSLR_	440.55
Q96C19	74	S	_ADLNQGIGEPQS(ph)PSR_	550.25
Q96C57	78	T	_EQDGNELQT(ph)TPEFR_	741.65
Q96C57	79	T	_EQDGNELQT(ph)TPEFR_	741.65
Q96CP6	277	T	_GHVT(ph)PNLS(ph)R_	380.82
Q96CP6	281	S	_GHVT(ph)PNLS(ph)R_	380.82
Q96CV9	177	S	_LNSSGSSEDS(ph)FVEIR_	569.58
Q96CV9	513	S	_DGGRQS(ph)LMEMQSR_	760.64

Q96CV9	525	T	_T(ph)SDSDQQAYLVQR_	795.84
Q96CV9	528	S	_TSDS(ph)DQQAYLVQR_	530.9
Q96CW6	302	S	_EFGYDS(ph)PHDLDS(ph)D_	828.76
Q96D71	273	S	_RQS(ph)S(ph)SYDDPWK_	510.19
Q96DT6	398	S	_AS(ph)EEITK_	429.19
Q96EB6	172	S	_ASHAS(ph)S(ph)SDWTPR_	731.26
Q96EB6	173	S	_ASHAS(ph)S(ph)SDWTPR_	731.26
Q96EQ0	295	S	_S(ph)FSSSAEEHS_	574.2
Q96EQ0	297	S	_SFS(ph)SSAEEHS_	574.2
Q96EZ8	22	S	_S(ph)EDEESLAGQK_	424.84
Q96FF9	83	S	_IS(ph)FFLEK_	321.82
Q96G74	507	T	_AT(ph)SPLVSLYPALECR_	586.28
Q96G74	508	S	_ATS(ph)PLVSLYPALECR_	878.92
Q96GA3	17	S	_AVS(ph)FHLVHR_	382.53
Q96HR8	315	S	_NDQEPPEALDFS(ph)DDEK_	675.94
Q96IF1	263	S	_HS(ph)VTGYGDCAVGAR_	510.54
Q96I18	324	S	_WS(ph)GNEPTDEFSDLPLR_	648.28
Q96J84	549	T	_EPLT(ph)MHSDREDDTA_	800.34
Q96J84	552	S	_EPLT(ph)MHSDREDDTA_	800.34
Q96JB2	533	S	_SGS(ph)TESLNPR_	564.24
Q96JM3	382	S	_S(ph)PPAS(ph)PESWK_	415.82
Q96JM3	386	S	_S(ph)PPAS(ph)PESWK_	415.82
Q96JM3	626	S	_DNQES(ph)SDAELSSSEYIK_	661.27
Q96JM3	674	T	_M(ox)DM(ox)T(ph)SPEQSR_	647.23
Q96JM3	675	S	_M(ox)DM(ox)T(ph)SPEQSR_	647.23
Q96JN8	502	S	_ALS(ph)PEGALR_	497.24
Q96K21	144	S	_WS(ph)PPQNYK_	367.16
Q96K21	460	S	_EHQTS(ph)AYSPPR_	451.53
Q96KM6	852	T	_ERT(ph)PEEPVAK_	412.53
Q96MU7	266	T	_EEGNDYDT(ph)R_	589.7
Q96MY1	400	S	_PVPTAQLS(ph)PTEISAVR_	582.63
Q96N67	182	S	_SMS(ph)IDDTPR_	551.22
Q96N67	450	T	_T(ph)TSGDDACNLTSFR_	812.82
Q96N67	451	T	_T(ph)TSGDDACNLTSFR_	542.22
Q96N67	898	S	_SLS(ph)NS(ph)NPDISGTPT_	783.32
Q96N67	905	S	_SLSNS(ph)NPDIS(ph)GTPT_	1174.5
Q96N67	1383	S	_MNS(ph)LTFK_	460.7
Q96N67	1430	S	_S(ph)PSGSAFGSQENLR_	506.22
Q96NL6	681	S	_AAS(ph)LMNLENI_	578.26
Q96P47	538	S	_LDPPPS(ph)PHSNR_	432.86
Q96PE3	487	S	_AS(ph)PTSTEEEQVMLR_	553.24
Q96PU4	667	S	_RPIS(ph)DDDCPSASK_	509.88
Q96Q15	3556	S	_TQPDVMS(ph)QNAR_	663.78
Q96Q42	464	S	_S(ph)SSLVDIR_	478.73
Q96Q42	465	S	_S(ph)SSLVDIR_	478.73
Q96Q42	466	S	_S(ph)SSLVDIR_	478.73
Q96QC0	313	S	_VLS(ph)PTAAK_	289.48
Q96QC0	382	S	_PVES(ph)PGDPNQLTR_	745.34
Q96QD8	21	S	_EDSSS(ph)YS(ph)SNSDFN_	995.37
Q96RK0	1246	S	_SS(ph)PPLPPAEER_	678.81
Q96RS0	85	S	_ES(ph)ELDS(ph)EAELMR_	1012.4

Q96RS0	154	S	_EYEEDDILAS(ph)DDPSS_	933.38
Q96RS0	615	T	_QAET(ph)EAEVK_	362.16
Q96RU3	299	S	_TVS(ph)DNS(ph)LSNSR_	670.25
Q96S38	281	S	_GVDLLLEGVQGES(ph)SPTR_	612.96
Q96S55	75	S	_RLS(ph)ESSALK_	357.51
Q96SB4	311	S	_QEESES(ph)PVERPLK_	402.69
Q96ST2	248	S	_IS(ph)DSESEDPPR_	656.26
Q96T23	227	S	_ES(ph)PSLEDEETK_	672.27
Q96T58	727	S	_S(ph)QS(ph)PVHLR_	361.82
Q96TC7	44	S	_S(ph)QSLPNSLDYTQTSDP_	682.63
Q99081	557	T	_T(ph)SSTNEDEDLNPEQK_	596.24
Q99081	558	S	_T(ph)SSTNEDEDLNPEQK_	596.24
Q99081	559	S	_T(ph)SSTNEDEDLNPEQK_	596.24
Q99081	560	T	_T(ph)SSTNEDEDLNPEQK_	596.24
Q99549	89	T	_GYTSDDDT(ph)WEPEIHLE_	598.23
Q99549	136	S	_NDIFEANS(ph)DS(ph)DQQ_	839
Q99549	138	S	_NDIFEANS(ph)DS(ph)DQQ_	839
Q99590	608	S	_TEELIES(ph)PK_	375.84
Q99590	613	S	_LES(ph)SEGEIIQTVDR_	552.59
Q99590	614	S	_LES(ph)SEGEIIQTVDR_	552.59
Q99607	186	S	_S(ph)TSPVTDPSIPIR_	725.35
Q99607	187	T	_S(ph)TSPVTDPSIPIR_	725.35
Q99607	188	S	_STS(ph)PVTDPSPHIR_	725.35
Q99613	178	S	_NEEDS(ph)EGS(ph)SDE_	945.67
Q99613	181	S	_NEEDS(ph)EGS(ph)SDE_	945.67
Q99613	182	S	_NEEDS(ph)EGS(ph)SDE_	945.67
Q99661	628	S	_EEEELS(ph)SQMS(ph)SFN_	835.99
Q99661	632	S	_EEEELS(ph)SQMS(ph)SFN_	835.99
Q99700	784	S	_GIS(ph)PVVSEHR_	387.52
Q99704	269	S	_ADS(ph)HEGEVAEGK_	436.84
Q99879	56	S	_QVHPDTGIS(ph)SK_	416.86
Q99879	57	S	_QVHPDTGIS(ph)SK_	416.86
Q9BQ52	212	S	_S(ph)SDSESNENEPHLP_	762.65
Q9BQ52	213	S	_S(ph)SDSESNENEPHLP_	762.65
Q9BQK8	224	S	_S(ph)DSELEVR_	507.71
Q9BRD0	135	T	_HGT(ph)PDPSPR_	522.22
Q9BRD0	151	S	_HDPDPS(ph)PR_	367.82
Q9BRD0	159	T	_HDT(ph)PDPS(ph)PLR_	432.17
Q9BRD0	235	S	_HGS(ph)SDISS(ph)PR_	601.72
Q9BRD0	240	S	_HGS(ph)SDISS(ph)PR_	601.72
Q9BSJ6	16	S	_S(ph)LQHQEQLEDSK_	507.89
Q9BSQ5	384	S	_GIITDS(ph)FGR_	523.24
Q9BTC0	151	T	_DT(ph)S(ph)DS(ph)DSDGLT_	730.57
Q9BTC0	152	S	_DT(ph)S(ph)DS(ph)DSDGLT_	730.57
Q9BTC0	154	S	_DT(ph)S(ph)DS(ph)DSDGLT_	730.57
Q9BTC8	430	S	_LSPS(ph)PTTEDPR_	640.28
Q9BTD8	135	S	_SHLDS(ph)PEAR_	546.23
Q9BTU6	460	S	_S(ph)SSESYTQSFQSR_	525.21
Q9BTU6	461	S	_SS(ph)SESYTQS(ph)FQSR_	551.87
Q9BTU6	464	S	_SSSES(ph)YTQSFQSR_	525.21
Q9BTU6	468	S	_SS(ph)SESYTQS(ph)FQSR_	551.87

Q9BUH6	145	T	_LAAAEET(ph)AVSPR_	432.21
Q9BUL5	63	S	_EESDWPASGSS(ph)SPLR_	562.23
Q9BUU2	132	S	_AAS(ph)DSNPAGPLR_	618.27
Q9BV36	228	T	_DSPQSLT(ph)DESCSEK_	554.88
Q9BV36	339	S	_AS(ph)SESQIFELNK_	478.22
Q9BVG9	16	S	_DAGGPRPES(ph)PVPAGR_	514.91
Q9BVV8	113	T	_EDPT(ph)EMASLDS(ph)DEE_	795.57
Q9BW71	289	S	_LLGDS(ph)DS(ph)EEEQK_	503.85
Q9BW71	291	S	_LLGDS(ph)DS(ph)EEEQK_	503.85
Q9B XK5	370	S	_S(ph)SPATSLFVELDEEEVK_	653.97
Q9B XK5	371	S	_S(ph)SPATSLFVELDEEEVK_	653.97
Q9B XW6	465	S	_GS(ph)PPASILS(ph)EDEFY_	947.69
Q9B XW6	472	S	_ASILS(ph)EDEFYDALS(ph)D_	947.69
Q9B XW6	481	S	_ASILS(ph)EDEFYDALS(ph)D_	947.69
Q9B XW6	509	S	_SFEEEGEHLGS(ph)R_	486.2
Q9BYW2	1995	S	_S(ph)QEQPDK_	456.18
Q9BZ67	439	S	_TTS(ph)FFSR_	463.19
Q9BZ72	200	Y	_Y(ph)WGM(ox)QSK_	332.46
Q9BZE4	468	S	_YDS(ph)VS(ph)ESEDEEML_	840.65
Q9BZE4	470	S	_YDS(ph)VS(ph)ESEDEEM_	840.65
Q9BZX2	254	S	_QAS(ph)ESSSRPH_	389.16
Q9C086	127	S	_DEDS(ph)NLSPS(ph)PLR_	620.59
Q9C086	132	S	_DEDS(ph)NLSPS(ph)PLR_	620.59
Q9C0B1	4	T	_RT(ph)PTAEER_	347.16
Q9C0C2	221	S	_GWS(ph)QEGPVK_	356.49
Q9C0C2	601	S	_EPLAQES(ph)PLPLATR_	722.68
Q9C0C2	1385	S	_HNGSLS(ph)PGLEAR_	439.87
Q9C0C2	1552	S	_S(ph)PSQDFSFIEDTEILD_	844.36
Q9C0C2	1554	S	_S(ph)PSQDFSFIEDTEILD_	844.36
Q9C0H9	859	S	_RGS(ph)DELTVPR_	403.86
Q9C0J8	1277	S	_S(ph)SSLDGEHHDGYHR_	419.92
Q9C0J8	1278	S	_S(ph)SSLDGEHHDGYHR_	419.92
Q9H019	103	S	_NAS(ph)VPNLR_	317.49
Q9H019	237	S	_AS(ph)SFADM(ox)M(ox)GILK_	461.53
Q9H019	238	S	_AS(ph)SFADM(ox)M(ox)GILK_	461.53
Q9H0B6	581	S	_AS(ph)SLNFLNK_	358.51
Q9H0B6	582	S	_ASS(ph)LNFLNK_	537.25
Q9H0B6	609	S	_TLSS(ph)SSMDLSR_	632.27
Q9H0B6	610	S	_TLSSS(ph)SMDLSR_	632.27
Q9H0B6	611	S	_TLSSSS(ph)MDLSR_	632.27
Q9H0D6	678	S	_NS(ph)LGGDVLFVGK_	429.21
Q9H0K1	342	S	_S(ph)SFPVEQR_	515.22
Q9H1E3	181	S	_ATVTPS(ph)PVK_	327.17
Q9H2G2	565	S	_VDEDS(ph)AEDTQSNDBGK_	563.88
Q9H2H9	54	T	_SLT(ph)NSHLEK_	370.17
Q9H2H9	56	S	_S(ph)LTNS(ph)HLEK_	396.83
Q9H2I8	152	S	_ASSEDVAS(ph)SPER_	657.76
Q9H2P0	98	S	_NVHS(ph)EDFENR_	442.84
Q9H2P0	921	S	_VIPEDAS(ph)ESEEK_	706.8
Q9H2U1	1008	S	_FQDGYYS(ph)_	480.16
Q9H307	413	S	_VES(ph)VEPSENEASK_	495.54

Q9H330	15	S	_S(ph)SPGPAPR_	424.69
Q9H334	658	S	_LSLVTTANHS(ph)PDFDHDR_	825.11
Q9H3N1	270	S	_S(ph)LGPSLATDK_	534.75
Q9H3Z4	8	S	_S(ph)LST(ph)SGESLYHVL_	655.96
Q9H3Z4	11	T	_S(ph)LST(ph)SGESLYHVL_	655.96
Q9H3Z4	12	S	_S(ph)LST(ph)SGESLYHV_	655.96
Q9H4A3	2032	S	_SGSPHS(ph)PHQLSSK_	643.94
Q9H4I2	944	T	_SSEPFDT(ph)SSPQAGR_	647.95
Q9H4I2	945	S	_SEPFDT(ph)SSPQAGR_	647.95
Q9H4I2	946	S	_SSEPFDT(ph)SSPQAGR_	647.95
Q9H4L4	352	S	_LEDIFQQEFS(ph)TPSR_	592.93
Q9H4L7	239	S	_EES(ph)NES(ph)AESSSNW_	765.61
Q9H4L7	242	S	_EES(ph)NES(ph)AESSSNW_	765.61
Q9H5H4	90	S	_S(ph)PGLVPPS(ph)PEFAPR_	537.57
Q9H5H4	97	S	_S(ph)PGLVPPS(ph)PEFAPR_	537.57
Q9H6F5	42	T	_ESNPEET(ph)REPGSPPS_	659.56
Q9H6H4	202	S	_LQDS(ph)DTEDECWS(ph)D_	866.65
Q9H6S0	1089	S	_IPNDS(ph)S(ph)DSEMEDK_	633.22
Q9H6S0	1090	S	_IPNDS(ph)S(ph)DSEMEDK_	633.22
Q9H6S0	1201	S	_KS(ph)SADTEFSDECTTAER_	671.93
Q9H6S0	1202	S	_KS(ph)SADTEFSDECTTAER_	671.93
Q9H6U6	849	S	_HM(ox)S(ph)SM(ox)EHTEEG_	552.54
Q9H6U6	850	S	_HM(ox)S(ph)SM(ox)EHTEEG_	552.54
Q9H6X2	362	S	_PAEES(ph)EEEDDDGLPK_	753.65
Q9H6Z4	219	S	_S(ph)PSEAADEVCALEEK_	572.23
Q9H6Z4	221	S	_S(ph)PSEAADEVCALEEK_	572.23
Q9H788	316	S	_TLSS(ph)SAQEDIIR_	467.22
Q9H788	317	S	_TLSSS(ph)AQEDIIR_	700.33
Q9H7D0	1834	S	_NS(ph)TELAPPLPVR_	687.34
Q9H7D7	121	S	_RLS(ph)QSDEDVIR_	466.55
Q9H814	349	T	_SLNFQEDDDT(ph)SR_	502.86
Q9H8E8	416	S	_QEVES(ph)EEEKPDR_	518.88
Q9H8G2	89	S	_S(ph)TDSSSVSGSLQQETK_	574.25
Q9H8G2	90	T	_S(ph)TDSSSVSGSLQQETK_	574.25
Q9H8G2	93	S	_STDSS(ph)SVSGSLQQETK_	574.25
Q9H8G2	94	S	_STDSS(ph)SVSGSLQQETK_	574.25
Q9H8M2	103	T	_EHCDT(ph)EGEADDFDPGK_	634.56
Q9H8Y5	398	S	_EALGQNEES(ph)PK_	427.85
Q9HAV4	416	S	_TDS(ph)PSCEYSR_	641.23
Q9HAV4	418	S	_TDS(ph)PSCEYSR_	641.23
Q9HB19	184	S	_SQS(ph)YIPTSGCR_	668.27
Q9HB58	192	S	_S(ph)TSVTNDK_	466.19
Q9HB58	193	T	_S(ph)TSVTNDK_	466.19
Q9HB58	194	S	_S(ph)TSVTNDK_	466.19
Q9HCG8	61	S	_S(ph)YDSSMESR_	571.2
Q9HCK8	2069	S	_DDS(ph)DS(ph)ELDLSK_	623.89
Q9HCK8	2071	S	_DDS(ph)DS(ph)ELDLSK_	623.89
Q9HD20	899	S	_DS(ph)PTLSNSGIR_	613.77
Q9NPB6	345	S	_GDGSGFS(ph)L_	410.15
Q9NPG3	173	S	_QAS(ph)ES(ph)EDDFIK_	476.84
Q9NPG3	175	S	_QAS(ph)ES(ph)EDDFIK_	476.84

Q9NPH3	555	S	_S(ph)SSDEQGLSYSSLK_	523.22
Q9NPH3	556	S	_SS(ph)SDEQGLSYSSLK_	784.33
Q9NPH3	557	S	_S(ph)SSDEQGLSYSSLK_	523.22
Q9NPI6	525	S	_ASSPS(ph)PLTIGTPESQR_	569.94
Q9NQG5	164	S	DYPGS(ph)YSPQDPSAG_	980.69
Q9NQG5	166	S	_PGS(ph)YSPQDPSAGPLLT_	980.69
Q9NQP4	125	S	_FGS(ph)NINLEADES_	688.27
Q9NR30	13	S	_SDAGLES(ph)DTAMK_	652.76
Q9NR30	121	S	_NEEPS(ph)EEEIDAPK_	522.88
Q9NRX5	361	S	_S(ph)DGSLEDGDDVHR_	494.52
Q9NS56	585	S	_VYS(ph)PYNHR_	372.49
Q9NSD4	306	S	_RSS(ph)ELT(ph)K_	490.7
Q9NSD4	309	T	_RSS(ph)ELT(ph)K_	490.7
Q9NSK0	611	S	_GLSAS(ph)TMDLSSSS_	661.76
Q9NSY1	1029	S	_RDS(ph)QS(ph)S(ph)NE_	685.26
Q9NSY1	1031	S	_RDS(ph)QS(ph)S(ph)NE_	685.26
Q9NSY1	1032	S	_RDS(ph)QS(ph)S(ph)NE_	685.26
Q9NTI5	1165	S	_ASSSSNPS(ph)SPGR_	625.59
Q9NTI5	1259	S	_GHTAS(ph)ES(ph)DEQ_	673.25
Q9NTJ3	39	T	_T(ph)ESPATAAETASE_	657.94
Q9NU22	4754	S	_DDEKS(ph)DS(ph)EGGDLDK_	749.77
Q9NVF7	344	S	_NSSGSGQNEES(ph)PR_	744.3
Q9NWH9	553	S	_S(ph)PGHMVILDQTK_	469.22
Q9NWW8	29	S	_TRS(ph)NPEGAEDR_	437.85
Q9NWZ8	126	S	_TES(ph)DAEVECDLSNMEI_	1066.4
Q9NXD2	769	S	_IWLS(ph)TETLANED_	736.32
Q9NY27	226	S	_SSTSESEVSSVS(ph)PLK_	686.3
Q9NYA4	610	S	_S(ph)MDDLCSACDTSSPLTR_	650.27
Q9NYA4	627	T	_T(ph)SSDPNLNNHCQEV_	617.59
Q9NYA4	628	S	_T(ph)SSDPNLNNHCQEV_	617.59
Q9NYA4	629	S	_TSS(ph)DPNLNNHCQEV_	617.59
Q9NYB0	203	S	_YLLGDAPVS(ph)PSSQK_	514.58
Q9NYF3	122	S	_SLS(ph)VPVDLSR_	576.79
Q9NYF3	232	S	_RFS(ph)LS(ph)PSLGPQASR_	554.92
Q9NYF3	234	S	_FS(ph)LS(ph)PSLGPQASR_	502.88
Q9NYF8	206	S	_SS(ph)ATSGDIWPGLSA_	747.63
Q9NYF8	208	T	_AT(ph)SGDIWPGLSAY_	747.63
Q9NYF8	341	T	_RFT(ph)DEESR_	373.82
Q9NYF8	660	S	_IDISPS(ph)TLR_	541.27
Q9NYV4	383	S	_HSS(ph)IS(ph)PVR_	521.71
Q9NYV4	385	S	_HSS(ph)IS(ph)PVR_	521.71
Q9NYV4	423	S	_GS(ph)PVFLPR_	476.74
Q9NZ53	596	S	_RDPEDS(ph)DVFEEDTHL_	628.58
Q9NZJ5	715	S	_EHIEIIAPS(ph)PQR_	490.58
Q9NZM1	731	S	_SLS(ph)QIHEAAVR_	430.88
Q9NZN3	3	S	_(ac)FS(ph)WLGTD_	609.74
Q9NZT2	557	S	_GDEPAES(ph)PSETPGPR_	666.95
Q9P0B6	42	S	_ELS(ph)PEAR_	441.19
Q9P0K7	667	S	_S(ph)LEDVTAEYIHK_	495.56
Q9P0L0	164	S	_PHS(ph)VSLNDTETR_	479.21
Q9P0T7	137	S	_S(ph)MAAAAASLGGPR_	413.86

Q9P206	404	S	_GS(ph)PSGGSTAEASD_	591.59
Q9P206	447	S	_THS(ph)LHQR_	320.15
Q9P270	86	T	_RT(ph)SSEELR_	529.24
Q9P270	87	S	_RTS(ph)SEELR_	353.16
Q9P2B4	488	S	_DLS(ph)PTLIDNSAAK_	475.56
Q9P2F8	1461	S	_LMLPDS(ph)PLVEEGR_	768.36
Q9P2G1	737	S	_GVAPADS(ph)PEAPR_	623.78
Q9P2R6	599	T	_T(ph)SPINEDIR_	562.75
Q9P2T1	28	S	_SRS(ph)EVDLTR_	381.51
Q9UBB5	407	S	_TEEMDIEMDS(ph)GDEA_	954.82
Q9UBC2	593	S	_GS(ph)FGAMDDPFK_	417.83
Q9UBH6	668	S	_YNQSIG(ph)LR_	530.74
Q9UBI6	8	T	_TAST(ph)NNIAQAR_	613.78
Q9UGU0	574	S	_LNAS(ph)PAAR_	440.21
Q9UGU0	1792	S	_HRS(ph)EDCGGGPR_	436.5
Q9UH62	67	S	_WS(ph)DDDDDS(ph)NESK_	655.53
Q9UH99	84	S	_S(ph)SLEELHGDANW_	669.95
Q9UH99	85	S	_S(ph)SLEELHGDANW_	669.95
Q9UHB6	686	S	_ENGADS(ph)DEDDNSFLK_	805.08
Q9UHD8	30	S	_S(ph)FEVEEVETPNSTPPR_	633.28
Q9UHF7	826	T	_T(ph)LRDSPNVEAAHLAR_	433.21
Q9UHF7	830	S	_TLRDS(ph)PNVEAAHLAR_	433.21
Q9UHI6	187	S	_CHIAVGS(ph)PGR_	378.5
Q9UHI6	677	S	_SYLEGS(ph)S(ph)DNQLK_	500.86
Q9UHI6	678	S	_SYLEGS(ph)S(ph)DNQLK_	500.86
Q9UHI6	714	S	_YQES(ph)PGIQMK_	420.85
Q9UHR5	113	S	_NMS(ph)PDEIK_	507.2
Q9UIQ6	72	S	_HEMEEDEEDYES(ph)SAK_	755.28
Q9UJ41	310	S	_QTS(ph)IETDR_	515.22
Q9UJM3	461	S	_HLSYVVS(ph)P_	491.23
Q9UK58	65	S	_LS(ph)PTPSMQDGLDLP_	751.34
Q9UK61	699	S	_SVGGDS(ph)DTEDM(ox)R_	682.74
Q9UKA4	18	S	_S(ph)FSEDVFQSVK_	451.53
Q9UKJ3	1033	S	_S(ph)QS(ph)PHYFR_	394.48
Q9UKJ3	1035	S	_S(ph)QS(ph)PHYFR_	394.48
Q9UKS6	276	S	_DLHQGIEAAS(ph)DEEDLR_	626.6
Q9UKS6	383	S	_ALYDYAGQEADELS(ph)FR_	643.28
Q9UKS7	56	S	_LEMQS(ph)DEECDR_	746.26
Q9UKV3	364	T	_TT(ph)SPLEEEER_	635.76
Q9UKV3	561	S	_RAS(ph)HTLLPSHR_	339.42
Q9ULE0	927	S	_SDS(ph)DSSTLPR_	572.73
Q9ULJ3	434	S	_TEPS(ph)SPLSDPSDIIR_	847.39
Q9ULJ8	338	S	_SEIPS(ph)PQSQLEDA_	778.37
Q9ULL5	560	S	_PSFS(ph)S(ph)DEEDSVAK_	709.95
Q9ULL5	561	S	_PSFS(ph)S(ph)DEEDSVAK_	709.95
Q9ULM3	118	S	_FLES(ph)PSR_	458.2
Q9UP95	37	S	_AELDDS(ph)DGHGNHR_	501.53
Q9UPN6	617	S	_ETVQTTQS(ph)PTPVEK_	542.25
Q9UPQ9	879	S	_GWEEPS(ph)PQSISR_	670.61
Q9UPR0	1113	S	_S(ph)LEVIPEK_	497.75
Q9UPS8	590	T	_SGET(ph)DHQQFPR_	461.19

Q9UPU9	420	S	_AYSS(ph)PSTTPEAR_	673.78
Q9UQ35	508	S	_S(ph)RS(ph)PQWR_	359.47
Q9UQ35	510	S	_S(ph)RS(ph)PQWR_	359.47
Q9UQ35	875	S	_SCFES(ph)SPDPELK_	492.53
Q9UQ35	952	S	_S(ph)VS(ph)PCSNVESR_	691.25
Q9UQ35	954	S	_S(ph)VS(ph)PCSNVESR_	691.25
Q9UQ35	1083	S	_QSHSES(ph)PSLQSK_	465.54
Q9UQ35	1102	S	_S(ph)S(ph)SPVTELASR_	431.84
Q9UQ35	1177	T	_MALPPQEDAT(ph)ASPPR_	830.87
Q9UQ35	1179	S	_MALPPQEDATAS(ph)PPR_	554.25
Q9UQ35	1232	S	_ALPTS(ph)SQDEELMEV_	815.02
Q9UQ35	1270	S	_SNFES(ph)S(ph)PEVEER_	673.24
Q9UQ35	1271	S	_SNFES(ph)S(ph)PEVEER_	673.24
Q9UQ35	2125	T	_PSMS(ph)PTPLDR_	590.76
Q9UQ35	2272	S	_TPAAAAAMNLAS(ph)PR_	474.56
Q9UQ35	2690	S	_S(ph)LS(ph)YS(ph)PVER_	639.22
Q9UQR1	306	S	_LTSEEDSGFSTS(ph)PK_	597.93
Q9Y263	50	S	_LWAPDS(ph)PNR_	568.25
Q9Y266	145	T	_QDT(ph)EEDEEEDEKDK_	606.89
Q9Y2D5	154	S	_DSLQVPVSPS(ph)STTSSR_	695.32
Q9Y2G3	1154	S	_SWS(ph)ASDPFYTNDR_	813.32
Q9Y2K5	853	S	_S(ph)ASTDLGTADVVLGR_	514.58
Q9Y2K5	856	T	_S(ph)ASTDLGTADVVLGR_	514.58
Q9Y2K7	692	S	_M(ox)EES(ph)DEEAVQAK_	487.85
Q9Y2U5	163	S	_S(ph)SPPPGYIPDELHQ_	648.31
Q9Y2U5	164	S	_S(ph)SPPPGYIPDELHQ_	648.31
Q9Y2W1	534	S	_SS(ph)SPPPR_	404.17
Q9Y2W1	535	S	_SSS(ph)PPPR_	404.17
Q9Y2W1	698	S	_HGLAHDEMKS(ph)PR_	365.16
Q9Y2W1	941	T	_GEIEDDES(ph)GTENRE_	841.84
Q9Y2X7	361	S	_SLS(ph)SPTDNLELSLR_	537.93
Q9Y2X7	362	S	_SLSS(ph)PTDNLELSLR_	806.38
Q9Y2X7	498	S	_AEHTPMAPGGS(ph)THR_	510.22
Q9Y365	284	S	_AGGEGS(ph)DDDTSLT_	775.27
Q9Y385	267	T	_RLST(ph)SPDVIQGHQPR_	443.47
Q9Y385	268	S	_RLST(ph)SPDVIQGHQPR_	443.47
Q9Y388	185	S	_EVQAEQPS(ph)SSSPR_	494.55
Q9Y388	186	S	_EVQAEQPSS(ph)SSPR_	741.32
Q9Y3C5	14	S	_SDDIS(ph)LLHESQSDR_	656.28
Q9Y3E5	57	S	_TESEAS(ph)ILGDSGEYK_	707.29
Q9Y3L3	262	S	_QADHS(ph)PSMTATHFPR_	550.73
Q9Y3M2	18	S	_S(ph)ASLSNLHSLDR_	460.55
Q9Y3M8	589	S	_WNS(ph)FQLSHQPR_	493.89
Q9Y3P9	360	S	_NS(ph)DM(ox)HLLDLES_	567.9
Q9Y3P9	996	T	_EVLDEDT(ph)DEEKETLK_	624.94
Q9Y3R5	597	S	_GIGLSASS(ph)PELSEHLR_	717.66
Q9Y485	436	S	_S(ph)DEETDDGVDDLK_	759.28
Q9Y485	1970	S	_WDS(ph)DNDEENEDVP_	701.6
Q9Y487	695	S	_KDS(ph)EEEVSLGSDIE_	785.58
Q9Y4E1	539	S	_GLFS(ph)DEEDSEDLFS_	829.01
Q9Y4F1	427	S	_VSAGEPGSHPS(ph)PAPR_	509.23

Q9Y4I1	1650	T	_T(ph)SSIADEGTYTLDSILR_	641.3
Q9Y4I1	1651	S	_T(ph)SSIADEGTYTLDSILR_	641.3
Q9Y4K4	333	T	_T(ph)ASEINFDK_	368.83
Q9Y4L1	567	S	_ETLVEDS(ph)AEEESTLTK_	606.28
Q9Y4P8	413	S	_GTYPSS(ph)PTR_	382.17
Q9Y4U1	275	S	_VS(ph)PPASPGP_	444.7
Q9Y520	1248	S	_SES(ph)SDFEVVVK_	652.28
Q9Y520	1249	S	_SES(ph)SDFEVVVK_	652.28
Q9Y520	2105	S	_LPDLS(ph)PVENK_	397.86
Q9Y561	657	T	_SLFSVESDDTDT(ph)ENER_	641.92
Q9Y561	784	S	_EMLIPISDGSS(ph)DFDV_	1009.1
Q9Y5B6	557	S	_MADHLEGLS(ph)S(ph)DD_	1024.4
Q9Y5B6	558	S	_MADHLEGLS(ph)S(ph)DD_	1024.4
Q9Y5J1	204	T	_KT(ph)SSDDES(ph)EEDE_	568.46
Q9Y5J1	205	S	_KT(ph)SSDDES(ph)EEDE_	568.46
Q9Y5J1	206	S	_KT(ph)SSDDES(ph)EEDE_	568.46
Q9Y5J1	210	S	_KT(ph)SSDDES(ph)EEDE_	568.46
Q9Y5K6	582	S	_KNS(ph)LDELRL_	352.17
Q9Y608	18	S	_DRFS(ph)AEDEALSNIAR_	591.93
Q9Y6A5	175	S	_VS(ph)GSPEQAVEENLS_	749.67
Q9Y6A5	177	S	_VS(ph)GSPEQAVEENLS_	749.67
Q9Y6D5	276	S	_GS(ph)SLSGTDDGAQEVVK_	543.9
Q9Y6D9	428	S	_YSELTPAEYS(ph)PQLTR_	797.71
Q9Y6I9	244	S	_ETSAATLS(ph)PGASSR_	472.21
Q9Y6M7	1198	S	_IS(ph)FEDEPR_	536.72
Q9Y6N3	84	Y	_NVS(ph)ILIPMT(ph)Y(ph)K_	506.88
Q9Y6N7	1055	S	_TFNS(ph)PNLK_	500.73
Q9Y6R4	499	S	_LES(ph)EDDSLGLWGAPD_	864.69

Supplementary Materials and Methods for Quantitative phosphoproteomic analysis and bioinformatics analysis

Sample Preparation

Table I. Sample preparation materials and reagents

Name	Company
TMT Kit	Thermo
Sequencing Grade Modified Trypsin	Promega
EtCH (ethyl alcohol)	Fisher Chemical
ACN (acetonitrile)	Fisher Chemical
TFA (trifluoroacetic acid)	Sigma-Aldrich
FA (formic acid)	Fluka
IAA (iodoacetamide)	Sigma
DTT (dithiothreitol)	Sigma
2-D Quant kit	GE Healthcare

Protein extraction

Protein samples derived from hypoxic breast tumor cells treated with or without KU60019 were sonicated three times on ice using a high intensity ultrasonic processor (Scientz) in lysis buffer (8 M urea, 2 mM EDTA, 10 mM DTT and 1% Protease Inhibitor Cocktail III and V). The remaining debris was removed by centrifugation at 12,000 g at 4 °C for 10 min. Finally, the protein was precipitated with cold 15% TCA for 2 h at -20 °C. After centrifugation at 4 °C for 10 min, the supernatant was discarded. The remaining precipitate was washed with cold acetone for three times. The protein was re-dissolved in buffer (100 mM TEAB, pH 8.0) and protein concentration was determined with 2-D Quant kit according to the manufacturer's instruction.

Trypsin Digestion

For digestion, the protein solution was reduced with 10 mM DTT for 1 h at 37 °C and alkylated with 20 mM IAA for 45 min at room temperature in darkness. For trypsin digestion, the protein sample was diluted by adding 100 mM TEAB to urea

concentration less than 2M. Finally, trypsin was added at 1:50 trypsin-to-protein mass ratio for the first digestion overnight and 1:100 trypsin-to-protein mass ratio for a second 4 h-digestion.

TMT Labeling

After trypsin digestion, peptides were desalted by Strata X C18 SPE column (Phenomenex) and vacuum-dried. Peptides were reconstituted in 0.2 M TEAB and processed according to the manufacturer's protocol for 6-plex TMT kit, repeat labeling once and used in the following experimental. Briefly, one unit of TMT reagent (defined as the amount of reagent required to label 1 mg of protein) were thawed and reconstituted in 24 μ l ACN. The peptide mixtures were then incubated for 2 h at room temperature and pooled, desalted and dried by vacuum centrifugation.

Table II. Labeling information

Sample Groups	Labels	Repeat labels
DMSO	126	126
Ku60019	127	127

HPLC Fractionation

The samples were then fractionated into fractions by high pH reverse-phase HPLC using Agilent 300Extend C18 column (5 μ m particles, 4.6 mm ID, 250 mm length). Briefly, peptides were first separated with a gradient of 2% to 60% acetonitrile in 10 mM ammonium bicarbonate pH 10 over 80 min into 80 fractions, Then, the peptides were combined into 8 fractions and dried by vacuum centrifuging.

Affinity Enrichment

Peptide mixtures were first incubated with IMAC microspheres suspension with vibration. The IMAC microspheres with enriched phosphopeptides were collected by centrifugation, and the supernatant was removed. To remove nonspecifically adsorbed peptides, the IMAC microspheres were washed with 50% ACN/6% TFA and 30%

ACN/0.1% TFA, sequentially. To elute the enriched phosphopeptides from the IMAC microspheres, elution buffer containing 10% NH₄OH was added and the enriched phosphopeptides were eluted with vibration. The supernatant containing phosphopeptides was collected and lyophilized for LC-MS/MS analysis.

Quantitative Proteomic Analysis by LC-MS/MS

Table III Quantitative proteomic analysis by LC-MS/MS materials and reagents

Name	Company
H ₂ O	Thermo
ACN (acetonitrile)	Fisher Chemical
FA (formic acid)	Fluka

Mass Spectrometer:

Thermo Scientific™ Q Exactive™ Plus

LC-MS/MS Analysis

Peptides were dissolved in 0.1% FA, directly loaded onto a reversed-phase pre-column (Acclaim PepMap 100, Thermo Scientific). Peptide separation was performed using a reversed-phase analytical column (Acclaim PepMap RSLC, Thermo Scientific) with a linear gradient of 2–24% solvent B (0.1% FA in 98% ACN) for 50 min, 24–36% solvent B for 12 min and 36–80% solvent B for 4 min at a constant flow rate of 300 nl/min on an EASY-nLC 1000 UPLC system. The resulting peptides were analyzed by Q Exactive™ Plus hybrid quadrupole-Orbitrap mass spectrometer (ThermoFisher Scientific).

The peptides were subjected to NSI source followed by tandem mass spectrometry (MS/MS) in Q Exactive™ Plus (Thermo) coupled online to the UPLC. Intact peptides were detected in the Orbitrap at a resolution of 70,000. Peptides were selected for MS/MS using NCE setting as 30; ion fragments were detected in the Orbitrap at a resolution of 17,500. A data-dependent procedure that alternated

between one MS scan followed by 20 MS/MS scans was applied for the top 20 precursor ions above a threshold ion count of $5E3$ in the MS survey scan with 15.0s dynamic exclusion. The electrospray voltage applied was 2.0 kV. Automatic gain control (AGC) was used to prevent overfilling of the ion trap; $5E4$ ions were accumulated for generation of MS/MS spectra. For MS scans, the m/z scan range was 350 to 1800. Fixed first mass was set as 100 m/z .

Database Search

The resulting MS/MS data was processed using MaxQuant with integrated Andromeda search engine (v.1.4.1.2). Tandem mass spectra were searched against *Swissprot Human* database (20,203 sequences) concatenated with reverse decoy database. Trypsin/P was specified as cleavage enzyme allowing up to 2 missing cleavages, 5 modifications per peptide and 5 charges. Mass error was set to 10 ppm for precursor ions and 0.02 Da for fragment ions. Carbamidomethylation on Cys was specified as fixed modification and oxidation on Met, phosphorylation on Ser, Thr, Tyr and acetylation on protein N-terminal were specified as variable modifications. False discovery rate (FDR) thresholds for protein, peptide and modification site were specified at 1%. Minimum peptide length was set at 7. All the other parameters in MaxQuant were set to default values. The site localization probability was set as > 0.5 .

QC Validation of MS Data

The MS data validation was shown in Figure 10. Firstly, we checked the mass error of all the identified peptides. The distribution of mass error is near zero and most of them are less than 0.02 Da which means the mass accuracy of the MS data fit the requirement (as shown in following Figure I-A). Secondly, the length of most peptides distributed between 8 and 20, which agree with the property of tryptic peptides (Figure I-B), that means sample preparation reach the standard.

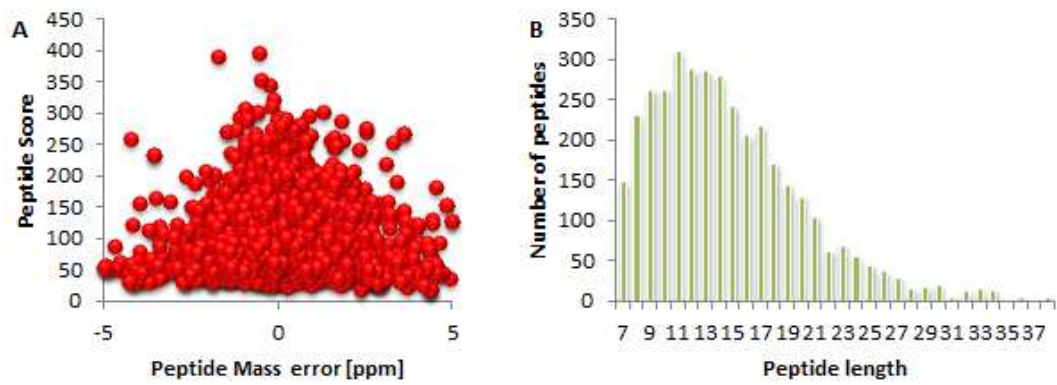


Figure I. QC validation of MS data

(A) Mass error distribution of all identified peptides, (B) Peptide length distribution.

Bioinformatics Methods

Gene ontology (GO) categories and KEGG pathway analysis were performed through the Database for Annotation, Visualization and Integrated Discovery (DAVID) v6.7.