Supplemental Table I. Detailed Peptide Report of the Identified Proteins Listed in Table I

Protein Name	Acc #	Num Unique	% Cov	Best Disc Score	Best Expect Val	m/z	z	ppm	Peptide	Score	Expect	Protein MW
Rpn1	Q13200	139	77.8	9.35	5.90E-17	997.465	3	25	FSHDADPEVSYNSIFAMGmVGSGTNNAR	63.9	5.90E-17	100200.6
	Q13200	139	77.8	9.35	5.90E-17	758.9036	2	6.5	Carbamyl-SGALLACGIVNSGVR	54.9	1.00E-16	100200.6
	Q13200	139	77.8	9.35	5.90E-17	693.705	3	1.1	TITGFQTHTTPVLLAHGER	68.5	7.00E-17	100200.6
	Q13200	139	77.8	9.35	5.90E-17	860.9583	2	15	SHYVLYGLVAAmQPR	65.2	1.00E-16	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1103.2587	3	34	EAPADMGAHQGVAVLGIALIAMGEEIGAEmALR	72.2	4.40E-16	100200.6
	Q13200	139	77.8	9.35	5.90E-17	992.1151	3	7.2	FSHDADPEVSYNSIFAMGMVGSGTNNAR	64	9.90E-16	100200.6
	Q13200	139	77.8	9.35	5.90E-17	766.7011	3	5.5	APVQPQQsPAAAPGGTDEKPSGK	66	1.10E-15	100200.6
	Q13200	139	77.8	9.35	5.90E-17	782.4526	2	-15	Carbamyl-AVPLALALISVSNPR	57.7	2.40E-15	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1002.7521	3	-19	FSHDADPEVSYNSIFAmGmVGSGTNNAR	65	1.10E-14	100200.6
	Q13200	139	77.8	9.35	5.90E-17	997.424	3	-16	FSHDADPEVSYNSIFAmGMVGSGTNNAR	58.4	2.30E-14	100200.6
	Q13200	139	77.8	9.35	5.90E-17	945.1531	3	37	DKEQELSEEDKQLQDELEMLVER	62.5	4.90E-14	100200.6
	Q13200	139	77.8	9.35	5.90E-17	992.4784	3	43	FSHDADPEVSYN(Deamid)SIFAMGMVGSGTNNAR	56.8	6.00E-14	100200.6
	Q13200	139	77.8	9.35	5.90E-17	826.4204	2	21	LKEIYENmAPGENK	60.5	1.10E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	904.4678	2	15	LKEIYENmAPGENKR	56.5	1.30E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1103.2183	3	-2.4	EAPADmGAHQGVAVLGIALIAMGEEIGAEMALR	57.8	1.40E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	847.7748	3	44	DKAPVQPQQsPAAAPGGTDEKPSGK	70.8	1.90E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1060.1685	3	-5	Acetyl-mEEGGRDKAPVQPQQSPAAAPGGTDEKPSGK	43.3	2.60E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1067.4783	2	-20	mNLASSFVN(Deamid)GFVNAAFGQDK	50.1	2.60E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	740.0575	3	22	APVQPQQSPAAAPGGTDEKPSGK	61.5	3.60E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	864.0966	3	22	EQELSEEDKQLQDELEMLVER	61.5	4.10E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1069.5477	3	-26	LGSIFGLGLAYAGSNREDVLTLLLPVMGDSK	58	4.20E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	821.1009	3	23	DKAPVQPQQSPAAAPGGTDEKPSGK	64.8	4.20E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	862.5034	3	14	AELATEEFLPVTPILEGFVILRK	49.8	5.60E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1059.0162	2	6.2	MNLASSFVNGFVNAAFGQDK	49	5.80E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1057.2005	3	-4.8	NKDHGMLSAAASLGMILLWDVDGGLTQIDK	59.4	6.40E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1097.9896	3	91	EAPADMGAHQGVAVLGIALIAMGEEIGAEMALR	53.3	6.60E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	914.4361	2	-18	FAADIISVLAmTMSGER	52.9	6.90E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1059.4764	2	-24	MNLASSFVN(Deamid)GFVNAAFGQDK	51.6	7.40E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1069.9399	3	34	LGSIFGLGLAYAGSN(Deamid)REDVLTLLLPVMGDSK	52.5	9.20E-13	100200.6
	Q13200	139	77.8	9.35	5.90E-17	819.8457	3	64	AELATEEFLPVTPILEGFVILR	54	1.20E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	740.4051	2	21	SSTTSmTSVPKPLK	56	1.50E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	852.9638	2	18	SHYVLYGLVAAMQPR	56.2	1.70E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	976.5615	3	70	DHGMLSAAASLGMILLWDVDGGLTQIDK	61.3	1.80E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	719.3139	2	-7.6	Carbamyl-EIYENMAPGENK	45	2.10E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	797.1918	4	47	NKDHGMLSAAASLGmILLWDVDGGLTQIDK	47.9	2.40E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1074.906	3	-1.3	LGSIFGLGLAYAGSNREDVLTLLLPVmGDSK	45.4	2.50E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1067.004	2	-2.9	mNLASSFVNGFVNAAFGQDK	50	2.80E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	624.2492	2	-11	FGGsGSQVDSAR	59.2	3.00E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	791.4099	4	33	Acetyl-MEEGGRDKAPVQPQQSPAAAPGGTDEKPSGK	55.2	3.80E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	811.4015	4	33	Acetyl-MEEGGRDKAPVQPQQsPAAAPGGTDEKPSGK	48	4.40E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	484.9502	3	13	VGQAVDVVGQAGKPK	64.8	5.80E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	653.9609	3	-45	LVGSQEELASWGHEYVR	68.6	6.70E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	862.0799	3	8.2	DK(CarmK)APVQPQQsPAAAPGGTDEKPSGK	49	8.40E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1103.1716	3	-45	EAPADMGAHQGVAVLGIALIAmGEEIGAEMALR	48.7	9.80E-12	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1001.0442	2	-1.3	MLVTFDEELRPLPVSVR	52.6	1.00E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1007.5232	2	-23	GEAIEAILAALEVVSEPFR	54.4	1.00E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	759.8676	2	-12	QLQDELEmLVER	45.8	1.30E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	840.1726	3	2.6	AVPLALALISVSNPRLNILDTLSK	44	1.60E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	584.2696	2	-5.9	FGGSGSQVDSAR	64.8	1.60E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	992.4303	3	-5.8	FSHDADPEVSYNSIFAMGMVGSGTN(Deamid)NAR	47.9	1.90E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	818.398	2	-9.7	LKEIYENMAPGENK	51.3	3.30E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	981.8089	3	-16	DHGMLSAAASLGmILLWDVDGGLTQIDK	65.9	4.30E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	783.8994	2	45	EIYENmAPGENKR	56.9	4.40E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	617.6195	3	-34	LK(CarmK)EIYENmAPGENKR	43.5	6.20E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	551.5798	3	-36	LKEIYEN(Deamid)mAPGENK	39.1	7.10E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	673.026	3	-7.5	mLVTFDEELRPLPVSVR	43.4	8.50E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	987.1924	3	37	DHGmLSAAASLGmILLWDVDGGLTQIDK	43.5	8.90E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	561.2595	2	-26	DPNNLFmVR	36.3	8.90E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	669.4407	4	54	RAVPLALALISVSNPRLNILDTLSK	38.5	9.40E-11	100200.6
	Q13200	139	77.8	9.35	5.90E-17	798.4064	2	-30	LGSIFGLGLAYAGSNR	49.9	1.10E-10	100200.6
	Q13200	139	77.8	9.35	5.90E-17	1198.8725	3	10	EIVPyNMAHNAEHEACDLLMEIEQVDMLEK	45.4	1.20E-10	100200.6
	Q13200	139	77.8	9.35	5.90E-17	559.6796	3	4.2	RAVPLALALISVSNPR	53.9	1.30E-10	100200.6

Q13200	139	77.8	9.35	5.90E-17	823.4239	2	-19	EDVLTLLLPVmGDSK	45.3	1.80E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	849.4526	3	33	APVQPQQSPAAAPGGTDEK(CarmK)PSGKER	43.9	3.20E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	835.4175	3	0.14	DK(CarmK)APVQPQQSPAAAPGGTDEKPSGK	40.8	3.90E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	597.9867	3	22	LKEIYENMAPGENKR	52.9	4.30E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	732.4071	2	20	SSTTSMTSVPKPLK	49.8	5.00E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	801.1871	4	42	NKDHGmLSAAASLGmILLWDVDGGLTQIDK	42.9	5.10E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	775.8701	2	3.9	EIYENMAPGENKR	57.5	8.10E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	706.656	3	-20	MN(Deamid)LASSFVNGFVNAAFGQDK	42.1	8.80E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	1196.8855	3	-15	SSMEVAGVTALACGMIAVGSCN(Deamid)GDVTSTILQTIMEK	37.5	9.00E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	815.4054	4	39	Acetyl-mEEGGRDKAPVQPQQsPAAAPGGTDEKPSGK	35.6	9.20E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	713.0832	4	-8.7	DKEQELSEEDKQLQDELEmLVER	40.8	9.50E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	751.3625	2	-1.7	qLQDELEmLVER	35.4	9.70E-10	100200.6
Q13200	139	77.8	9.35	5.90E-17	743.3616	2	-6.4	qLQDELEMLVER	42.2	1.10E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	906.4574	2	2.5	FAADIISVLAMTMSGER	56.3	1.10E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	574.7744	2	-8.8	Carbamyl-DPNNLFMVR	38.5	1.60E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	1059.9825	2	-11	MNLASSFVN(Deamid)GFVN(Deamid)AAFGQDK	39.4	1.70E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	840.4228	3	35	Carbamyl-NECDPALALLSDYVLHNSNTMR	40.1	1.70E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	612.6391	3	48	DAGDKDKEQELSEEDK	54.8	3.00E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	656.8164	2	-9.4	SETELKDTYAR	43.1	3.10E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	656.7041	3	48	RFAADIISVLAMTMSGER	58	4.60E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	815.4188	2	-29	EDVLTLLLPVMGDSK	46.6	5.10E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	853.9843	4	4.8	WLPLGLGLNHLGKGEAIEAILAALEVVSEPFR	38.3	5.20E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	662.0319	3	41	RFAADIISVLAmTMSGER	45.5	5.90E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	730.9328	2	14	Carbamyl-WLPLGLGLNHLGK	45.9	6.00E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	541.2461	2	4.9	Carbamyl-DIDENAYAK	35.5	7.30E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	748.4055	2	-13	VGQAVDVVGQAGK(CarmK)PK	36.4	7.30E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	432.5993	3	-16	VQREPLLTLVK	42.6	7.70E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	705.8096	2	-6.2	EIYENmAPGENK	37	9.60E-09	100200.6
Q13200	139	77.8	9.35	5.90E-17	751.8837	2	5.5	QLQDELEMLVER	39.7	1.10E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	922.4311	2	-21	FAADIISVLAmTmSGER	39.7	1.10E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	678.3324	3	19	THLEN(Deamid)NRFGGSGSQVDSAR	35.8	1.80E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	418.2119	2	-17	YGEPTLR	34.4	2.40E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	553.7565	2	-22	DPN(Deamid)NLFMVR	32.9	2.90E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	374.8872	3	37	FSRFPEALR	34.9	3.00E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	640.7672	2	-60	YLYSSEDYIK	31.1	3.40E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	476.706	2	-35	qMAFmLGR	31.1	4.60E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	453.7591	2	87	K(CarmK)NPNYDL	18.9	5.00E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	667.3569	3	31	RFAADIISVLAmTmSGER	35.8	5.30E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	489.2721	3	23	LLTDDGNKWLYK	38.2	6.10E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	519.3004	2	-16	LAQGLTHLGK	52.1	6.60E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	473.5887	3	-45	WLPLGLGLN(Deamid)HLGK	32.4	6.90E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	573.6193	3	-44	DTSLYRPALEELRR	42.6	7.30E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	571.9494	3	-13	VPDDIYKTHLENNR	30.1	7.60E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	847.7594	3	26	DKAPVQPQQSPAAAPGGtDEKPSGK	38.3	7.80E-08	100200.6
Q13200	139	77.8	9.35	5.90E-17	425.2454	2	57	VPDDIYK	21.4	1.20E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	781.9288	2	21	DTSLYRPALEELR	49.3	1.20E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	1059.9703	2	-22	MN(Deamid)LASSFVNGFVN(Deamid)AAFGQDK	29.6	1.40E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	761.8807	2	-16	SSTTSmTSVPKPLK(CarmK)	26.6	1.80E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	754.3742	3	-3.3	APVQPQQSPAAAPGGTDEK(CarmK)PSGK	34.1	1.80E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	617.6218	3	-30	LKEIYENmAPGENK(CarmK)R	32.1	1.80E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	748.4004	2	-20	VGQAVDVVGQAGKPK(CarmK)	34.6	3.20E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	784.3522	2	-5.5	EIYENmAPGEN(Deamid)KR	24.6	3.30E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	477.2071	2	-66	QMAFMLGR	31.4	4.30E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	1067.4905	2	-8.1	mN(Deamid)LASSFVNGFVNAAFGQDK	30.8	5.20E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	626.9712	3	42	DAGDK(CarmK)DKEQELSEEDK	32.9	5.60E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	508.8173	2	28	LNILDTLSK	37.3	9.80E-07	100200.6
Q13200	139	77.8	9.35	5.90E-17	471.2282	2	-37	qLAQYHAK	25.3	1.00E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	766.7225	3	33	APVQPQQSPAAAPGGtDEKPSGK	30.1	1.10E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	468.7058	2	-41	qMAFMLGR	25.6	1.40E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	612.3192	3	17	LK(CarmK)EIYENMAPGENKR	27.1	1.40E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	973.5163	4	41	SGALLACGIVNSGVRNECDPALALLSDYVLHNSN(Deamid)TmR	30.7	1.60E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	476.7019	2	-44	qmAFMLGR	29.1	1.80E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	753.8779	2	-23	SSTTSMTSVPKPLK(CarmK)	24.9	1.80E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	631.7718	2	-14	EWQELDDAEK	39.4	1.80E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	422.2153	2	-71	TFGHLLR	33.1	2.10E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	1075.2553	3	18	LGSIFGLGLAYAGSN(Deamid)REDVLTLLLPVmGDSK	27.1	2.70E-06	100200.6
Q13200	139	77.8	9.35	5.90E-17	509.2983	2	26	FLRPHYGK	35.3	3.60E-06	100200.6

	Q13200	139	77.8	9.35	5.90E-17	485.2243	2	-24	QMAFmLGR	22.1	4.40E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	520.2302	2	-4.6	DIDEN(Deamid)AYAK	21.5	4.70E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	696.7003	3	20	QLAQYHAK(CarmK)DPNNLFMVR	26.4	4.80E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	495.7331	2	-23	ELDImEPK	24	5.40E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	730.9277	2	7.4	WLPLGLGLNHLGK(CarmK)	24.6	5.50E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	690.0394	3	51	HLAGEVAKEWQELDDAEK	22.8	6.30E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	412.7573	2	54	HLAGEVAK	27.8	6.80E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	847.7566	3	23	DKAPVQPQQSPAAAPGGTDEKPsGK	29.9	7.30E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	586.3055	3	23	VPDDIYK(CarmK)THLENNR	20.6	8.20E-06	100200.6
	Q13200	139	77.8	9.35	5.90E-17	517.9279	3	38	EIYENMAPGEN(Deamid)KR	25.9	9.40E-06	100200.6
Rpn2	Q99460	101	71.1	8.48	1.20E-19	715.3889	3	17	MITSAAGIISLLDEDEPQLK	47.3	1.80E-16	105837.2
	Q99460	101	71.1	8.48	1.20E-19	566.5486	4	13	SNCKPSTFAYPAPLEVPKEK	53.8	3.20E-16	105837.2
	Q99460	101	71.1	8.48	1.20E-19	847.3999	4	-19	LNAVVNDFWAEISESVDKIEVLYEDEGFR	58.4	1.20E-19	105837.2
	Q99460	101	71.1	8.48	1.20E-19	742.8581	2	-37	HGGSLGLGLAAmGTAR	66.3	2.90E-19	105837.2
	Q99460	101	71.1	8.48	1.20E-19	869.7689	3	-16	TNLYQDDAVTGEAAGLALGLVMLGSK	64.2	1.80E-16	105837.2
	Q99460	101	71.1	8.48	1.20E-19	631.6091	3	2.5	TSSAFVGKtPEAsPEPK	50.8	3.20E-16	105837.2
	Q99460	101	71.1	8.48	1.20E-19	933.9725	2	-7.5	TILESNDVPGmLAYSLK	53.9	1.00E-15	105837.2
	Q99460	101	71.1	8.48	1.20E-19	578.314	3	30	TSSAFVGKTPEASPEPK	55.9	2.00E-15	105837.2
	Q99460	101	71.1	8.48	1.20E-19	875.105	3	-11	TNLYQDDAVTGEAAGLALGLVmLGSK	68.8	2.80E-15	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1080.544	2	-14	mITSAAGIISLLDEDEPQLK	59	2.60E-14	105837.2
	Q99460	101	71.1	8.48	1.20E-19	415.5468	3	-59	FTATASLGVIHK	53.1	3.30E-14	105837.2
	Q99460	101	71.1	8.48	1.20E-19	726.6418	3	-30	NAQAIEDmVGYAQETQHEK	61.9	3.60E-14	105837.2
	Q99460	101	71.1	8.48	1.20E-19	734.8621	2	-35	HGGSLGLGLAAMGTAR	57.1	1.90E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	721.6556	3	-6.2	N(Deamid)AQAIEDMVGYAQETQHEK	57.4	2.00E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1119.0333	2	-4.6	TVGtPIASVPGSTNTGTVPGSEK	45.8	2.40E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	925.9635	2	-20	TILESNDVPGMLAYSLK	53.1	3.60E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1375.3688	3	27	VFYHLGAFEESLN(Deamid)YALGAGDLFNVNDNSEYVETIIAK	51.5	4.60E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	813.4809	3	46	FGAILAQGILDAGGHNVTISLQSR	61.2	5.10E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	776.4206	2	14	LLHVAVSDVNDDVR	55.3	5.20E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	934.4792	2	8.2	TILESN(Deamid)DVPGmLAYSLK	46.3	6.60E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	971.1942	3	19	Acetyl-MITSAAGIISLLDEDEPQLKEFALHK	44.5	8.90E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1018.4776	2	-24	LNAVVNDFWAEISESVDK	43.4	9.70E-13	105837.2
	Q99460	101	71.1	8.48	1.20E-19	721.3141	3	-25	NAQAIEDMVGYAQETQHEK	59.1	2.10E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	894.0709	2	29	YQPFKPLSIGGIIILK	51.8	2.30E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	722.3262	2	-31	Carbamyl-VINDKHDDVmAK	44	2.90E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	467.0232	4	39	RLLHVAVSDVN(Deamid)DDVRR	45.4	2.90E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	906.9181	2	-7	TSSAFVGKtPEASPEPK	51	6.00E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1093.6223	2	51	Acetyl-MITSAAGIISLLDEDEPQLK	60	7.20E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	668.354	2	-33	GLAVGIALVmYGR	47.6	8.20E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	527.7851	2	-25	qAIGIALETR	41.3	9.30E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1079.0422	2	-12	TVGTPIASVPGSTNTGTVPGSEK	45.8	9.60E-12	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1103.8592	3	14	TVGTPIASVPGSTN(Deamid)TGTVPGSEKDSDSMETEEK	44.1	1.50E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	968.5078	4	21	DTSPGSAYQEGGGLYALGLIHANHGGDIIDYLLNQLK	41.9	2.40E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	948.4959	2	-6.7	KKEPEPNFQLLDNPAR	60.8	3.00E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1052.4949	2	-26	EAINLLEPmTNDPVNYVR	53.5	4.00E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1079.5712	2	22	TVGTPIASVPGSTN(Deamid)TGTVPGSEK	40	4.10E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1018.5075	2	13	DTSEDIEELVEPVAAHGPK	57.1	4.60E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	466.7774	4	39	RLLHVAVSDVNDDVRR	45.2	5.60E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1291.3649	3	43	DTSPGSAYQEGGGLYALGLIHAN(Deamid)HGGDIIDYLLNQLK	39.3	6.70E-11	105837.2
	Q99460	101	71.1	8.48	1.20E-19	545.291	2	-70	VSTAVLSITAK	43.8	1.40E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	660.3633	2	-24	GLAVGIALVMYGR	44.4	1.40E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	692.8715	2	34	VINDKHDDVMAK	56.4	1.60E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	722.3338	2	-20	VINDK(CarmK)HDDVmAK	27.4	1.80E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	926.4745	2	0.53	TILESN(Deamid)DVPGMLAYSLK	39.2	2.20E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	720.7568	3	78	Carbamyl-CLDDHK(CarmK)YKQAIGIALETR	37.9	2.50E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	854.4469	2	-16	LLHVAVSDVNDDVRR	51.9	2.90E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	493.6285	3	16	RAAVESLGFILFR	42.9	3.10E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1103.498	3	-16	TVGTPIASVPGSTNTGTVPGSEKDSDSMETEEK	39.5	4.20E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1130.1545	3	-15	TVGTPIASVPGSTNTGTVPGsEKDSDSMETEEK	35.2	4.80E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	596.7922	2	-9	N(Deamid)NNTDLmILK	37.5	5.00E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	711.0165	3	-6.6	Carbamyl-EAINLLEPMTNDPVNYVR	52.8	5.20E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	820.3872	2	-25	EPEPNFQLLDNPAR	49	6.40E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	565.982	3	8.1	FTATASLGVIHKGHEK	33.8	7.10E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1242.9653	3	9.3	IYMNLEKPDFINVCQCLIFLDDPQAVSDILEK	42.3	8.80E-10	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1130.5161	3	15	TVGtPIASVPGSTN(Deamid)TGTVPGSEKDSDSMETEEK	33	1.20E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	592.6233	3	-15	TSSAFVGK(CarmK)TPEASPEPK	37.2	1.60E-09	105837.2

	Q99460	101	71.1	8.48	1.20E-19	915.5284	2	-21	YQPFK(CarmK)PLSIGGIIILK	31.4	1.70E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	726.9801	3	-16	N(Deamid)AQAIEDmVGYAQETQHEK	37	2.10E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	570.0083	3	57	RLLHVAVSDVNDDVR	39	2.70E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	467.9142	3	43	VIN(Deamid)DKHDDVmAK	36.9	3.00E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	488.9241	3	47	MEVDEAEKKEEK	49.6	3.30E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	683.3763	2	-5.3	Carbamyl-AAVESLGFILFR	42.5	4.20E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	697.3436	2	-43	EALQLmATYLPK	41.1	4.70E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1088.5198	4	26	DTSEDIEELVEPVAAHGPKIEEEEQEPEPPEPFEYIDD	34	5.50E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	710.832	4	5.3	NSVCHTATVIANSFMHCGTTSDQFLR	37.1	5.60E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	661.7095	3	2.3	ILSGEMAIELHLQFLIR	44.6	7.00E-09	105837.2
	Q99460	101	71.1	8.48	1.20E-19	596.7812	2	-27	NNN(Deamid)TDLmILK	32.9	1.20E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	740.8486	2	4.3	mEVDEAEKKEEK	39.6	1.30E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	884.4369	2	-20	KEPEPNFQLLDNPAR	42.7	1.30E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	689.396	2	29	EALQLMATYLPK	37.9	2.00E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	476.5794	3	20	VINDK(CarmK)HDDVMAK	38.3	3.30E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	543.0088	4	-22	QCVENADLPEGEKKPIDQR	38	3.40E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	854.9602	2	9.1	LLHVAVSDVN(Deamid)DDVRR	33.8	4.00E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1042.4894	4	12	TVGtPIASVPGSTN(Deamid)TGTVPGSEKDSDSMETEEKTSSAFVGK	29.9	4.80E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	792.3966	2	-3.3	TPEASPEPK(CarmK)DQTLK	43.5	6.00E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1108.8652	3	16	TVGTPIASVPGSTNTGTVPGSEKDSDSmETEEK	35.3	6.70E-08	105837.2
	Q99460	101	71.1	8.48	1.20E-19	459.2536	2	-10	qFAALVASK	40.3	1.20E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	588.2814	2	-45	NNNTDLMILK	32.6	1.30E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	968.782	4	50	DTSPGSAYQEGGGLYALGLIHANHGGDIIDYLLN(Deamid)QLK	28	1.30E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	685.3117	2	-34	IEVLYEDEGFR	36	1.30E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	667	3	-60	ILSGEmAIELHLQFLIR	27.1	2.10E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	588.7873	2	-22	N(Deamid)NNTDLMILK	32.5	2.10E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	478.2445	2	8.9	TPEASPEPK	32.5	2.30E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	536.2697	2	-78	QAIGIALETR	44.7	3.30E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	531.9371	3	41	EEEKMEVDEAEKK	33.6	6.80E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1045.0127	2	-4.3	EAIN(Deamid)LLEPMTNDPVNYVR	35.6	7.40E-07	105837.2
	Q99460	101	71.1	8.48	1.20E-19	722.1198	4	-14	mITSAAGIISLLDEDEPQLKEFALHK	27.3	1.00E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	393.7605	2	76	VMPAQLK	19.9	1.20E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	1167.4482	2	-40	IEEEEQEPEPPEPFEYIDD	27.7	1.30E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	531.9371	3	41	KEEEKMEVDEAEK	33.4	1.50E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	467.7764	2	11	QFAALVASK	28.9	2.10E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	632.9938	3	-7.7	KKEPEPN(Deamid)FQLLDNPAR	25.9	2.90E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	497.2853	2	38	QDVYDLLK	26.9	2.90E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	453.7149	2	-90	RLDVFEK	34.3	3.30E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	720.7493	3	68	Carbamyl-CLDDHKYK(CarmK)QAIGIALETR	34.8	3.30E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	398.7166	2	7.5	TSSAFVGK	20.9	4.50E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	445.217	2	-12	N(Deamid)ASNDIVR	30.9	4.90E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	401.7103	2	-45	VmPAQLK	20.6	7.00E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	533.2434	2	-25	VLTmPETCR	20	7.80E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	386.725	2	-18	LEGIVNK	29.7	7.90E-06	105837.2
	Q99460	101	71.1	8.48	1.20E-19	444.7298	2	-1.2	NASNDIVR	26.9	9.30E-06	105837.2
Rpn3	O43242	74	79.2	8.42	3.00E-16	967.6927	4	-13	AKPPPGGGEQEPPPPPAPQDVEMKEEAATGGGSTGEADGK	55.6	3.00E-16	60978.1
	O43242	74	79.2	8.42	3.00E-16	825.4649	2	16	HDADGQATLLNLLLR	63.1	8.10E-14	60978.1
	O43242	74	79.2	8.42	3.00E-16	971.7258	4	23	AKPPPGGGEQEPPPPPAPQDVEmKEEAATGGGSTGEADGK	54.7	1.60E-13	60978.1
	O43242	74	79.2	8.42	3.00E-16	718.7975	2	-18	EEAATGGGSTGEADGK	49.6	2.20E-13	60978.1
	O43242	74	79.2	8.42	3.00E-16	899.1053	3	-2.2	DFLLPFLEEPmDTEADLQFRPR	55.3	4.50E-13	60978.1
	O43242	74	79.2	8.42	3.00E-16	884.9606	2	-11	ELDTVTLEDIKEHVK	57.9	3.00E-12	60978.1
	O43242	74	79.2	8.42	3.00E-16	893.7778	3	2.4	DFLLPFLEEPMDTEADLQFRPR	53.4	3.40E-12	60978.1
	O43242	74	79.2	8.42	3.00E-16	745.3853	3	17	EMIDIYSTREPQLAFHQR	52.5	4.70E-12	60978.1
	O43242	74	79.2	8.42	3.00E-16	817.4112	3	6.9	AKPPPGGGEQEPPPPPAPQDVEMK	53.8	6.70E-12	60978.1
	O43242	74	79.2	8.42	3.00E-16	822.8838	2	3.8	N(Deamid)YLHYSLYDQAEK	49.3	1.40E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	837.8834	2	-59	LQLDSPEDAEFIVAK	51.2	1.50E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	831.3335	2	-64	SVFPEQANNNEWAR	64.8	3.50E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	819.4459	4	34	HDADGQATLLNLLLRNYLHYSLYDQAEK	47.6	3.70E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	748.4209	2	13	VYEFLDKLDVVR	64.2	8.20E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	822.3815	2	-8.7	NYLHYSLYDQAEK	60.4	9.80E-11	60978.1
	O43242	74	79.2	8.42	3.00E-16	846.5401	2	25	LLIVVELLLGEIPDR	42.7	1.10E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	556.7944	2	33	TAAAAAEHSQR	54.1	1.30E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	746.1116	3	-10	LLIVVELLLGEIPDRLQFR	49.6	1.90E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	831.8543	2	-30	SVFPEQANN(Deamid)NEWAR	57.5	2.00E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	831.8597	2	-23	SVFPEQAN(Deamid)NNEWAR	58.7	2.10E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	352.5347	3	25	APQHTAVGFK	37.5	2.60E-10	60978.1

	O43242	74	79.2	8.42	3.00E-16	706.8375	2	-17	AVQGFFTSNNATR	54.1	2.60E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	822.7629	3	31	AKPPPGGGEQEPPPPPAPQDVEmK	59	2.70E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	959.8623	3	7.6	AASTPLLPEVEAYLQLLVVIFMMNSK	33.7	5.80E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	732.3788	2	-24	Carbamyl-IKAIQLEYSEAR	37	5.90E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	769.9045	2	-25	SLMPYFLLTQAVR	50.5	8.60E-10	60978.1
	O43242	74	79.2	8.42	3.00E-16	777.8926	2	-37	SLmPYFLLTQAVR	46	1.20E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	872.1458	3	9.7	ISLADIAQKLQLDSPEDAEFIVAK	42.6	1.30E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	684.329	2	-6.1	Carbamyl-FNQVLDQFGEK	38.3	1.90E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	564.2345	2	-70	EMIDIYSTR	38.5	2.10E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	1011.8889	3	0.21	AASTPLLPEVEAYLQLLVVIFMMNSKR	37.3	3.20E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	707.8214	2	-17	AVQGFFTSN(Deamid)N(Deamid)ATR	41.5	3.80E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	760.4416	3	18	RSLMPYFLLTQAVRTGNLAK	42	3.80E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	837.0622	3	-12	AK(CarmK)PPPGGGEQEPPPPPAPQDVEmK	40.9	6.70E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	656.3376	2	11	DGVIEASINHEK	50.1	8.50E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	708.387	3	-10	SLMPYFLLTQAVRTGNLAK	32.4	8.60E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	699.3648	2	-14	FQADGTYTLIIR	45.2	9.40E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	592.3528	2	34	KAPQHTAVGFK	50.7	9.50E-09	60978.1
	O43242	74	79.2	8.42	3.00E-16	565.6724	3	36	RSLMPYFLLTQAVR	39.7	1.10E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	409.5721	3	31	K(CarmK)APQHTAVGFK	37.8	1.20E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	659.8297	2	-16	Carbamyl-ELDTVTLEDIK	35.9	1.40E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	650.6241	4	47	RLNHYVLYKAVQGFFTSNNATR	37.1	1.60E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	572.2294	2	-73	EmIDIYSTR	32.7	1.70E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	846.431	2	9.8	ISDDLMQK(CarmK)ISTQNR	38.7	2.00E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	483.2038	2	-63	ISDDLmQK	40.7	2.20E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	486.7037	2	-84	mISLSYSR	28.4	2.60E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	571.0018	3	32	RSLmPYFLLTQAVR	33.3	3.20E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	551.3273	3	55	AIRDGVIEASINHEK	43.4	4.10E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	976.49	2	-7.5	TGNLAK(CarmK)FNQVLDQFGEK	30.6	4.80E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	513.5899	3	-43	VYEFLDK(CarmK)LDVVR	35.8	5.00E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	533.8223	2	24	HNVIK(CarmK)TGVR	26.9	5.70E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	478.7353	2	-25	MISLSYSR	35.6	5.80E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	686.6854	3	-22	LQLDSPEDAEFIVAK(CarmK)AIR	32.9	7.40E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	575.7589	2	-24	Carbamyl-EQQDLEFAK	37	8.90E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	696.8561	2	21	EREQQDLEFAK	49.6	9.70E-08	60978.1
	O43242	74	79.2	8.42	3.00E-16	831.7301	3	-13	AK(CarmK)PPPGGGEQEPPPPPAPQDVEMK	45.9	1.10E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	611.7913	2	-25	Carbamyl-AIQLEYSEAR	45.8	1.80E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	643.7126	2	-14	EmAEDDDDSFP	25	2.50E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	525.29	2	-4.8	LNHYVLYK	42.3	3.90E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	475.2107	2	-54	ISDDLMQK	37.7	4.00E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	656.814	2	-13	DGVIEASIN(Deamid)HEK	42	8.90E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	1179.9903	2	7.6	EQQDLEFAKEMAEDDDDSFP	25.4	8.90E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	403.7157	2	6.5	TMTNALR	28.5	9.70E-07	60978.1
	O43242	74	79.2	8.42	3.00E-16	468.2153	2	-41	YLYYTGR	33	1.00E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	411.6975	2	-32	TmTNALR	16.9	1.10E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	563.2999	2	11	EPQLAFHQR	38.3	1.10E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	457.2251	2	-26	VYEFLDK	29.9	1.30E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	474.5532	3	-34	EAQKISDDLmQK	27.1	2.20E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	1187.9845	2	4.8	EQQDLEFAKEmAEDDDDSFP	21.8	2.90E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	635.7133	2	-18	EMAEDDDDSFP	20	3.10E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	377.6954	2	-49	qPSLK(CarmK)R	23.6	5.20E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	365.7218	2	50	SFLHAR	31	6.50E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	400.7359	2	-29	ALDLVAAK	41	7.90E-06	60978.1
	O43242	74	79.2	8.42	3.00E-16	551.634	3	17	AIRDGVIEASIN(Deamid)HEK	27.3	8.50E-06	60978.1
Rpt5	P17980	70	73.1	8.75	2.70E-16	930.9812	2	-18	qIQELVEAIVLPmNHK	59.4	2.70E-16	49204
	P17980	70	73.1	8.75	2.70E-16	830.9211	2	-23	LAGPQLVQmFIGDGAK	57	6.10E-15	49204
	P17980	70	73.1	8.75	2.70E-16	797.3981	3	5.9	RGATELTHEDYMEGILEVQAK	67.5	1.00E-14	49204
	P17980	70	73.1	8.75	2.70E-16	1127.0365	2	14	AMEVDERPTEQYSDIGGLDK	64	1.70E-14	49204
	P17980	70	73.1	8.75	2.70E-16	1233.9858	3	42	TLPYLVSNVIELLDVDPNDQEEDGANIDLDSQR	60.6	1.80E-14	49204
	P17980	70	73.1	8.75	2.70E-16	851.9507	2	-19	APSIIFIDELDAIGTK	57.5	2.00E-14	49204
	P17980	70	73.1	8.75	2.70E-16	439.2156	3	-27	VTHELQAmKDK	48.5	3.20E-14	49204
	P17980	70	73.1	8.75	2.70E-16	757.0205	3	7.9	AmEVDERPTEQYSDIGGLDK	59.4	5.70E-14	49204
	P17980	70	73.1	8.75	2.70E-16	1234.2716	3	7.9	TLPYLVSNVIELLDVDPN(Deamid)DQEEDGANIDLDSQR	49.5	2.20E-13	49204
	P17980	70	73.1	8.75	2.70E-16	620.364	3	27	APSIIFIDELDAIGTKR	50.5	4.30E-13	49204
	P17980	70	73.1	8.75	2.70E-16	1117.5426	2	6	GATELTHEDYMEGILEVQAK	60.4	4.40E-13	49204
	P17980	70	73.1	8.75	2.70E-16	822.922	2	-25	LAGPQLVQMFIGDGAK	60.5	7.80E-13	49204
	P17980	70	73.1	8.75	2.70E-16	847.0054	2	49	QTYFLPVIGLVDAEK	42.2	2.80E-12	49204

	P17980	70	73.1	8.75	2.70E-16	617.7076	3	21	VIAATN(Deamid)RVDILDPALLR	51.8	3.10E-12	49204
	P17980	70	73.1	8.75	2.70E-16	765.0111	3	-20	Carbamyl-GATELTHEDYmEGILEVQAK	49.5	6.20E-12	49204
	P17980	70	73.1	8.75	2.70E-16	594.2964	3	12	KmNVSPDVNYEELAR	47.5	7.70E-12	49204
	P17980	70	73.1	8.75	2.70E-16	617.3683	3	2.5	VIAATNRVDILDPALLR	52.1	8.00E-12	49204
	P17980	70	73.1	8.75	2.70E-16	922.9858	2	-16	qIQELVEAIVLPMNHK	57.6	9.30E-12	49204
	P17980	70	73.1	8.75	2.70E-16	1276.6593	3	21	TLPYLVSNVIELLDVDPNDQEEDGANIDLDSQRK	47.2	1.60E-11	49204
	P17980	70	73.1	8.75	2.70E-16	980.5563	2	21	EKAPSIIFIDELDAIGTK	49.2	2.60E-11	49204
	P17980	70	73.1	8.75	2.70E-16	1060.5524	2	53	MATVWDEAEQDGIGEEVLK	54.5	2.80E-11	49204
	P17980	70	73.1	8.75	2.70E-16	953.0095	2	-7.6	Carbamyl-QIQELVEAIVLPMNHK	51.9	4.10E-11	49204
	P17980	70	73.1	8.75	2.70E-16	1012.5683	3	32	LKPGDLVGVNKDSYLILETLPTEYDSR	49.8	4.20E-11	49204
	P17980	70	73.1	8.75	2.70E-16	939.4845	2	-29	QIQELVEAIVLPmNHK	53.9	5.40E-11	49204
	P17980	70	73.1	8.75	2.70E-16	838.5283	2	93	qTYFLPVIGLVDAEK	46	5.90E-11	49204
	P17980	70	73.1	8.75	2.70E-16	650.359	2	29	VTHELQAMKDK	57.3	8.00E-11	49204
	P17980	70	73.1	8.75	2.70E-16	1103.0687	2	3.7	TmLELLNQLDGFQPNTQVK	57.5	8.00E-11	49204
	P17980	70	73.1	8.75	2.70E-16	923.4744	2	-20	qIQELVEAIVLPMN(Deamid)HK	48.3	1.20E-10	49204
	P17980	70	73.1	8.75	2.70E-16	1095.1163	2	45	TMLELLNQLDGFQPNTQVK	56.9	2.20E-10	49204
	P17980	70	73.1	8.75	2.70E-16	811.3711	2	-19	Acetyl-mNLLPNIEsPVTR	48.3	2.50E-10	49204
	P17980	70	73.1	8.75	2.70E-16	528.7946	2	30	VTHELQAMK	45	2.80E-10	49204
	P17980	70	73.1	8.75	2.70E-16	738.8718	2	14	KIEFPmPNEEAR	46.7	3.10E-10	49204
	P17980	70	73.1	8.75	2.70E-16	529.8181	4	41	EKAPSIIFIDELDAIGTKR	42.5	3.20E-10	49204
	P17980	70	73.1	8.75	2.70E-16	1276.9542	3	-4.7	TLPYLVSNVIELLDVDPN(Deamid)DQEEDGANIDLDSQRK	41	5.80E-10	49204
	P17980	70	73.1	8.75	2.70E-16	1068.479	2	-14	mATVWDEAEQDGIGEEVLK	41.1	6.20E-10	49204
	P17980	70	73.1	8.75	2.70E-16	596.7766	2	-48	GVLmYGPPGTGK	49.8	7.00E-10	49204
	P17980	70	73.1	8.75	2.70E-16	602.2824	4	-22	RGATELTHEDYmEGILEVQAK	42.1	7.90E-10	49204
	P17980	70	73.1	8.75	2.70E-16	1026.8817	3	10	LKPGDLVGVNK(CarmK)DSYLILETLPTEYDSR	41.9	1.50E-09	49204
	P17980	70	73.1	8.75	2.70E-16	803.3888	2	-0.17	Acetyl-MNLLPNIEsPVTR	37.7	1.70E-09	49204
	P17980	70	73.1	8.75	2.70E-16	588.7736	2	-58	GVLMYGPPGTGK	34.9	1.80E-09	49204
	P17980	70	73.1	8.75	2.70E-16	759.8831	4	-22	LKPGDLVGVN(Deamid)KDSYLILETLPTEYDSR	39.6	1.80E-09	49204
	P17980	70	73.1	8.75	2.70E-16	818.8607	2	-30	MNVSPDVNYEELAR	56.8	1.80E-09	49204
	P17980	70	73.1	8.75	2.70E-16	700.386	2	4.8	EKFENLGIQPPK	43.3	2.30E-09	49204
	P17980	70	73.1	8.75	2.70E-16	957.9419	2	-30	DSYLILETLPTEYDSR	50.5	2.40E-09	49204
	P17980	70	73.1	8.75	2.70E-16	826.8616	2	-26	mNVSPDVNYEELAR	49.2	2.40E-09	49204
	P17980	70	73.1	8.75	2.70E-16	1095.5297	2	-27	TMLELLN(Deamid)QLDGFQPNTQVK	38.8	3.20E-09	49204
	P17980	70	73.1	8.75	2.70E-16	536.7996	2	43	VTHELQAmK	26.1	3.90E-09	49204
	P17980	70	73.1	8.75	2.70E-16	561.7639	2	-23	mSTEEIIQR	42	8.80E-09	49204
	P17980	70	73.1	8.75	2.70E-16	803.3835	2	-6.8	Acetyl-MNLLPNIEsPVTR	44.5	9.40E-09	49204
	P17980	70	73.1	8.75	2.70E-16	882.9519	2	22	KMNVSPDVNYEELAR	50.4	1.10E-08	49204
	P17980	70	73.1	8.75	2.70E-16	571.792	2	-38	FENLGIQPPK	38	1.30E-08	49204
	P17980	70	73.1	8.75	2.70E-16	1103.5602	2	3.2	TmLELLN(Deamid)QLDGFQPNTQVK	33.6	2.40E-08	49204
	P17980	70	73.1	8.75	2.70E-16	553.7499	2	-53	MSTEEIIQR	40.1	2.70E-08	49204
	P17980	70	73.1	8.75	2.70E-16	487.5429	3	-73	KIEFPMPNEEAR	38.5	9.90E-08	49204
	P17980	70	73.1	8.75	2.70E-16	621.6572	3	-25	QIQELVEAIVLPMN(Deamid)HK	37	1.20E-07	49204
	P17980	70	73.1	8.75	2.70E-16	442.7523	2	23	IMQIHSR	32.9	1.40E-07	49204
	P17980	70	73.1	8.75	2.70E-16	668.3346	3	-40	EK(CarmK)APSIIFIDELDAIGTK	30.9	1.50E-07	49204
	P17980	70	73.1	8.75	2.70E-16	453.5467	3	-35	VTHELQAmK(CarmK)DK	21.8	2.50E-07	49204
	P17980	70	73.1	8.75	2.70E-16	562.8206	2	-30	VDILDPALLR	39.6	2.70E-07	49204
	P17980	70	73.1	8.75	2.70E-16	952.8967	3	31	QTYFLPVIGLVDAEK(CarmK)LKPGDLVGVNK	27.4	2.90E-07	49204
	P17980	70	73.1	8.75	2.70E-16	666.7908	2	-38	IEFPMPNEEAR	30.1	8.60E-07	49204
	P17980	70	73.1	8.75	2.70E-16	904.4228	2	-14	K(CarmK)MNVSPDVNYEELAR	34.7	1.10E-06	49204
	P17980	70	73.1	8.75	2.70E-16	771.9099	2	12	Carbamyl-mNLLPNIESPVTR	28.6	1.20E-06	49204
	P17980	70	73.1	8.75	2.70E-16	450.7554	2	35	ImQIHSR	22.1	1.20E-06	49204
	P17980	70	73.1	8.75	2.70E-16	394.2569	2	82	Carbamyl-VIAATNR	26.6	1.50E-06	49204
	P17980	70	73.1	8.75	2.70E-16	763.4295	2	31	Acetyl-MNLLPNIESPVTR	33.5	1.90E-06	49204
	P17980	70	73.1	8.75	2.70E-16	844.4268	2	-22	LAGPQLVQMFIGDGAK(CarmK)	24.2	2.70E-06	49204
	P17980	70	73.1	8.75	2.70E-16	744.7073	3	-11	TMLELLNQLDGFQPNTQVK(CarmK)	23.9	5.50E-06	49204
	P17980	70	73.1	8.75	2.70E-16	389.6963	2	-31	DAFALAK(CarmK)	22.7	7.30E-06	49204
	P17980	70	73.1	8.75	2.70E-16	570.344	2	2.2	LKPGDLVGVNK	34	7.70E-06	49204
Rpn6	O00231	65	72	8.48	7.20E-17	792.7467	3	3.6	AQsLLSTDREASIDILHSIVK	56.5	7.20E-17	47333
	O00231	65	72	8.48	7.20E-17	986.001	2	4.8	LQATLDmQSGIIHAAEEK	67.6	1.00E-16	47333
	O00231	65	72	8.48	7.20E-17	795.4238	3	27	LQATLDMQSGIIHAAEEKDWK	64.1	2.00E-15	47333
	O00231	65	72	8.48	7.20E-17	807.8662	2	-26	TYEAALETIQNmSK	59	3.20E-15	47333
	O00231	65	72	8.48	7.20E-17	800.3628	2	-24	TYEAALETIQN(Deamid)MSK	47	2.60E-14	47333
	O00231	65	72	8.48	7.20E-17	966.862	3	27	DIQENDEEAVQVKEQSILELGSLLAK	58.6	6.70E-14	47333
	O00231	65	72	8.48	7.20E-17	1005.289	4	30	FHGILDQGEGVLIIFDEPPVDKTYEAALETIQNMSK	56	1.10E-13	47333
	O00231	65	72	8.48	7.20E-17	1176.981	2	-27	TAYSYFYEAFEGYDSIDSPK	48.7	1.10E-13	47333
	O00231	65	72	8.48	7.20E-17	799.8787	2	-14	TYEAALETIQNMSK	55	9.00E-13	47333

	O00231	65	72	8.48	7.20E-17	835.8244	3	30	TGQAAELGGLLK(CarmK)YVRPFLNSISK	51.2	1.30E-12	47333
	O00231	65	72	8.48	7.20E-17	652.3118	3	-36	LQATLDMQSGIIHAAEEK	60.8	1.70E-12	47333
	O00231	65	72	8.48	7.20E-17	837.1652	3	31	ALLVEVQLLESK(CarmK)TYHALSNLPK	43.5	2.60E-12	47333
	O00231	65	72	8.48	7.20E-17	865.9327	2	-24	ImLNTPEDVQALVSGK	54	9.20E-12	47333
	O00231	65	72	8.48	7.20E-17	766.0902	3	2.4	AQSLLSTDREASIDILHSIVK	48.9	1.20E-11	47333
	O00231	65	72	8.48	7.20E-17	552.3483	2	95	Acetyl-AAAAVVEFQR	51.5	1.80E-11	47333
	O00231	65	72	8.48	7.20E-17	813.449	3	30	FHGILDQGEGVLIIFDEPPVDK	54	2.60E-11	47333
	O00231	65	72	8.48	7.20E-17	764.411	2	-8.5	YQEALHLGSQLLR	61.5	2.80E-11	47333
	O00231	65	72	8.48	7.20E-17	739.7065	4	74	MDDKALLVEVQLLESKTYHALSNLPK	46.3	6.10E-11	47333
	O00231	65	72	8.48	7.20E-17	535.7434	2	-7.8	AQsLLSTDR	38.2	1.60E-10	47333
	O00231	65	72	8.48	7.20E-17	856.168	3	52	KFHGILDQGEGVLIIFDEPPVDK	50.6	1.70E-10	47333
	O00231	65	72	8.48	7.20E-17	558.2357	3	-72	RDIQENDEEAVQVK	54.6	1.70E-10	47333
	O00231	65	72	8.48	7.20E-17	818.1462	3	29	AQSLLSTDREASIDILHSIVKR	46.5	2.60E-10	47333
	O00231	65	72	8.48	7.20E-17	752.3866	2	-34	LYDNLLEQNLIR	50.5	3.30E-10	47333
	O00231	65	72	8.48	7.20E-17	671.363	2	-60	ALLVEVQLLESK	46.6	4.20E-10	47333
	O00231	65	72	8.48	7.20E-17	572.305	2	-11	TYHALSNLPK	45.9	4.40E-10	47333
	O00231	65	72	8.48	7.20E-17	546.6697	3	22	VQIEHISSLIK(CarmK)LSK	39.3	6.40E-10	47333
	O00231	65	72	8.48	7.20E-17	857.9327	2	-27	IMLNTPEDVQALVSGK	55.2	7.20E-10	47333
	O00231	65	72	8.48	7.20E-17	560.319	3	18	AELRDDPIISTHLAK	52.1	7.90E-10	47333
	O00231	65	72	8.48	7.20E-17	421.7463	4	20	RYQEALHLGSQLLR	41.8	9.00E-10	47333
	O00231	65	72	8.48	7.20E-17	740.92	2	-11	EASIDILHSIVKR	53.4	2.10E-09	47333
	O00231	65	72	8.48	7.20E-17	605.3189	2	-14	DDPIISTHLAK	40.6	3.20E-09	47333
	O00231	65	72	8.48	7.20E-17	441.9185	3	-0.82	YVRPFLNSISK	44.5	4.00E-09	47333
	O00231	65	72	8.48	7.20E-17	743.6445	4	-8.3	mDDKALLVEVQLLESKTYHALSNLPK	43.7	5.50E-09	47333
	O00231	65	72	8.48	7.20E-17	870.4593	3	0.92	K(CarmK)FHGILDQGEGVLIIFDEPPVDK	41.6	5.90E-09	47333
	O00231	65	72	8.48	7.20E-17	662.8523	2	-38	EASIDILHSIVK	49.2	6.40E-09	47333
	O00231	65	72	8.48	7.20E-17	700.9334	2	43	EQSILELGSLLAK	38.5	7.70E-09	47333
	O00231	65	72	8.48	7.20E-17	546.315	2	9	KLSQmILDK	46	1.40E-08	47333
	O00231	65	72	8.48	7.20E-17	702.3603	2	3.6	YVRPFLNsISK	40.3	1.60E-08	47333
	O00231	65	72	8.48	7.20E-17	546.3216	2	21	LSQmILDKK	51.1	2.70E-08	47333
	O00231	65	72	8.48	7.20E-17	752.8908	2	-18	LYDNLLEQN(Deamid)LIR	35.3	3.40E-08	47333
	O00231	65	72	8.48	7.20E-17	633.8516	2	-36	VQIEHISSLIK	51.6	4.20E-08	47333
	O00231	65	72	8.48	7.20E-17	508.6303	3	15	EASIDILHSIVK(CarmK)R	35	4.40E-08	47333
	O00231	65	72	8.48	7.20E-17	1037.5813	4	50	KFHGILDQGEGVLIIFDEPPVDKTYEAALETIQN(Deamid)MSK	36.3	5.60E-08	47333
	O00231	65	72	8.48	7.20E-17	809.743	3	7.1	LQATLDMQSGIIHAAEEK(CarmK)DWK	31.2	8.80E-08	47333
	O00231	65	72	8.48	7.20E-17	579.3215	2	-14	TGQAAELGGLLK	39.2	1.10E-07	47333
	O00231	65	72	8.48	7.20E-17	759.3547	2	3.6	DIQEN(Deamid)DEEAVQVK	45.5	2.40E-07	47333
	O00231	65	72	8.48	7.20E-17	572.6103	3	-42	IMLN(Deamid)TPEDVQALVSGK	37.1	2.70E-07	47333
	O00231	65	72	8.48	7.20E-17	967.1765	3	13	DIQEN(Deamid)DEEAVQVKEQSILELGSLLAK	30.9	3.00E-07	47333
	O00231	65	72	8.48	7.20E-17	407.2538	3	32	KLSQmILDKK	26.9	4.60E-07	47333
	O00231	65	72	8.48	7.20E-17	845.9771	4	21	Acetyl-AAAAVVEFQRAQSLLSTDREASIDILHSIVK	28.4	6.40E-07	47333
	O00231	65	72	8.48	7.20E-17	469.2391	2	-30	VVDSLYNK	27.8	7.10E-07	47333
	O00231	65	72	8.48	7.20E-17	543.2612	2	-67	LVSLYFDTK	36.9	1.20E-06	47333
	O00231	65	72	8.48	7.20E-17	490.743	2	-26	VVDSLYNK(CarmK)	24.2	1.30E-06	47333
	O00231	65	72	8.48	7.20E-17	424.2415	2	9.9	VIEPFSR	34	1.40E-06	47333
	O00231	65	72	8.48	7.20E-17	758.8586	2	-1.8	DIQENDEEAVQVK	52.7	2.10E-06	47333
	O00231	65	72	8.48	7.20E-17	517.2534	2	-27	Carbamyl-AQSLLSTDR	33	2.90E-06	47333
	O00231	65	72	8.48	7.20E-17	662.8668	2	0.26	YVRPFLN(Deamid)SISK	36.9	3.30E-06	47333
	O00231	65	72	8.48	7.20E-17	621.3534	2	8.6	LVSLYFDTKR	36.5	4.50E-06	47333
	O00231	65	72	8.48	7.20E-17	482.2367	2	-54	LSQmILDK	42.4	4.70E-06	47333
	O00231	65	72	8.48	7.20E-17	538.2978	2	-28	LSQMILDKK	30.8	5.80E-06	47333
	O00231	65	72	8.48	7.20E-17	668.0248	3	-15	Carbamyl-KMDDKALLVEVQLLESK	21.4	6.80E-06	47333
	O00231	65	72	8.48	7.20E-17	538.2595	2	-99	KLSQMILDK	39.1	7.10E-06	47333
	O00231	65	72	8.48	7.20E-17	405.1828	2	-56	SLADFEK	29.4	7.50E-06	47333
	O00231	65	72	8.48	7.20E-17	393.6813	2	-43	YmLLCK	19.1	8.80E-06	47333
	O00231	65	72	8.48	7.20E-17	602.3579	2	-3.7	KLSQMILDKK	43.4	9.20E-06	47333
Rpt6	P62195	60	73.2	8.61	3.70E-17	745.0432	3	10	FVVDVDKNIDINDVTPNCR	47.1	1.60E-16	45626.4
	P62195	60	73.2	8.61	3.70E-17	685.8227	2	14	Carbamyl-GVCTEAGMYALR	45	1.60E-16	45626.4
	P62195	60	73.2	8.61	3.70E-17	819.824	3	33	EVIELPVKHPELFEALGIAQPK	70.2	3.70E-17	45626.4
	P62195	60	73.2	8.61	3.70E-17	810.347	2	-53	VHVTQEDFEmAVAK	63.5	1.60E-16	45626.4
	P62195	60	73.2	8.61	3.70E-17	971.5561	2	15	ILPNKVDPLVSLMmVEK	54.5	1.40E-15	45626.4
	P62195	60	73.2	8.61	3.70E-17	707.268	3	-98	EHAPSIIFmDEIDSIGSSR	58.4	1.70E-14	45626.4
	P62195	60	73.2	8.61	3.70E-17	775.4084	2	-18	HPELFEALGIAQPK	61.5	6.30E-14	45626.4
	P62195	60	73.2	8.61	3.70E-17	858.7366	4	40	ILPNKVDPLVSLMMVEKVPDSTYEMIGGLDK	54.1	1.30E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	701.9933	3	-17	EHAPSIIFMDEIDSIGSSR	58	2.30E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	587.327	3	49	RVHVTQEDFEMAVAK	53.4	5.40E-13	45626.4

	P62195	60	73.2	8.61	3.70E-17	715.6664	3	-13	Acetyl-ALDGPEQmELEEGKAGSGLR	50	5.50E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	648.066	3	56	ILPNKVDPLVSLmMVEK	48.1	5.70E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	802.3459	2	-19	Acetyl-ALDGPEQmELEEGK	66	6.20E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	802.3884	2	-5.6	VHVTQEDFEMAVAK	59.5	8.10E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	642.6858	3	-19	ILPNKVDPLVSLMMVEK	56.3	8.20E-13	45626.4
	P62195	60	73.2	8.61	3.70E-17	770.831	2	-42	VPDSTYEmIGGLDK	63	1.00E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	794.43	2	83	Acetyl-ALDGPEQMELEEGK	64.4	1.30E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	1064.9951	2	-16	Acetyl-ALDGPEQMELEEGKAGSGLR	66.8	1.80E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	943.2278	3	26	EIKEVIELPVKHPELFEALGIAQPK	57.3	1.90E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	920.4411	2	-16	TmLELLN(Deamid)QLDGFEATK	52.1	2.70E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	820.0749	3	-49	LLREELQLLQEQGSYVGEVVR	64.5	5.70E-12	45626.4
	P62195	60	73.2	8.61	3.70E-17	592.6506	3	35	RVHVTQEDFEmAVAK	48.9	1.40E-11	45626.4
	P62195	60	73.2	8.61	3.70E-17	919.941	2	-25	TmLELLNQLDGFEATK	60	2.20E-11	45626.4
	P62195	60	73.2	8.61	3.70E-17	911.9048	2	-68	TMLELLNQLDGFEATK	60.6	3.40E-11	45626.4
	P62195	60	73.2	8.61	3.70E-17	979.5418	2	3.2	ILPNKVDPLVSLmmVEK	43	5.40E-11	45626.4
	P62195	60	73.2	8.61	3.70E-17	696.8311	2	-40	VDPLVSLmmVEK	36.6	9.60E-11	45626.4
	P62195	60	73.2	8.61	3.70E-17	964.0399	2	4.3	ILPN(Deamid)KVDPLVSLMMVEK	49.3	1.50E-10	45626.4
	P62195	60	73.2	8.61	3.70E-17	694.8397	2	-27	IAELmPGASGAEVK	44.7	2.80E-10	45626.4
	P62195	60	73.2	8.61	3.70E-17	1038.5066	2	-26	EELQLLQEQGSYVGEVVR	60.4	2.90E-10	45626.4
	P62195	60	73.2	8.61	3.70E-17	834.1546	3	27	EVIELPVK(CarmK)HPELFEALGIAQPK	43.3	4.20E-10	45626.4
	P62195	60	73.2	8.61	3.70E-17	912.4393	2	-21	TMLELLN(Deamid)QLDGFEATK	52.1	6.90E-10	45626.4
	P62195	60	73.2	8.61	3.70E-17	680.8424	2	-32	VDPLVSLMMVEK	49.9	2.00E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	762.8142	2	-68	VPDSTYEMIGGLDK	51.9	2.20E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	601.3911	2	98	Carbamyl-GVLLYGPPGTGK	31	5.30E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	719.9123	2	-14	IDILDSALLRPGR	63.8	6.20E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	956.1577	3	10	VDPLVSLMMVEKVPDSTYEMIGGLDK	35.4	8.10E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	657.0276	3	-9	ILPNK(CarmK)VDPLVSLMMVEK	36.6	8.40E-09	45626.4
	P62195	60	73.2	8.61	3.70E-17	424.2677	2	98	Carbamyl-VIMATNR	33.5	1.40E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	645.79	2	-15	LEGGSGGDSEVQR	63.8	2.30E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	432.2195	2	-9.9	Carbamyl-VImATNR	32.3	3.00E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	648.3591	3	1.8	ILPN(Deamid)KVDPLVSLMmVEK	32.2	3.90E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	473.7586	2	-11	VSGSELVQK	44.3	4.80E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	649.8048	2	-27	IEFPPPNEEAR	35.9	9.60E-08	45626.4
	P62195	60	73.2	8.61	3.70E-17	489.7431	2	27	N(Deamid)DSYTLHK	23.3	1.80E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	686.8084	2	-76	IAELMPGASGAEVK	45.3	2.00E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	662.3557	3	-14	ILPNK(CarmK)VDPLVSLMmVEK	33.3	2.50E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	657.3728	2	5.5	IEELQLIVNDK	50.5	2.60E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	432.9347	3	9.3	EIKEVIELPVK	32.3	2.80E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	657.8441	2	-26	IEELQLIVN(Deamid)DK	44.7	3.40E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	750.9082	2	0.065	KIAELMPGASGAEVK	38.3	3.60E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	708.3522	2	-16	IAELMPGASGAEVK(CarmK)	24.3	4.30E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	713.8387	2	-44	KIEFPPPNEEAR	39.1	4.90E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	411.2154	2	-21	FVVDVDK	34.5	5.10E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	441.2244	2	-15	ELFVmAR	25.6	6.90E-07	45626.4
	P62195	60	73.2	8.61	3.70E-17	489.2611	2	47	NDSYTLHK	32.4	1.10E-06	45626.4
	P62195	60	73.2	8.61	3.70E-17	375.2004	2	-0.6	FIGEGAR	34.4	1.20E-06	45626.4
	P62195	60	73.2	8.61	3.70E-17	473.2865	3	72	VALRN(Deamid)DSYTLHK	24.4	1.30E-06	45626.4
	P62195	60	73.2	8.61	3.70E-17	933.4566	2	-14	TMLELLNQLDGFEATK(CarmK)	22.3	2.90E-06	45626.4
	P62195	60	73.2	8.61	3.70E-17	433.2207	2	-30	ELFVMAR	33.7	4.60E-06	45626.4
	P62195	60	73.2	8.61	3.70E-17	688.8492	2	-18	VDPLVSLMmVEK	30.4	5.60E-06	45626.4
Rpt2	P62191	59	71.4	7.82	2.00E-15	653.3471	2	17	AICTEAGLMALR	54.2	7.70E-15	49184.9
	P62191	59	71.4	7.82	2.00E-15	893.7778	3	3.2	MTLADDVTLDDLIMAKDDLSGADIK	63.6	2.00E-15	49184.9
	P62191	59	71.4	7.82	2.00E-15	1127.5868	2	2.7	VAEEHAPSIVFIDEIDAIGTK	53.3	4.20E-15	49184.9
	P62191	59	71.4	7.82	2.00E-15	868.0833	3	-15	ESVELPLTHPEYYEEmGIKPPK	60.5	7.70E-15	49184.9
	P62191	59	71.4	7.82	2.00E-15	687.6476	3	-13	NQEQmKPLEEKQEEER	58.1	2.10E-14	49184.9
	P62191	59	71.4	7.82	2.00E-15	804.1163	3	30	VAEEHAPSIVFIDEIDAIGTKR	62	5.40E-14	49184.9
	P62191	59	71.4	7.82	2.00E-15	729.0168	3	-40	VHAVIGVLmDDTDPLVTVmK	55.4	7.60E-14	49184.9
	P62191	59	71.4	7.82	2.00E-15	723.7143	3	-0.49	VHAVIGVLMDDTDPLVTVmK	57.6	8.20E-14	49184.9
	P62191	59	71.4	7.82	2.00E-15	862.7757	3	13	ESVELPLTHPEYYEEMGIKPPK	60.4	1.80E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	898.9164	2	-22	mTLADDVTLDDLImAK	56.5	2.30E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	718.3623	3	-29	VHAVIGVLMDDTDPLVTVMK	56.5	2.50E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	857.9491	2	11	IKDYLLmEEEFIR	55.7	3.80E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	890.9177	2	-24	MTLADDVTLDDLImAK	52.1	7.40E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	882.9231	2	-21	MTLADDVTLDDLIMAK	52.3	8.10E-13	49184.9
	P62191	59	71.4	7.82	2.00E-15	682.3534	3	42	NQEQMKPLEEKQEEER	58.8	5.40E-12	49184.9
	P62191	59	71.4	7.82	2.00E-15	682.6811	3	41	N(Deamid)QEQMKPLEEKQEEER	60.6	9.80E-12	49184.9

	P62191	59	71.4	7.82	2.00E-15	879.4279	2	-17	IK(CarmK)DYLLmEEEFIR	39.8	2.20E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	1102.5123	2	-25	APQETYADIGGLDN(Deamid)QIQEIK	58.1	2.60E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	1102.0366	2	-9.9	APQETYADIGGLDNQIQEIK	61.5	3.60E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	1016.5062	4	4.3	GTPmSVGTLEEIIDDNHAIVSTSVGSEHYVSILSFVDK	41	4.70E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	725.8952	2	-38	IETLDPALIRPGR	60.8	5.20E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	849.9222	2	-24	IKDYLLMEEEFIR	51.5	6.80E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	884.4156	2	-19	TmLELLNQLDGFDSR	57.5	7.90E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	890.9289	2	-11	mTLADDVTLDDLIMAK	50	9.30E-11	49184.9
	P62191	59	71.4	7.82	2.00E-15	639.798	2	-71	AVANQTSATFLR	48.3	1.20E-10	49184.9
	P62191	59	71.4	7.82	2.00E-15	868.1054	3	0.82	VEK(CarmK)APQETYADIGGLDNQIQEIK	45	1.70E-10	49184.9
	P62191	59	71.4	7.82	2.00E-15	696.6781	3	26	NQEQMK(CarmK)PLEEKQEEER	51.4	3.70E-10	49184.9
	P62191	59	71.4	7.82	2.00E-15	876.4752	2	46	TMLELLNQLDGFDSR	55	7.70E-10	49184.9
	P62191	59	71.4	7.82	2.00E-15	876.9039	2	-27	TMLELLN(Deamid)QLDGFDSR	48.4	8.00E-10	49184.9
	P62191	59	71.4	7.82	2.00E-15	853.7845	3	18	VEKAPQETYADIGGLDNQIQEIK	50.8	1.60E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	1193.3823	4	33	APQETYADIGGLDNQIQEIKESVELPLTHPEYYEEMGIKPPK	37.5	1.90E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	723.7343	3	27	VHAVIGVLmDDTDPLVTVMK	41.5	2.10E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	871.4434	2	-1.9	IK(CarmK)DYLLMEEEFIR	39.3	2.70E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	729.337	2	-22	DYLLMEEEFIR	44.3	3.50E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	479.7227	2	-64	YEPPVPTR	31.3	4.20E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	601.3911	2	98	Carbamyl-GVILYGPPGTGK	31	5.30E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	516.2145	4	-50	N(Deamid)QEQmKPLEEKQEEER	46.8	7.50E-09	49184.9
	P62191	59	71.4	7.82	2.00E-15	424.2677	2	98	Carbamyl-VIMATNR	33.5	1.40E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	543.8204	2	36	KYEPPVPTR	35.5	1.80E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	432.2195	2	-9.9	Carbamyl-VImATNR	32.3	3.00E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	851.4628	3	11	VHAVIGVLMDDTDPLVTVMK(CarmK)VEK	32.8	3.70E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	687.8467	2	21	N(Deamid)QEQMKPLEEK	47.6	9.50E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	687.358	2	26	NQEQMKPLEEK	47.5	9.70E-08	49184.9
	P62191	59	71.4	7.82	2.00E-15	695.3537	2	23	NQEQmKPLEEK	39.4	1.20E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	467.2026	2	-58	DDLSGADIK	40.2	1.50E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	737.3629	2	17	DYLLmEEEFIR	30.6	2.70E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	617.8144	2	-7.9	KQEGTPEGLYL	29.9	3.60E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	1197.5877	4	0.1	APQETYADIGGLDN(Deamid)QIQEIKESVELPLTHPEYYEEmGIKPPK	30.6	4.40E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	1193.5884	4	-0.35	APQETYADIGGLDN(Deamid)QIQEIKESVELPLTHPEYYEEMGIKPPK	26.9	4.60E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	629.8133	2	-39	K(CarmK)IEFPLPDEK	32.5	4.90E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	490.7959	2	44	SKENVLYK	24.8	8.60E-07	49184.9
	P62191	59	71.4	7.82	2.00E-15	640.3286	2	-11	AVAN(Deamid)QTSATFLR	31.4	1.30E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	608.3409	2	10	KIEFPLPDEK	46.4	1.50E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	697.0118	3	34	N(Deamid)QEQMK(CarmK)PLEEKQEEER	29.3	1.60E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	868.3967	3	-42	VEK(CarmK)APQETYADIGGLDN(Deamid)QIQEIK	29.4	3.40E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	501.2925	2	25	IFQIHTSR	36.7	3.50E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	490.8	2	90	VTNEDFKK	17.9	3.60E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	386.5816	3	66	RIFQIHTSR	33.5	7.10E-06	49184.9
	P62191	59	71.4	7.82	2.00E-15	570.7713	2	28	RYDSNSGGER	29.1	9.40E-06	49184.9
Rpt3	P43686	58	81.8	8.76	1.70E-21	1237.6926	3	34	RIQSIPLVIGQFLEAVDQN(Deamid)TAIVGSTTGSNYYVR	65.5	1.70E-21	47366.7
	P43686	58	81.8	8.76	1.70E-21	1237.335	3	9.6	RIQSIPLVIGQFLEAVDQNTAIVGSTTGSNYYVR	64.1	1.60E-17	47366.7
	P43686	58	81.8	8.76	1.70E-21	1110.0814	2	8.1	ILLELLNQmDGFDQNVNVK	59.5	2.10E-15	47366.7
	P43686	58	81.8	8.76	1.70E-21	846.7469	3	-14	LQQELEFLEVQEEYIKDEQK	69.3	3.80E-14	47366.7
	P43686	58	81.8	8.76	1.70E-21	1185.3668	3	65	IQSIPLVIGQFLEAVDQNTAIVGSTTGSNYYVR	54.8	4.20E-14	47366.7
	P43686	58	81.8	8.76	1.70E-21	1102.1297	2	50	ILLELLNQMDGFDQNVNVK	57.2	5.60E-14	47366.7
	P43686	58	81.8	8.76	1.70E-21	708.3273	3	-14	MNLSEEVDLEDYVARPDK	68.8	9.10E-14	47366.7
	P43686	58	81.8	8.76	1.70E-21	903.8061	3	15	K(CarmK)LQQELEFLEVQEEYIKDEQK	61	1.90E-13	47366.7
	P43686	58	81.8	8.76	1.70E-21	1224.9318	3	-6	Carbamyl-AQDEIPALSVSRPQTGLSFLGPEPEDLEDLYSR	62.3	3.50E-13	47366.7
	P43686	58	81.8	8.76	1.70E-21	713.6727	3	5.8	mNLSEEVDLEDYVARPDK	60.6	3.60E-13	47366.7
	P43686	58	81.8	8.76	1.70E-21	972.4984	2	-22	ENAPAIIFIDEIDAIATK	54.3	4.00E-13	47366.7
	P43686	58	81.8	8.76	1.70E-21	1091.8037	4	34	HSNALVDVLPPEADSSImmLTSDQKPDVMYADIGGMDIQK	45.1	7.50E-13	47366.7
	P43686	58	81.8	8.76	1.70E-21	1237.2709	3	9.4	AQDEIPALSVSRPQTGLsFLGPEPEDLEDLYSR	53.4	1.30E-12	47366.7
	P43686	58	81.8	8.76	1.70E-21	889.473	3	18	KLQQELEFLEVQEEYIKDEQK	65.3	1.80E-12	47366.7
	P43686	58	81.8	8.76	1.70E-21	700.7181	3	2.9	ENAPAIIFIDEIDAIATKR	54.3	2.90E-12	47366.7
	P43686	58	81.8	8.76	1.70E-21	432.2657	3	63	AVAHHTTAAFIR	48.5	3.90E-12	47366.7
	P43686	58	81.8	8.76	1.70E-21	1083.819	4	46	HSNALVDVLPPEADSSIMMLTSDQKPDVMYADIGGMDIQK	43.6	1.10E-11	47366.7
	P43686	58	81.8	8.76	1.70E-21	1094.541	4	19	HSNALVDVLPPEADSSIMMLTSDQK(CarmK)PDVMYADIGGMDIQK	40.8	1.40E-11	47366.7
	P43686	58	81.8	8.76	1.70E-21	697.8948	2	5.2	ADTLDPALLRPGR	57.5	3.70E-11	47366.7
	P43686	58	81.8	8.76	1.70E-21	609.8027	2	-25	Acetyl-mEEIGILVEK	42.9	8.10E-11	47366.7
	P43686	58	81.8	8.76	1.70E-21	1087.7767	4	8.3	HSNALVDVLPPEADSSIMmLTSDQKPDVMYADIGGMDIQK	40.9	1.50E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	693.3794	2	25	EFLHAQEEVKR	54.1	1.50E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	601.8433	2	38	Acetyl-MEEIGILVEK	47.5	1.50E-10	47366.7

	P43686	58	81.8	8.76	1.70E-21	1084.0069	4	-7.5	HSN(Deamid)ALVDVLPPEADSSIMMLTSDQKPDVMYADIGGMDIQK	38.9	1.70E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	1091.8161	4	46	HSNALVDVLPPEADSSIMMLTSDQKPDVmYADIGGmDIQK	36.9	2.30E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	740.7058	3	-8.4	ILLELLN(Deamid)QmDGFDQNVNVK	34.4	2.90E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	598.6606	3	34	TVIKKDEQEHEFYK	52.6	6.00E-10	47366.7
	P43686	58	81.8	8.76	1.70E-21	746.8793	2	25	FDAQTGADREVQR	38.4	1.10E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	740.0988	3	-4.5	ILSTIDRELLKPNASVALHK	41.6	1.60E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	713.9813	3	-21	mN(Deamid)LSEEVDLEDYVARPDK	37.3	2.60E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	701.06	3	23	EN(Deamid)APAIIFIDEIDAIATKR	35.1	2.70E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	563.6306	3	-7.3	EAVELPLTHFELYK	44.8	4.10E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	740.4382	3	11	ILSTIDRELLKPN(Deamid)ASVALHK	43.4	6.30E-09	47366.7
	P43686	58	81.8	8.76	1.70E-21	612.7861	2	39	DEQEHEFYK	39.4	1.30E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	615.2985	2	-21	EFLHAQEEVK	50.5	1.30E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	424.2677	2	98	Carbamyl-VIMATNR	33.5	1.40E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	439.7345	2	-13	qIGIDPPR	26.8	1.60E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	488.2895	3	11	Carbamyl-ELLKPNASVALHK	39.8	2.50E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	389.2102	3	-67	RLIFSTITSK	36.8	2.80E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	432.2195	2	-9.9	Carbamyl-VImATNR	32.3	3.00E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	735.3928	3	17	ILLELLN(Deamid)QMDGFDQNVNVK	29.8	4.10E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	824.9295	2	22	RFDAQTGADREVQR	45.3	7.10E-08	47366.7
	P43686	58	81.8	8.76	1.70E-21	396.2079	2	4.9	YLGEGPR	33.2	1.00E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	676.8307	2	31	KDEQEHEFYK	52.5	1.10E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	928.5569	4	72	RIQSIPLVIGQFLEAVDQNTAIVGSTTGSN(Deamid)YYVR	28.9	1.10E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	566.0979	4	32	ILSTIDRELLK(CarmK)PNASVALHK	29.9	2.50E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	613.0083	3	53	TVIK(CarmK)KDEQEHEFYK	37.4	2.70E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	972.9255	2	-89	EN(Deamid)APAIIFIDEIDAIATK	30.4	2.70E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	505.278	2	-44	LIFSTITSK	33.3	5.00E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	679.3817	2	33	KEFLHAQEEVK	43.9	5.10E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	438.5583	3	-55	K(CarmK)IEFPLPDRR	25.9	8.30E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	1238.032	3	43	RIQSIPLVIGQFLEAVDQN(Deamid)TAIVGSTTGSN(Deamid)YYVR	29.8	8.30E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	490.7161	2	-19	FDAQTGADR	27.2	9.50E-07	47366.7
	P43686	58	81.8	8.76	1.70E-21	496.7495	2	-50	VVGSEFVQK	37	2.10E-06	47366.7
	P43686	58	81.8	8.76	1.70E-21	635.8739	2	11	KIEFPLPDRR	40.3	2.50E-06	47366.7
	P43686	58	81.8	8.76	1.70E-21	722.9732	3	-37	Carbamyl-MN(Deamid)LSEEVDLEDYVARPDK	29.8	2.80E-06	47366.7
	P43686	58	81.8	8.76	1.70E-21	379.2277	4	51	KEFLHAQEEVKR	27.1	3.10E-06	47366.7
	P43686	58	81.8	8.76	1.70E-21	372.2252	3	32	KIEFPLPDR	28.4	9.30E-06	47366.7
Rpn5	O00232	56	59.6	9.05	5.40E-16	756.3871	3	30	K(CarmK)GSLESPATDVFGSTEEGEKR	63.6	5.40E-16	52773.7
	O00232	56	59.6	9.05	5.40E-16	903.1614	3	27	RmAQLLDLSVDESEAFLSNLVVNK	56.7	6.40E-16	52773.7
	O00232	56	59.6	9.05	5.40E-16	1071.4936	2	-22	EAASILQELQVETYGSmEK	60.5	2.20E-15	52773.7
	O00232	56	59.6	9.05	5.40E-16	805.4257	3	-3.7	SVVLYVILAPFDNEQSDLVHR	71.5	1.70E-14	52773.7
	O00232	56	59.6	9.05	5.40E-16	1034.4945	2	4.8	KGSLESPATDVFGSTEEGEK	60.3	4.00E-14	52773.7
	O00232	56	59.6	9.05	5.40E-16	1048.4882	2	-4.2	GSLESPATDVFGSTEEGEKR	69.5	3.90E-13	52773.7
	O00232	56	59.6	9.05	5.40E-16	897.4608	2	-4	TTHLIAKEEmIHNLQ	48.3	1.10E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	970.4117	2	-31	GSLESPATDVFGSTEEGEK	64.5	1.30E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	742.037	3	11	KGSLESPATDVFGSTEEGEKR	70.8	2.30E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	805.7574	3	0.87	SVVLYVILAPFDN(Deamid)EQSDLVHR	47.4	2.30E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	1276.1659	2	11	mAQLLDLSVDESEAFLSNLVVNK	48.2	2.40E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	707.3074	2	-17	MEVDYSATVDQR	54	3.20E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	867.4157	2	-31	EWDLLNENImLLSK	52.1	3.60E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	966.4863	3	25	EQN(Deamid)GDVKEAASILQELQVETYGSMEK	51.1	4.70E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	897.8161	3	12	RMAQLLDLSVDESEAFLSNLVVNK	55.8	7.90E-12	52773.7
	O00232	56	59.6	9.05	5.40E-16	1268.1405	2	-11	MAQLLDLSVDESEAFLSNLVVNK	45.8	1.40E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	848.4648	3	34	DPNNLLNDWSQKLNSLMSLVNK	41.3	1.50E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	889.4451	2	-25	TTHLIAKEEMIHNLQ	50.2	4.80E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	736.8056	2	-19	Carbamyl-mEVDYSATVDQR	44.7	5.10E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	779.4272	2	-17	Carbamyl-LQEVIETLLSLEK	50.5	6.40E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	557.2338	2	-21	Carbamyl-TASDmVSTSR	33.5	8.10E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	1063.5041	2	-15	EAASILQELQVETYGSMEK	55.7	8.10E-11	52773.7
	O00232	56	59.6	9.05	5.40E-16	576.2895	3	4.1	WSTLVEDYGMELRK	45.8	2.30E-10	52773.7
	O00232	56	59.6	9.05	5.40E-16	859.4295	2	-18	EWDLLNENIMLLSK	45.8	3.00E-10	52773.7
	O00232	56	59.6	9.05	5.40E-16	807.8536	2	-29	WSTLVEDYGmELR	38.5	3.30E-10	52773.7
	O00232	56	59.6	9.05	5.40E-16	567.7754	2	-66	LNSLmSLVNK	39.5	9.30E-10	52773.7
	O00232	56	59.6	9.05	5.40E-16	549.2398	2	-15	Carbamyl-TASDMVSTSR	43.3	1.40E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	824.3432	2	-11	AIYDtPCIQAESEK	40.7	1.90E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	709.397	2	24	TLATIKEQN(Deamid)GDVK	54.8	1.90E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	722.3191	2	-38	DPNNLLNDWSQK	44	2.10E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	757.3501	3	-38	EAASILQELQVETYGSmEKK	30.9	3.30E-09	52773.7

	O00232	56	59.6	9.05	5.40E-16	722.8477	2	12	DPN(Deamid)NLLNDWSQK	41.1	3.40E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	723.3237	2	-9.8	DPNN(Deamid)LLN(Deamid)DWSQK	34.7	4.80E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	571.2905	2	-0.58	LFTTMELMR	41.3	5.70E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	725.3881	2	12	ERVEFILEQMR	49.8	6.60E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	587.2585	2	-46	LFTTmELmR	28.8	7.80E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	581.6385	3	34	WSTLVEDYGmELRK	35.2	8.00E-09	52773.7
	O00232	56	59.6	9.05	5.40E-16	471.5528	3	-44	FFQEENTEKLK	42.1	1.10E-08	52773.7
	O00232	56	59.6	9.05	5.40E-16	799.8453	2	-43	WSTLVEDYGMELR	42.4	1.80E-08	52773.7
	O00232	56	59.6	9.05	5.40E-16	582.788	2	-34	VEFILEQMR	41.6	3.60E-08	52773.7
	O00232	56	59.6	9.05	5.40E-16	586.2602	2	-11	FFQEENTEK	48	6.20E-08	52773.7
	O00232	56	59.6	9.05	5.40E-16	560.3103	2	4.9	LN(Deamid)SLMSLVNK	34.3	9.30E-08	52773.7
	O00232	56	59.6	9.05	5.40E-16	650.365	2	-23	Carbamyl-LAGIINFQRPK	56	1.00E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	419.9269	3	28	LAGIIN(Deamid)FQRPK	34	1.20E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	722.8226	2	-22	DPNNLLN(Deamid)DWSQK	35.3	1.40E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	559.7879	2	-49	LNSLMSLVNK	40.1	3.90E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	507.2409	2	2.4	EEMIHNLQ	32.3	3.90E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	607.6654	3	27	TTHLIAK(CarmK)EEMIHNLQ	26.3	4.60E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	648.3519	3	-20	LQEVIETLLSLEK(CarmK)QTR	31.6	5.90E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	433.761	2	35	VVEHNIR	28.9	6.00E-07	52773.7
	O00232	56	59.6	9.05	5.40E-16	600.7959	2	7.8	Carbamyl-LFTTMELmR	22	1.50E-06	52773.7
	O00232	56	59.6	9.05	5.40E-16	586.7412	2	-30	FFQEEN(Deamid)TEK	24.5	2.00E-06	52773.7
	O00232	56	59.6	9.05	5.40E-16	461.2506	2	-11	IYVEIER	36	3.30E-06	52773.7
	O00232	56	59.6	9.05	5.40E-16	392.2591	2	49	TTHLIAK	28.5	4.30E-06	52773.7
	O00232	56	59.6	9.05	5.40E-16	650.3805	2	0.42	LAGIINFQRPK(CarmK)	24.4	6.40E-06	52773.7
	O00232	56	59.6	9.05	5.40E-16	971.8335	3	41	EQN(Deamid)GDVKEAASILQELQVETYGSmEK	22.4	7.90E-06	52773.7
Rpt1	P35998	55	80.6	8.04	1.60E-15	671.3511	2	49	SVCTEAGMFAIR	35.8	1.70E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	933.7862	3	20	IDPTVTMMQVEEKPDVTYSDVGGCK	58.9	1.60E-15	48503.1
	P35998	55	80.6	8.04	1.60E-15	1068.9934	2	-15	FVVDLSDQVAPTDIEEGmR	57.7	1.60E-15	48503.1
	P35998	55	80.6	8.04	1.60E-15	746.466	3	51	FVNLGIEPPKGVLLFGPPGTGK	54	1.90E-14	48503.1
	P35998	55	80.6	8.04	1.60E-15	1061.0012	2	-10	FVVDLSDQVAPTDIEEGMR	56	1.60E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	690.2801	2	-21	FDDGAGGDNEVQR	59.6	1.70E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	889.4056	2	-42	TmLELINQLDGFDPR	58.1	4.80E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	402.5911	3	45	YQIHIPLPPK	35	7.00E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	690.7924	2	8.2	FDDGAGGDN(Deamid)EVQR	51.1	9.60E-12	48503.1
	P35998	55	80.6	8.04	1.60E-15	1116.9017	3	-4.9	ESDTGLAPPALWDLAADKQTLQSEQPLQVAR	50.6	1.20E-11	48503.1
	P35998	55	80.6	8.04	1.60E-15	956.2098	3	33	KINELTGIKESDTGLAPPALWDLAADK	55	1.30E-11	48503.1
	P35998	55	80.6	8.04	1.60E-15	739.4065	2	11	IATEKDFLEAVNK	60.7	2.80E-11	48503.1
	P35998	55	80.6	8.04	1.60E-15	611.3139	3	-29	IINADSEDPKYIINVK	61.9	3.10E-11	48503.1
	P35998	55	80.6	8.04	1.60E-15	720.3445	2	-64	qVEDDIQQLLKK	51	9.20E-11	48503.1
	P35998	55	80.6	8.04	1.60E-15	563.2893	3	-57	LREVVETPLLHPER	50.6	1.90E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	557.2868	2	-57	FVNLGIEPPK	35.3	2.00E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	740.9547	2	86	qTLQSEQPLQVAR	52.8	3.00E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	881.437	2	-9.8	TMLELINQLDGFDPR	55.3	3.50E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	623.9734	3	-9.2	ESDTGLAPPALWDLAADK	51.4	3.60E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	770.9059	2	-2.1	Carbamyl-QTLQSEQPLQVAR	47	6.30E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	531.7387	2	-14	TYGQSTYSR	42.5	7.80E-10	48503.1
	P35998	55	80.6	8.04	1.60E-15	913.4778	3	-2.1	INELTGIKESDTGLAPPALWDLAADK	42.7	1.00E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	889.9211	2	-16	TmLELIN(Deamid)QLDGFDPR	44.7	1.30E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	702.3926	2	18	KIEFSLPDLEGR	48.8	2.60E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	723.8652	2	-25	K(CarmK)IEFSLPDLEGR	39.2	2.80E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	709.891	2	7.7	EVVETPLLHPER	53.4	3.00E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	581.8124	2	28	PDYLGADQRK	40.5	4.50E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	746.7303	3	-34	FVN(Deamid)LGIEPPKGVLLFGPPGTGK	40.1	4.80E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	760.756	3	-9.5	FVNLGIEPPK(CarmK)GVLLFGPPGTGK	33.8	5.10E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	491.9148	3	-17	TKEDEKDDKPIR	53.5	6.60E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	881.9197	2	-20	TMLELIN(Deamid)QLDGFDPR	41.1	8.00E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	756.3929	3	-4.7	Carbamyl-VLMATNRPDTLDPALMRPGR	46.8	9.90E-09	48503.1
	P35998	55	80.6	8.04	1.60E-15	638.36	2	43	IEFSLPDLEGR	41	1.80E-08	48503.1
	P35998	55	80.6	8.04	1.60E-15	656.3269	2	-25	qVEDDIQQLLK	48.5	2.00E-08	48503.1
	P35998	55	80.6	8.04	1.60E-15	593.3219	2	-22	Carbamyl-GVLLFGPPGTGK	42.3	3.30E-08	48503.1
	P35998	55	80.6	8.04	1.60E-15	378.2366	3	42	DIRFELLAR	41	9.00E-08	48503.1
	P35998	55	80.6	8.04	1.60E-15	477.7043	2	-35	Carbamyl-ELFEmAR	30.7	9.70E-08	48503.1
	P35998	55	80.6	8.04	1.60E-15	517.7418	2	-13	PDYLGADQR	36	1.70E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	747.3856	3	-9.7	VLmATNRPDTLDPALMRPGR	41.6	2.30E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	579.3057	2	-32	ALDEGDIALLK	47	2.40E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	686.359	2	-0.48	Carbamyl-QVEDDIQQLLK	36.8	2.40E-07	48503.1

	P35998	55	80.6	8.04	1.60E-15	535.9753	3	17	KIATEKDFLEAVNK	24.3	3.90E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	747.3881	3	-6.3	VLMATNRPDTLDPALmRPGR	34	4.40E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	1109.0523	2	-16	TMLELINQLDGFDPRGNIK(CarmK)	35.7	4.90E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	728.9187	2	20	QVEDDIQQLLKK	45.9	5.80E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	361.1699	2	-42	Carbamyl-FSATPR	21.6	6.30E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	659.861	2	-17	DFLEAVNK(CarmK)VIK	29.4	8.60E-07	48503.1
	P35998	55	80.6	8.04	1.60E-15	468.2153	2	-64	DFLEAVNK	27.9	1.00E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	374.905	3	42	THIFKIHAR	23.8	1.30E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	970.5143	3	0.97	KINELTGIK(CarmK)ESDTGLAPPALWDLAADK	25.9	1.60E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	508.2903	2	-4.9	VIGSELVQK(CarmK)	27.9	1.90E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	580.781	2	-16	LCPNSTGAEIR	33.9	2.40E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	551.2746	2	-0.2	IINADSEDPK	35.9	3.30E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	564.7846	4	-19	VLmATNRPDTLDPALmRPGR	20	8.00E-06	48503.1
	P35998	55	80.6	8.04	1.60E-15	444.263	2	-0.95	INELTGIK	31.6	8.10E-06	48503.1
Rpn7	Q15008	55	76.1	8.79	5.90E-16	792.0772	3	-13	TFVTYTVYVSMIALERPDLR	58.4	5.90E-16	45531.7
	Q15008	55	76.1	8.79	5.90E-16	654.9624	3	-72	PLENLEEEGLPKNPDLR	69.9	1.40E-15	45531.7
	Q15008	55	76.1	8.79	5.90E-16	952.9621	2	-15	YSVFFQSLAVVEQEMK	52.2	6.00E-15	45531.7
	Q15008	55	76.1	8.79	5.90E-16	683.6601	3	-34	YSVFFQSLAVVEQEmKK	44.6	9.60E-14	45531.7
	Q15008	55	76.1	8.79	5.90E-16	497.2144	3	-77	GDAAVRDELmAAVR	50.8	2.20E-13	45531.7
	Q15008	55	76.1	8.79	5.90E-16	629.3933	3	34	TVALGHRLDIVFYLLR	47	4.20E-13	45531.7
	Q15008	55	76.1	8.79	5.90E-16	878.1536	3	57	SLTLGYMAEAFGVGVEFIDQELSR	51	1.10E-12	45531.7
	Q15008	55	76.1	8.79	5.90E-16	663.0644	3	4.4	VIK(CarmK)GAEILEVLHSLPAVR	56.5	1.40E-12	45531.7
	Q15008	55	76.1	8.79	5.90E-16	960.9536	2	-21	YSVFFQSLAVVEQEmK	48.3	1.50E-12	45531.7
	Q15008	55	76.1	8.79	5.90E-16	793.9031	2	6.7	IGLFYmDNDLITR	57.2	1.50E-12	45531.7
	Q15008	55	76.1	8.79	5.90E-16	863.4003	3	-9.7	QAAELFLDTVSTFTSYELmDYK	51.5	2.60E-12	45531.7
	Q15008	55	76.1	8.79	5.90E-16	1003.4907	2	-17	Acetyl-PLEN(Deamid)LEEEGLPKNPDLR	49.4	1.70E-11	45531.7
	Q15008	55	76.1	8.79	5.90E-16	716.0427	3	46	ANEDELKRLDEELEDAEK	53.6	2.00E-11	45531.7
	Q15008	55	76.1	8.79	5.90E-16	785.8485	2	-66	IGLFYMDNDLITR	51.3	3.10E-11	45531.7
	Q15008	55	76.1	8.79	5.90E-16	823.9453	2	-24	Carbamyl-GAEILEVLHSLPAVR	61.1	8.80E-11	45531.7
	Q15008	55	76.1	8.79	5.90E-16	858.1198	3	50	QAAELFLDTVSTFTSYELMDYK	42.9	1.20E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	797.4183	3	-0.89	TFVTYTVYVSmIALERPDLR	40.4	1.30E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	749.0663	3	40	RLDEELEDAEKNLGESEIR	55.3	1.80E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	779.9411	2	41	SLDWQIDVDLLNK	45.5	1.80E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	928.9754	2	-15	IDKVNEIVETNRPDSK	62	2.10E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	1045.0006	2	0.37	LDEELEDAEKNLGESEIR	46.8	3.30E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	678.3714	3	29	YSVFFQSLAVVEQEMKK	38.1	6.50E-10	45531.7
	Q15008	55	76.1	8.79	5.90E-16	634.0143	3	27	IDK(CarmK)VNEIVETNRPDSK	48.4	1.10E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	737.3807	2	4.3	GDAAVRDELMAAVR	58.3	1.20E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	684.8311	2	-25	PLEN(Deamid)LEEEGLPK	36.5	1.20E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	782.8849	2	11	NLGESEIRDAMMAK	57.6	1.30E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	371.1823	3	-84	FLLSLPEHR	44.6	1.80E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	740.3822	2	-1.3	IHAYSQLLESYR	54.2	1.80E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	750.828	2	-78	VNEIVETNRPDSK	58.1	2.60E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	684.3186	2	-55	PLENLEEEGLPK	55.3	2.90E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	639.3573	2	18	IGDKEGALTAFR	54	5.20E-09	45531.7
	Q15008	55	76.1	8.79	5.90E-16	620.0001	3	16	IDKVN(Deamid)EIVETNRPDSK	37.3	1.10E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	638.783	2	-17	SLIEEGGDWDR	36.6	1.70E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	669.3276	3	-25	PLENLEEEGLPK(CarmK)NPDLR	43.9	2.20E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	786.395	2	3.4	IGLFYMDN(Deamid)DLITR	30.6	2.50E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	673.7976	2	-41	RLDEELEDAEK	50.5	3.30E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	716.8223	2	-31	SLIEEGGDWDRR	52.5	3.30E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	444.9211	3	48	KDWLFAPHYR	33.7	4.30E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	790.8845	2	13	NLGESEIRDAMmAK	40.5	5.10E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	469.2453	3	-42	IGDKEGALTAFRK	34.7	5.30E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	763.349	3	-29	RLDEELEDAEK(CarmK)NLGESEIR	34.1	6.80E-08	45531.7
	Q15008	55	76.1	8.79	5.90E-16	501.2688	3	28	VN(Deamid)EIVETNRPDSK	43.6	1.10E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	772.3738	2	-20	VNEIVETNRPDSK(CarmK)	34.6	1.70E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	460.7279	2	-2.2	DELmAAVR	24.8	1.80E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	602.7947	2	-6.4	DWLFAPHYR	41.7	2.20E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	712.6506	3	-59	Acetyl-MPLENLEEEGLPKNPDLR	31.3	2.70E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	576.3231	2	-38	LDIVFYLLR	39.7	4.00E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	464.7856	2	7.1	KGDLLLNR	34.9	5.30E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	595.7544	2	-34	LDEELEDAEK	34.8	5.60E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	690.854	2	7.3	NWQYQETIK(CarmK)K	31.9	8.10E-07	45531.7
	Q15008	55	76.1	8.79	5.90E-16	368.2183	3	50	KANEDELKR	32.4	1.50E-06	45531.7
	Q15008	55	76.1	8.79	5.90E-16	432.724	2	-19	EGALTAFR	29.6	1.50E-06	45531.7

	Q15008	55	76.1	8.79	5.90E-16	605.3258	2	45	NWQYQETIK	34	1.90E-06	45531.7
	Q15008	55	76.1	8.79	5.90E-16	669.3471	2	1.5	NWQYQETIKK	35.2	2.80E-06	45531.7
	Q15008	55	76.1	8.79	5.90E-16	459.2246	2	-29	NLGESEIR	35.2	3.10E-06	45531.7
Rpn9	Q9UNM6	53	75.3	8.41	1.20E-15	660.1038	4	36	MKDVPGFLQQSQSSGPGQPAVWHR	63.9	1.20E-15	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	829.096	3	35	ETIEDVEEmLNNLPGVTSVHSR	63.8	2.60E-15	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	793.3945	3	2.2	DVPGFLQQSQSSGPGQPAVWHR	60.5	6.30E-15	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	823.7403	3	5.6	ETIEDVEEMLNNLPGVTSVHSR	64.5	1.30E-14	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1067.564	3	-13	AFTLGLAGLLGEGVFNFGELLMHPVLESLR	64.2	8.40E-14	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	851.0365	2	14	VNPLSLVEIILHVVR	60.4	1.20E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	704.059	3	28	TAWGQQPDLAANEAQLLRK	61.1	1.20E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1004.9861	2	-5.7	qWLIDTLYAFNSGNVER	56.6	1.70E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	829.3645	3	-37	ETIEDVEEmLNN(Deamid)LPGVTSVHSR	50.1	5.70E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	664.1073	4	43	mKDVPGFLQQSQSSGPGQPAVWHR	53	6.60E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1235.6144	2	18	ETIEDVEEMLN(Deamid)NLPGVTSVHSR	57.4	8.80E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	829.4197	3	29	ETIEDVEEmLN(Deamid)NLPGVTSVHSR	51	8.80E-13	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1067.9098	3	4.1	AFTLGLAGLLGEGVFN(Deamid)FGELLMHPVLESLR	48.5	1.10E-12	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1072.9756	3	62	AFTLGLAGLLGEGVFNFGELLmHPVLESLR	62.6	1.60E-12	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	991.5527	2	45	TAWGQQPDLAANEAQLLR	56.6	1.40E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	893.3944	2	-19	SmEmLVEHQAHDILT	38.4	1.80E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	804.3607	2	-22	YYQTIGNHASYYK	55.6	2.00E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	803.3772	2	-22	qmTDPNVALTFLEK	53.5	2.10E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	528.9196	3	7.1	LYEN(Deamid)FISEFEHR	48.8	3.80E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	702.36	2	-49	ITVNEVELLVmK	48.7	6.40E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	888.5013	4	50	LNIGDLQVTKETIEDVEEMLNNLPGVTSVHSR	40.8	7.60E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	531.3191	2	75	qLTFEEIAK	41.1	8.70E-11	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	885.4164	2	3.4	SMEmLVEHQAHDILT	41.4	1.80E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	585.3146	2	29	VHmTWVQPR	35.1	1.80E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	675.9983	3	-11	QWLIDTLYAFNSGNVER	51.1	2.60E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	811.8994	2	-11	QmTDPNVALTFLEK	47.3	2.80E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	610.3533	3	18	ALSVGLVK(CarmK)GSIDEVDKR	43.5	6.80E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	536.9081	3	-14	YYQTIGN(Deamid)HASYYK	49.6	8.40E-10	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	528.5436	3	-84	LYENFISEFEHR	51.3	1.00E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	795.371	2	-34	qMTDPNVALTFLEK	51.6	1.10E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	803.8741	2	-46	QMTDPNVALTFLEK	46.8	1.20E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	877.385	2	-35	SMEMLVEHQAHDILT	43	1.50E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	694.8796	2	-13	ITVN(Deamid)EVELLVMK	39.4	4.20E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	568.0008	3	-22	VN(Deamid)PLSLVEIILHVVR	27.9	5.10E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	838.0949	3	19	NTDRQWLIDTLYAFNSGNVER	50.9	5.70E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	531.2558	2	-17	Carbamyl-GSIDEVDKR	41.1	8.20E-09	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	1073.3095	3	68	AFTLGLAGLLGEGVFN(Deamid)FGELLmHPVLESLR	39.3	1.90E-08	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	572.7442	2	-13	sSDEAVILCK	35.5	2.10E-08	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	694.4183	2	31	ITVNEVELLVMK	47	2.60E-08	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	577.2807	2	-34	VHMTWVQPR	37.6	4.60E-08	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	430.2164	2	6.9	FYDLSSK	32.3	1.20E-07	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	550.8093	2	-18	LNIGDLQVTK	39.9	2.30E-07	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	655.3627	2	18	RVHMTWVQPR	37	3.10E-07	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	894.1	3	-7.3	MK(CarmK)DVPGFLQQSQSSGPGQPAVWHR	31.7	9.70E-07	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	539.8027	2	19	QLTFEEIAK	37.2	1.10E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	824.4051	3	16	ETIEDVEEMLN(Deamid)N(Deamid)LPGVTSVHSR	24.6	1.50E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	892.4345	4	-24	LNIGDLQVTKETIEDVEEmLNNLPGVTSVHSR	25.3	1.70E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	451.7017	2	-33	FYDLSSK(CarmK)	18.1	1.70E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	358.7197	2	2.7	TAIGALK(CarmK)	20.6	2.40E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	600.7818	2	-24	DLPVSEQQER	47.6	6.80E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	532.7504	2	-33	SSDEAVILCK	26.9	7.40E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	702.648	3	-35	YYQTIGNHASYYK(CarmK)DALR	25.6	8.80E-06	42918.8
	Q9UNM6	53	75.3	8.41	1.20E-15	814.8626	3	61	SAKITVN(Deamid)EVELLVMKALSVGLVK	18.6	9.50E-06	42918.8
Rpt4	P62333	41	58.6	8.96	2.00E-17	1112.5389	3	19	EVDPLVYN(Deamid)MSHEDPGNVSYSEIGGLSEQIR	60.3	2.00E-17	44173.4
	P62333	41	58.6	8.96	2.00E-17	684.0129	3	25	TLMELLNQmDGFDTLHR	65.5	3.60E-17	44173.4
	P62333	41	58.6	8.96	2.00E-17	689.2817	3	-67	TLmELLNQmDGFDTLHR	70.5	4.50E-14	44173.4
	P62333	41	58.6	8.96	2.00E-17	683.9982	3	3.3	TLmELLNQMDGFDTLHR	67.4	6.10E-14	44173.4
	P62333	41	58.6	8.96	2.00E-17	798.8206	2	-41	ADHDFVVQEDFmK	59.1	8.40E-14	44173.4
	P62333	41	58.6	8.96	2.00E-17	1112.1819	3	-6.6	EVDPLVYNMSHEDPGNVSYSEIGGLSEQIR	54.5	1.90E-13	44173.4
	P62333	41	58.6	8.96	2.00E-17	678.6006	3	-94	TLMELLNQMDGFDTLHR	70.3	1.30E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	690.8944	2	43	VALDMTTLTImR	54.5	1.70E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	1117.8271	3	-20	EVDPLVYN(Deamid)mSHEDPGNVSYSEIGGLSEQIR	54.6	2.10E-12	44173.4

	P62333	41	58.6	8.96	2.00E-17	1117.5301	3	8.2	EVDPLVYNmSHEDPGNVSYSEIGGLSEQIR	48	2.10E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	678.9936	3	1.9	TLMELLN(Deamid)QMDGFDTLHR	58.6	3.10E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	855.4601	2	3.6	VVSSSIVDKYIGESAR	65.5	5.30E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	746.7334	3	0.5	MIMATNRPDTLDPALLRPGR	55.4	5.90E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	499.2087	3	-68	FSEGTSADREIQR	45.4	7.50E-12	44173.4
	P62333	41	58.6	8.96	2.00E-17	790.8714	2	19	ADHDFVVQEDFMK	57	1.00E-11	44173.4
	P62333	41	58.6	8.96	2.00E-17	698.8452	2	-25	VALDmTTLTImR	44.8	1.40E-11	44173.4
	P62333	41	58.6	8.96	2.00E-17	720.955	2	42	ALQSVGQIVGEVLK	47.5	3.10E-11	44173.4
	P62333	41	58.6	8.96	2.00E-17	682.8322	2	-52	VALDMTTLTIMR	50.9	1.10E-10	44173.4
	P62333	41	58.6	8.96	2.00E-17	690.8354	2	-43	VALDmTTLTIMR	50.9	1.50E-10	44173.4
	P62333	41	58.6	8.96	2.00E-17	752.0789	3	19	MImATNRPDTLDPALLRPGR	41	3.30E-10	44173.4
	P62333	41	58.6	8.96	2.00E-17	1112.8294	3	-14	EVDPLVYN(Deamid)MSHEDPGN(Deamid)VSYSEIGGLSEQIR	43.1	6.50E-10	44173.4
	P62333	41	58.6	8.96	2.00E-17	582.7744	2	-20	LSDGFNGADLR	46.8	1.30E-09	44173.4
	P62333	41	58.6	8.96	2.00E-17	653.2881	2	-93	IHIDLPNEQAR	47.5	1.30E-09	44173.4
	P62333	41	58.6	8.96	2.00E-17	637.3399	2	24	HGEIDYEAIVK	50.5	2.20E-09	44173.4
	P62333	41	58.6	8.96	2.00E-17	478.9342	3	13	KIHIDLPN(Deamid)EQAR	35.9	3.10E-09	44173.4
	P62333	41	58.6	8.96	2.00E-17	899.5231	2	36	EVIELPLTNPELFQR	52.5	8.50E-09	44173.4
	P62333	41	58.6	8.96	2.00E-17	583.2508	2	-46	LSDGFN(Deamid)GADLR	52.5	1.00E-08	44173.4
	P62333	41	58.6	8.96	2.00E-17	485.2347	2	36	FSEGTSADR	33.4	2.00E-08	44173.4
	P62333	41	58.6	8.96	2.00E-17	717.4117	2	21	KIHIDLPNEQAR	46.5	3.90E-08	44173.4
	P62333	41	58.6	8.96	2.00E-17	473.7056	2	-5	EmFNYAR	24.3	7.30E-08	44173.4
	P62333	41	58.6	8.96	2.00E-17	418.7685	2	37	IHAGPITK	35.3	2.30E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	732.7322	3	-9.2	ELREVIELPLTNPELFQR	39.8	2.90E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	664.2998	2	-16	NVCTEAGmFAIR	23.2	3.10E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	551.2675	3	-16	RFSEGTSADREIQR	33.2	6.80E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	467.2583	2	-17	VVSSSIVDK	40.9	8.90E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	465.7228	2	26	EMFNYAR	28.7	9.30E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	629.8378	4	65	Carbamyl-LSDGFNGADLRNVCTEAGmFAIR	27.4	9.80E-07	44173.4
	P62333	41	58.6	8.96	2.00E-17	653.822	2	-29	IHIDLPN(Deamid)EQAR	28.4	1.70E-06	44173.4
	P62333	41	58.6	8.96	2.00E-17	362.2308	2	-31	VGIIPPK	32.5	1.70E-06	44173.4
	P62333	41	58.6	8.96	2.00E-17	563.2848	2	30	RFSEGTSADR	36.2	3.10E-06	44173.4
	P62333	41	58.6	8.96	2.00E-17	367.7063	2	-4	LDYKPV	17.7	4.90E-06	44173.4
Alpha 6	P25786	43	74.9	8.17	5.20E-17	726.3136	3	-8.6	AQPAQPADEPAEKADEPmEH	62.2	5.20E-17	29555.9
	P25786	43	74.9	8.17	5.20E-17	720.9702	3	-25	AQPAQPADEPAEKADEPMEH	58.2	1.10E-15	29555.9
	P25786	43	74.9	8.17	5.20E-17	1000.1302	3	-6.4	DLEFTIYDDDDVSPFLEGLEERPQR	58.6	1.30E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	696.018	3	-48	ILHVDNHIGISIAGLTADAR	59	2.70E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	769.0452	3	35	KAQPAQPADEPAEKADEPmEH	52	3.70E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	573.0311	4	25	KAQPAQPADEPAEKADEPMEH	54	5.00E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	778.0334	3	15	K(CarmK)AQPAQPADEPAEKADEPMEH	48.7	7.10E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	724.3669	2	1	IHQIEYAmEAVK	61.3	9.20E-14	29555.9
	P25786	43	74.9	8.17	5.20E-17	889.8602	2	-54	NQYDNDVTVWSPQGR	52	1.10E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	890.3922	2	-9.1	N(Deamid)QYDNDVTVWSPQGR	47.2	3.40E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	444.925	3	14	FVFDRPLPVSR	50.8	4.10E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	737.8767	2	7	Carbamyl-IHQIEYAMEAVK	51.3	6.50E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	890.3866	2	-15	NQYDN(Deamid)DVTVWSPQGR	48.9	6.80E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	1042.822	3	-12	DLEFTIYDDDDVSPFLEGLEERPQRK	53.4	7.70E-12	29555.9
	P25786	43	74.9	8.17	5.20E-17	783.3401	3	-17	K(CarmK)AQPAQPADEPAEKADEPmEH	34.9	6.40E-11	29555.9
	P25786	43	74.9	8.17	5.20E-17	554.3584	2	8.8	THAVLVALKR	44.1	7.40E-11	29555.9
	P25786	43	74.9	8.17	5.20E-17	696.3982	3	27	ILHVDN(Deamid)HIGISIAGLTADAR	47.2	1.50E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	676.3193	2	-13	AQPAQPADEPAEK	52.9	1.60E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	740.6498	3	-7.3	AQPAQPADEPAEK(CarmK)ADEPmEH	26.6	5.80E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	890.8813	2	-12	N(Deamid)QYDN(Deamid)DVTVWSPQGR	42.8	7.10E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	738.7623	3	17	KILHVDNHIGISIAGLTADAR	65.1	8.90E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	735.3222	3	-1.8	AQPAQPADEPAEK(CarmK)ADEPMEH	32.5	9.50E-10	29555.9
	P25786	43	74.9	8.17	5.20E-17	619.2684	3	-6.3	HmSEFmECNLNELVK	39.9	1.10E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	389.5613	3	-48	SKTHAVLVALK	41.8	1.20E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	413.5612	3	7.3	RAQSELAAHQK	43.1	1.90E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	476.2672	2	-75	THAVLVALK	38.4	5.80E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	739.0775	3	-0.68	KILHVDN(Deamid)HIGISIAGLTADAR	46.2	6.70E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	842.4711	2	-24	LVSLIGSK(CarmK)TQIPTQR	41.5	8.10E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	441.6433	3	67	SKTHAVLVALKR	26.9	8.60E-09	29555.9
	P25786	43	74.9	8.17	5.20E-17	562.6387	3	-3.1	ALRETLPAEQDLTTK	43	1.80E-08	29555.9
	P25786	43	74.9	8.17	5.20E-17	761.873	2	-7.2	Carbamyl-KAQPAQPADEPAEK	35.6	2.10E-08	29555.9
	P25786	43	74.9	8.17	5.20E-17	444.2571	2	-14	N(Deamid)VSIGIVGK	31	2.40E-08	29555.9
	P25786	43	74.9	8.17	5.20E-17	673.2804	2	-97	ETLPAEQDLTTK	45.4	3.50E-08	29555.9
	P25786	43	74.9	8.17	5.20E-17	430.263	2	-7	LVSLIGSK(CarmK)	27.3	8.70E-08	29555.9

	P25786	43	74.9	8.17	5.20E-17	403.9098	3	-14	SK(CarmK)THAVLVALK	35.5	1.80E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	422.2153	2	-40	qGSATVGLK	35.9	2.00E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	541.8075	2	45	AQSELAAHQK	24.4	2.40E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	430.7701	2	57	QGSATVGLK	32.5	3.70E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	443.7681	2	-7.7	NVSIGIVGK	32.5	5.20E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	427.9098	3	38	RAQSELAAHQK(CarmK)	25.8	8.40E-07	29555.9
	P25786	43	74.9	8.17	5.20E-17	465.2681	2	-13	NVSIGIVGK(CarmK)	24.8	2.40E-06	29555.9
	P25786	43	74.9	8.17	5.20E-17	408.7531	2	-24	LVSLIGSK	38.3	4.60E-06	29555.9
	P25786	43	74.9	8.17	5.20E-17	425.6747	2	-36	QECLDSR	22.2	4.90E-06	29555.9
Rpn8	P51665	40	70.1	9.14	7.90E-16	671.1159	4	51	TFEHVTSEIGAEEAEEVGVEHLLR	74.5	7.90E-16	37025.7
	P51665	40	70.1	9.14	7.90E-16	858.3882	3	-29	DLGLPTEAYISVEEVHDDGTPTSK	63.4	6.70E-15	37025.7
	P51665	40	70.1	9.14	7.90E-16	1133.5253	4	8.2	KVLDVSNSFAVPFDEDDKDDSVWFLDHDYLENMYGMFK	45.5	9.40E-14	37025.7
	P51665	40	70.1	9.14	7.90E-16	648.404	3	39	VVVHPLVLLSVVDHFNR	58.1	1.10E-13	37025.7
	P51665	40	70.1	9.14	7.90E-16	757.3739	2	9.8	DIKDTTVGtLSQR	59.1	6.10E-12	37025.7
	P51665	40	70.1	9.14	7.90E-16	777.9375	2	24	LHKNDIAINELmK	40.3	6.60E-12	37025.7
	P51665	40	70.1	9.14	7.90E-16	869.4706	2	7.8	TNDQmVVVYLASLIR	49.3	1.90E-11	37025.7
	P51665	40	70.1	9.14	7.90E-16	671.4082	2	6.7	RVVGVLLGSWQK	49	4.80E-11	37025.7
	P51665	40	70.1	9.14	7.90E-16	589.2756	2	-28	N(Deamid)DIAINELmK	42.4	9.30E-11	37025.7
	P51665	40	70.1	9.14	7.90E-16	661.8256	2	-75	SVVALHNLIN(Deamid)NK	55.9	2.20E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	769.9415	2	26	LHKNDIAINELMK	53.1	2.60E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	861.4448	2	-25	TNDQMVVVYLASLIR	52.1	2.70E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	1108.6736	3	61	LPINHQIIYQLQDVFNLLPDVSLQEFVK	49.1	3.30E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	593.3678	2	25	VVGVLLGSWQK	45.6	3.70E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	1101.4925	4	0.27	VLDVSNSFAVPFDEDDKDDSVWFLDHDYLENMYGMFK	39.7	4.00E-10	37025.7
	P51665	40	70.1	9.14	7.90E-16	1105.5308	4	36	VLDVSNSFAVPFDEDDKDDSVWFLDHDYLENMYGmFK	37.6	1.40E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	661.3727	2	-16	SVVALHNLINNK	58.2	1.80E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	560.7804	2	-5.2	Carbamyl-DTTVGTLSQR	40.1	2.30E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	513.9477	3	5.7	LHKN(Deamid)DIAINELMK	38.1	2.80E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	1105.537	4	42	VLDVSNSFAVPFDEDDKDDSVWFLDHDYLENmYGMFK	38.8	4.00E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	581.7763	2	-18	N(Deamid)DIAIN(Deamid)ELMK	32.4	4.60E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	1108.9712	3	33	LPINHQIIYQLQDVFN(Deamid)LLPDVSLQEFVK	38.9	5.20E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	760.9659	4	59	TNDQmVVVYLASLIRSVVALHNLINNK	34.8	6.70E-09	37025.7
	P51665	40	70.1	9.14	7.90E-16	692.8989	2	-11	RVVGVLLGSWQK(CarmK)	31.4	1.60E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	717.374	2	-13	DIKDTTVGTLSQR	54.4	2.10E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	869.9429	2	-15	TN(Deamid)DQmVVVYLASLIR	38.6	2.20E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	861.9396	2	-22	TN(Deamid)DQMVVVYLASLIR	45.1	3.00E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	581.2743	2	-35	N(Deamid)DIAINELMK	37.7	4.40E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	519.2907	3	27	LHKN(Deamid)DIAINELmK	31.5	5.20E-08	37025.7
	P51665	40	70.1	9.14	7.90E-16	386.5522	3	27	IVGWYHTGPK	46	1.20E-07	37025.7
	P51665	40	70.1	9.14	7.90E-16	1134.1	4	81	KVLDVSN(Deamid)SFAVPFDEDDKDDSVWFLDHDYLEN(Deamid)MYGMFK	28.4	2.40E-07	37025.7
	P51665	40	70.1	9.14	7.90E-16	588.7755	2	-42	NDIAINELmK	36.1	2.70E-07	37025.7
	P51665	40	70.1	9.14	7.90E-16	661.8882	2	20	SVVALHN(Deamid)LINNK	36.1	1.30E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	392.7315	2	-0.87	PELAVQK	30.2	1.70E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	738.8743	2	-16	DIK(CarmK)DTTVGTLSQR	28.5	2.90E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	606.9918	3	-38	SVVALHNLINNK(CarmK)IANR	29.2	4.60E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	505.7997	2	29	ITN(Deamid)QVHGLK	28.9	5.40E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	1101.7479	4	8.8	VLDVSN(Deamid)SFAVPFDEDDKDDSVWFLDHDYLENMYGMFK	23.3	6.40E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	526.7826	2	-25	ITNQVHGLK(CarmK)	24.6	8.40E-06	37025.7
	P51665	40	70.1	9.14	7.90E-16	580.7852	2	-30	NDIAINELMK	27.8	8.40E-06	37025.7
Rpn11	O00487	36	64.8	8.81	2.20E-16	667.2936	3	7	SWmEGLTLQDYSEHCK	60.9	1.10E-15	34577.4
	O00487	36	64.8	8.81	2.20E-16	838.1464	3	20	QTTSNLGHLNKPSIQALIHGLNR	59.5	2.20E-16	34577.4
	O00487	36	64.8	8.81	2.20E-16	1113.8856	3	-21	LGGGmPGLGQGPPTDAPAVDTAEQVYISSLALLK	55	1.10E-15	34577.4
	O00487	36	64.8	8.81	2.20E-16	1231.0841	2	6.6	AGVPMEVmGLmLGEFVDDYTVR	53	1.70E-13	34577.4
	O00487	36	64.8	8.81	2.20E-16	832.4784	3	29	qTTSNLGHLNKPSIQALIHGLNR	59.6	2.40E-13	34577.4
	O00487	36	64.8	8.81	2.20E-16	1108.6331	3	50	LGGGMPGLGQGPPTDAPAVDTAEQVYISSLALLK	53.2	6.60E-13	34577.4
	O00487	36	64.8	8.81	2.20E-16	923.9753	2	18	AVEEEDKmTPEQLAIK	66.5	1.90E-12	34577.4
	O00487	36	64.8	8.81	2.20E-16	542.9464	3	9.6	LINANmmVLGHEPR	54.7	2.40E-12	34577.4
	O00487	36	64.8	8.81	2.20E-16	903.1079	3	-21	VIDVFAmPQSGTGVSVEAVDPVFQAK	47.7	3.60E-12	34577.4
	O00487	36	64.8	8.81	2.20E-16	537.948	3	19	LIN(Deamid)ANMmVLGHEPR	49.9	5.50E-12	34577.4
	O00487	36	64.8	8.81	2.20E-16	1223.0576	2	-17	AGVPMEVMGLmLGEFVDDYTVR	50.5	9.40E-12	34577.4
	O00487	36	64.8	8.81	2.20E-16	805.9126	2	2.4	LINANMmVLGHEPR	68.4	4.30E-11	34577.4
	O00487	36	64.8	8.81	2.20E-16	776.9426	2	-18	AVAVVVDPIQSVK(CarmK)GK	38.8	9.60E-11	34577.4
	O00487	36	64.8	8.81	2.20E-16	1346.1558	2	-24	VIDVFAMPQSGTGVSVEAVDPVFQAK	47.6	1.00E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	1223.0609	2	-14	AGVPmEVMGLMLGEFVDDYTVR	44.6	1.30E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	915.945	2	-18	AVEEEDKMTPEQLAIK	66.3	1.40E-10	34577.4

	O00487	36	64.8	8.81	2.20E-16	797.9218	2	11	LINANMMVLGHEPR	56.8	1.70E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	665.3416	2	13	HYYSITINYR	46.1	1.90E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	1231.0677	2	-6.8	AGVPmEVmGLMLGEFVDDYTVR	38.3	2.10E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	1215.141	2	49	AGVPMEVMGLMLGEFVDDYTVR	51.1	2.30E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	532.5689	3	-70	LIN(Deamid)ANMMVLGHEPR	49.1	2.60E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	852.4906	3	30	QTTSNLGHLNK(CarmK)PSIQALIHGLNR	40.7	3.60E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	624.8695	4	50	qTTSN(Deamid)LGHLNKPSIQALIHGLNR	37	9.60E-10	34577.4
	O00487	36	64.8	8.81	2.20E-16	1223.0871	2	7	AGVPMEVmGLMLGEFVDDYTVR	44.1	1.50E-09	34577.4
	O00487	36	64.8	8.81	2.20E-16	662.8813	2	-21	AVAVVVDPIQSVK	41	8.80E-09	34577.4
	O00487	36	64.8	8.81	2.20E-16	502.7491	2	-97	GKVVIDAFR	40.8	2.20E-08	34577.4
	O00487	36	64.8	8.81	2.20E-16	629.349	4	13	QTTSN(Deamid)LGHLN(Deamid)KPSIQALIHGLNR	27.9	6.00E-08	34577.4
	O00487	36	64.8	8.81	2.20E-16	498.8294	2	49	MLLNLHKK	40.1	7.40E-08	34577.4
	O00487	36	64.8	8.81	2.20E-16	609.7962	4	-3.4	Carbamyl-NYNK(CarmK)AVEEEDKMTPEQLAIK	29.1	1.10E-07	34577.4
	O00487	36	64.8	8.81	2.20E-16	945.4497	2	-13	AVEEEDK(CarmK)mTPEQLAIK	35.6	1.80E-07	34577.4
	O00487	36	64.8	8.81	2.20E-16	1003.9087	2	3.8	sWMEGLTLQDYSEHCK	27.6	1.00E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	684.3927	2	-8.2	AVAVVVDPIQSVK(CarmK)	23.8	1.10E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	442.7339	2	-47	mLLNLHK	29.9	1.30E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	383.6797	2	-41	MLDmLK	26.9	2.40E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	434.74	2	-40	MLLNLHK	30.3	3.30E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	410.246	2	15	VVIDAFR	32.9	7.80E-06	34577.4
	O00487	36	64.8	8.81	2.20E-16	391.6696	2	-60	mLDmLK	19.7	8.10E-06	34577.4
PA200i isoform	Q14997	38	26.6	8	6.60E-13	865.1158	3	15	FLTNAYDIGHAVIWITAMMGGPSK	47.9	6.60E-13	206409.3
	Q14997	38	26.6	8	6.60E-13	613.3533	3	21	FVEQLITFLSLEDRK	59	1.00E-12	206409.3
	Q14997	38	26.6	8	6.60E-13	791.0004	2	26	FEHIGIGLLSLLLR	46.5	5.70E-12	206409.3
	Q14997	38	26.6	8	6.60E-13	855.4683	2	11	FVEQLITFLSLEDR	51.5	2.20E-11	206409.3
	Q14997	38	26.6	8	6.60E-13	732.3458	2	-24	NMVVYAGVEEQPK	42.1	3.20E-11	206409.3
	Q14997	38	26.6	8	6.60E-13	745.0504	3	26	HLAGLFNSITSFYHPSNN(Deamid)GR	43	8.30E-11	206409.3
	Q14997	38	26.6	8	6.60E-13	726.8872	2	-27	NPSINQILLSPEK	44	1.10E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	881.9559	2	25	IAPVENDNSYDELKR	64.1	1.30E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	792.8734	2	-26	VFNFSTSHIFETR	56.1	1.70E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	608.9868	3	9.4	WFPEGPTHMLPLLMR	37.9	1.80E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	792.9007	2	-11	DPGSVGDTIPSAELVK	49.7	1.80E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	558.3169	3	33	FFVENLNHDAIVVR	36.7	2.00E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	588.6387	3	32	IAPVENDN(Deamid)SYDELKR	45.1	2.60E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	939.4637	2	-2.1	NYENLVDTLLDGVEQR	39.3	9.40E-10	206409.3
	Q14997	38	26.6	8	6.60E-13	599.5477	4	34	SREDMTEAEQIIFDHFSDPK	44.6	1.10E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	1015.9177	3	20	TGSLEAAQALQNLALmRPELVIPPVLER	42.6	1.90E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	990.4761	2	-15	LATDNIGYIDWDPYVPK	35.7	2.00E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	783.438	2	-21	SLNLPVGSSQVLVPR	55.2	3.00E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	1035.0638	2	-5.5	SFSTAVTEQLQLLPLFFK	39.6	3.10E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	537.3073	2	-29	MAISAVAGILK	39	5.90E-09	206409.3
	Q14997	38	26.6	8	6.60E-13	668.3637	3	35	ADLELPWRPLYDMVER	44.3	1.50E-08	206409.3
	Q14997	38	26.6	8	6.60E-13	704.3896	3	29	TEHLGLNWFPNSVENILK	37.9	5.20E-08	206409.3
	Q14997	38	26.6	8	6.60E-13	779.6956	4	65	NFDDAFLPVLKPHLEHLVADSHESTQR	33.4	8.60E-08	206409.3
	Q14997	38	26.6	8	6.60E-13	732.8457	2	-14	N(Deamid)MVVYAGVEEQPK	28.2	9.40E-08	206409.3
	Q14997	38	26.6	8	6.60E-13	762.8742	2	-35	QYETIGLDFTIPK	31.6	9.80E-08	206409.3
	Q14997	38	26.6	8	6.60E-13	951.007	2	-0.094	AVQLQELWPGGLFWTR	36.8	1.10E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	1010.554	3	-11	TGSLEAAQALQNLALMRPELVIPPVLER	44	1.30E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	641.8177	2	-0.032	LEISMMQGFAR	32.1	1.30E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	665.3454	2	11	LYTGLEYDLSR	32.1	1.70E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	740.3516	2	-13	NmVVYAGVEEQPK	37	3.10E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	587.846	2	-20	LLYELVSIPK	31.9	3.10E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	603.515	4	-18	SREDmTEAEQIIFDHFSDPK	31.9	3.10E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	728.3823	2	-26	IIGDLLQFQGSHK	27.4	7.40E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	497.9548	3	36	KPSWLTPVPDSHK	21.9	8.10E-07	206409.3
	Q14997	38	26.6	8	6.60E-13	523.7629	2	-7.7	qGVTQQQFK	32	5.60E-06	206409.3
	Q14997	38	26.6	8	6.60E-13	566.0221	3	43	DIIPLVLEFLRPDR	24.4	5.90E-06	206409.3
	Q14997	38	26.6	8	6.60E-13	564.2839	2	-7.6	LSTSSYSQVR	23.6	8.10E-06	206409.3
	Q14997	38	26.6	8	6.60E-13	1016.27	3	44	TGSLEAAQALQN(Deamid)LALmRPELVIPPVLER	28.6	9.20E-06	206409.3
Rpn10	P55036	31	32.4	8.46	2.20E-14	774.0273	3	-21	AAAASAAEAGIATTGTEDSDDALLK	62	2.20E-14	40737
	P55036	31	32.4	8.46	2.20E-14	826.0794	3	3	RAAAASAAEAGIATTGTEDSDDALLK	65.6	6.40E-13	40737
	P55036	31	32.4	8.46	2.20E-14	658.6923	3	9.8	IIAFVGSPVEDN(Deamid)EKDLVK	61.9	5.40E-12	40737
	P55036	31	32.4	8.46	2.20E-14	974.9609	2	-18	VNVDIINFGEEEVNTEK	55.9	7.00E-12	40737
	P55036	31	32.4	8.46	2.20E-14	637.7693	2	-10	NAmGsLASQATK	55	8.40E-12	40737
	P55036	31	32.4	8.46	2.20E-14	759.3566	2	-52	IIAFVGSPVEDNEK	54.5	1.80E-11	40737

	P55036	31	32.4	8.46	2.20E-14	669.7639	2	3.3	NAMGsLAsQATK	41.4	2.00E-11	40737
	P55036	31	32.4	8.46	2.20E-14	598.2734	2	-19	N(Deamid)AmGSLASQATK	54.1	3.90E-11	40737
	P55036	31	32.4	8.46	2.20E-14	1103.5761	2	26	EKVNVDIINFGEEEVNTEK	53.5	5.90E-11	40737
	P55036	31	32.4	8.46	2.20E-14	597.7879	2	-8.3	NAmGSLASQATK	51.9	1.20E-10	40737
	P55036	31	32.4	8.46	2.20E-14	658.3489	3	-14	IIAFVGSPVEDNEKDLVK	64.4	2.20E-10	40737
	P55036	31	32.4	8.46	2.20E-14	638.763	2	-16	MTIsQQEFGR	51.5	2.70E-10	40737
	P55036	31	32.4	8.46	2.20E-14	646.7647	2	-9.2	mTIsQQEFGR	41.4	3.10E-10	40737
	P55036	31	32.4	8.46	2.20E-14	606.7726	2	-25	mTISQQEFGR	46.6	4.00E-10	40737
	P55036	31	32.4	8.46	2.20E-14	759.8657	2	-29	IIAFVGSPVEDN(Deamid)EK	46.9	1.30E-09	40737
	P55036	31	32.4	8.46	2.20E-14	629.7884	2	16	NAMGsLASQATK	60	1.60E-09	40737
	P55036	31	32.4	8.46	2.20E-14	589.3297	2	-4.7	LTAFVNTLNGK	42.9	1.60E-09	40737
	P55036	31	32.4	8.46	2.20E-14	975.4811	2	11	VNVDIINFGEEEVN(Deamid)TEK	40.8	2.20E-09	40737
	P55036	31	32.4	8.46	2.20E-14	589.7882	2	-12	NAMGSLASQATK	45.3	7.30E-09	40737
	P55036	31	32.4	8.46	2.20E-14	598.7644	2	-43	MTISQQEFGR	56	1.10E-08	40737
	P55036	31	32.4	8.46	2.20E-14	589.8359	2	20	LTAFVNTLN(Deamid)GK	42.9	1.20E-08	40737
	P55036	31	32.4	8.46	2.20E-14	590.272	2	-26	N(Deamid)AMGSLASQATK	51.4	1.50E-08	40737
	P55036	31	32.4	8.46	2.20E-14	536.3086	3	56	NAMGSLASQATKDGKK	36.5	3.00E-08	40737
	P55036	31	32.4	8.46	2.20E-14	555.9213	3	-44	NAmGSLASQATK(CarmK)DGKK	28.7	1.10E-07	40737
	P55036	31	32.4	8.46	2.20E-14	460.7724	2	98	N(Deamid)GDFLPTR	36	1.90E-07	40737
	P55036	31	32.4	8.46	2.20E-14	672.6853	3	-12	IIAFVGSPVEDNEKDLVK(CarmK)	28.9	2.00E-07	40737
	P55036	31	32.4	8.46	2.20E-14	439.6887	2	-38	VSMEEQR	27.2	4.60E-07	40737
	P55036	31	32.4	8.46	2.20E-14	736.4147	3	72	EKVNVDIIN(Deamid)FGEEEVNTEK	25.8	4.70E-07	40737
	P55036	31	32.4	8.46	2.20E-14	460.221	2	-31	NGDFLPTR	33.3	6.40E-07	40737
	P55036	31	32.4	8.46	2.20E-14	669.7542	2	-11	NAMGsLAsQATK	23.6	3.50E-06	40737
	P55036	31	32.4	8.46	2.20E-14	397.7448	2	-7.6	Carbamyl-VAHLALK	27	6.30E-06	40737
Beta 4	P49721	31	69.7	8.51	4.40E-16	1010.5428	2	6.5	APFAAHGYGAFLTLSILDR	68.9	4.40E-16	22836.5
	P49721	31	69.7	8.51	4.40E-16	882.7064	4	24	TPYHVNLLLAGYDEHEGPALYYmDYLAALAK	67.5	1.20E-14	22836.5
	P49721	31	69.7	8.51	4.40E-16	878.7078	4	24	TPYHVNLLLAGYDEHEGPALYYMDYLAALAK	59	2.80E-14	22836.5
	P49721	31	69.7	8.51	4.40E-16	939.501	4	33	SRTPYHVNLLLAGYDEHEGPALYYMDYLAALAK	48	7.40E-13	22836.5
	P49721	31	69.7	8.51	4.40E-16	1091.0457	2	-2.5	Acetyl-MEYLIGIQGPDYVLVASDR	45	1.70E-12	22836.5
	P49721	31	69.7	8.51	4.40E-16	970.5084	2	-1.4	IIDKN(Deamid)GIHDLDNISFPK	60.9	2.10E-12	22836.5
	P49721	31	69.7	8.51	4.40E-16	1099.0505	2	4.2	Acetyl-mEYLIGIQGPDYVLVASDR	50.5	6.20E-12	22836.5
	P49721	31	69.7	8.51	4.40E-16	562.9715	3	52	VAASNIVQmKDDHDK	56.2	1.00E-11	22836.5
	P49721	31	69.7	8.51	4.40E-16	1001.2131	3	23	APFAAHGYGAFLTLSILDRYYTPTISR	46.4	1.60E-11	22836.5
	P49721	31	69.7	8.51	4.40E-16	538.779	2	-24	VAASNIVQmK	42.7	2.10E-11	22836.5
	P49721	31	69.7	8.51	4.40E-16	807.3649	2	-13	N(Deamid)GYELSPTAAAN(Deamid)FTR	46.8	3.50E-11	22836.5
	P49721	31	69.7	8.51	4.40E-16	835.9083	2	-4.4	VAASNIVQMKDDHDK	67	8.70E-11	22836.5
	P49721	31	69.7	8.51	4.40E-16	806.3521	2	-49	NGYELSPTAAANFTR	47.2	2.40E-10	22836.5
	P49721	31	69.7	8.51	4.40E-16	735.8734	2	12	N(Deamid)GIHDLDNISFPK	50.7	7.20E-10	22836.5
	P49721	31	69.7	8.51	4.40E-16	735.3998	2	37	NGIHDLDNISFPK	40.3	1.50E-09	22836.5
	P49721	31	69.7	8.51	4.40E-16	806.9558	2	89	N(Deamid)GYELSPTAAANFTR	51.9	1.90E-09	22836.5
	P49721	31	69.7	8.51	4.40E-16	571.9623	3	29	VAASNIVQMK(CarmK)DDHDK	44	1.90E-09	22836.5
	P49721	31	69.7	8.51	4.40E-16	634.0018	3	47	MRN(Deamid)GYELSPTAAANFTR	53.5	3.70E-09	22836.5
	P49721	31	69.7	8.51	4.40E-16	634.281	3	-30	MRN(Deamid)GYELSPTAAAN(Deamid)FTR	35.9	1.60E-08	22836.5
	P49721	31	69.7	8.51	4.40E-16	879	4	77	TPYHVN(Deamid)LLLAGYDEHEGPALYYMDYLAALAK	33.9	2.70E-08	22836.5
	P49721	31	69.7	8.51	4.40E-16	639.3265	3	36	mRN(Deamid)GYELSPTAAANFTR	44.9	3.30E-08	22836.5
	P49721	31	69.7	8.51	4.40E-16	731.9434	2	18	RFILNLPTFSVR	45.4	9.20E-08	22836.5
	P49721	31	69.7	8.51	4.40E-16	530.8163	2	41	VAASNIVQMK	45	9.60E-08	22836.5
	P49721	31	69.7	8.51	4.40E-16	644.7545	3	55	RFILNLPTFSVRIIDK	33.6	1.80E-07	22836.5
	P49721	31	69.7	8.51	4.40E-16	500.7463	2	-25	YYTPTISR	33	3.70E-07	22836.5
	P49721	31	69.7	8.51	4.40E-16	647.041	3	41	IIDKNGIHDLDNISFPK	28.9	1.50E-06	22836.5
	P49721	31	69.7	8.51	4.40E-16	647.3592	3	26	IIDKNGIHDLDN(Deamid)ISFPK	31.3	2.70E-06	22836.5
	P49721	31	69.7	8.51	4.40E-16	552.2919	2	-10	VAASNIVQMK(CarmK)	23.4	3.60E-06	22836.5
	P49721	31	69.7	8.51	4.40E-16	572.263	3	-19	VAASN(Deamid)IVQMK(CarmK)DDHDK	27.6	4.60E-06	22836.5
	P49721	31	69.7	8.51	4.40E-16	653.8726	2	-11	FILNLPTFSVR	43	4.90E-06	22836.5
	P49721	31	69.7	8.51	4.40E-16	958.4301	2	-23	mRNGYELSPTAAAN(Deamid)FTR	22.1	6.80E-06	22836.5
Beta 6	P20618	29	66.4	8.09	1.40E-14	951.987	2	0.21	AmTTGAIAAmLSTILYSR	64.3	1.40E-14	26489.6
	P20618	29	66.4	8.09	1.40E-14	952.509	4	43	RFFPYYVYNIIGGLDEEGKGAVYSFDPVGSYQR	60.3	4.10E-14	26489.6
	P20618	29	66.4	8.09	1.40E-14	943.9845	2	-5.2	AmTTGAIAAMLSTILYSR	53.5	4.80E-14	26489.6
	P20618	29	66.4	8.09	1.40E-14	1217.594	3	5.4	FFPYYVYNIIGGLDEEGKGAVYSFDPVGSYQR	48	2.00E-13	26489.6
	P20618	29	66.4	8.09	1.40E-14	957.5426	2	50	Carbamyl-AMTTGAIAAMLSTILYSR	60.7	6.80E-13	26489.6
	P20618	29	66.4	8.09	1.40E-14	834.3779	2	-41	NmQNVEHVPLSLDR	64.2	1.20E-12	26489.6
	P20618	29	66.4	8.09	1.40E-14	1062.4843	2	-33	FFPYYVYNIIGGLDEEGK	48.9	1.00E-11	26489.6
	P20618	29	66.4	8.09	1.40E-14	999.5069	2	7	DVFISAAERDVYTGDALR	60.6	1.10E-11	26489.6
	P20618	29	66.4	8.09	1.40E-14	832.138	3	58	Carbamyl-HSNNKAMTTGAIAAMLSTILYSR	51.9	1.40E-11	26489.6

	P20618	29	66.4	8.09	1.40E-14	944.8105	3	2.8	FSPYVFN(Deamid)GGTILAIAGEDFAIVASDTR	43.9	3.60E-11	26489.6
	P20618	29	66.4	8.09	1.40E-14	1010.4713	2	-40	AGGSASAmLQPLLDNQVGFK	54.8	4.70E-11	26489.6
	P20618	29	66.4	8.09	1.40E-14	773.3381	2	-42	GAVYSFDPVGSYQR	47.1	8.30E-11	26489.6
	P20618	29	66.4	8.09	1.40E-14	760.7141	3	-2.6	RFFPYYVYNIIGGLDEEGK	59.9	1.10E-10	26489.6
	P20618	29	66.4	8.09	1.40E-14	943.9902	2	0.92	AMTTGAIAAmLSTILYSR	47.4	1.80E-10	26489.6
	P20618	29	66.4	8.09	1.40E-14	826.4177	2	3.7	NMQNVEHVPLSLDR	58.4	3.40E-10	26489.6
	P20618	29	66.4	8.09	1.40E-14	1002.5031	2	-11	AGGSASAMLQPLLDNQVGFK	50.3	5.80E-10	26489.6
	P20618	29	66.4	8.09	1.40E-14	834.8838	2	-24	N(Deamid)mQNVEHVPLSLDR	41	7.70E-10	26489.6
	P20618	29	66.4	8.09	1.40E-14	826.9159	2	11	N(Deamid)MQNVEHVPLSLDR	53.6	2.30E-09	26489.6
	P20618	29	66.4	8.09	1.40E-14	913.7223	4	37	FFPYYVYN(Deamid)IIGGLDEEGKGAVYSFDPVGSYQR	35.8	2.50E-09	26489.6
	P20618	29	66.4	8.09	1.40E-14	1003.0009	2	-5.7	AGGSASAMLQPLLDN(Deamid)QVGFK	39.9	5.20E-09	26489.6
	P20618	29	66.4	8.09	1.40E-14	681.7149	3	28	AmTTGAIAAMLSTILYSRR	34.1	6.70E-09	26489.6
	P20618	29	66.4	8.09	1.40E-14	505.2381	2	-26	DVYTGDALR	37.2	2.40E-08	26489.6
	P20618	29	66.4	8.09	1.40E-14	430.1965	3	-86	EGIREETVSLR	43.3	4.50E-08	26489.6
	P20618	29	66.4	8.09	1.40E-14	551.6084	3	2.8	NMQN(Deamid)VEHVPLSLDR	37.2	1.20E-07	26489.6
	P20618	29	66.4	8.09	1.40E-14	472.957	3	54	EGIREETVSLRK	33.4	1.70E-07	26489.6
	P20618	29	66.4	8.09	1.40E-14	676.3679	3	5.7	AMTTGAIAAMLSTILYSRR	32	1.70E-07	26489.6
	P20618	29	66.4	8.09	1.40E-14	504.2151	2	-92	DVFISAAER	38.9	3.40E-07	26489.6
	P20618	29	66.4	8.09	1.40E-14	695.8724	2	-23	Carbamyl-LVKDVFISAAER	32.1	1.30E-06	26489.6
	P20618	29	66.4	8.09	1.40E-14	573.8071	2	15	LSEGFSIHTR	52.1	2.90E-06	26489.6
Beta 3	P49720	33	62.4	7.53	7.60E-14	766.7917	3	55	QIKPYTLMSMVANLLYEKR	45.6	7.60E-14	22949.1
	P49720	33	62.4	7.53	7.60E-14	883.9319	2	-25	FGPYYTEPVIAGLDPK	54.7	2.50E-13	22949.1
	P49720	33	62.4	7.53	7.60E-14	1063.04	2	-16	qIKPYTLMSMVANLLYEK	57.3	4.10E-13	22949.1
	P49720	33	62.4	7.53	7.60E-14	815.3454	2	-68	FGIQAQmVTTDFQK	54.1	8.00E-13	22949.1
	P49720	33	62.4	7.53	7.60E-14	630.3244	3	-48	LYIGLAGLATDVQTVAQR	58.6	1.40E-12	22949.1
	P49720	33	62.4	7.53	7.60E-14	807.3587	2	-55	FGIQAQMVTTDFQK	51.7	2.40E-12	22949.1
	P49720	33	62.4	7.53	7.60E-14	528.6148	3	-10	DAVSGmGVIVHIIEK	54	4.50E-12	22949.1
	P49720	33	62.4	7.53	7.60E-14	751.9097	2	95	Acetyl-SIMSYN(Deamid)GGAVMAMK	49.6	2.50E-11	22949.1
	P49720	33	62.4	7.53	7.60E-14	579.3324	4	34	QIKPYTLMSmVANLLYEKR	43.5	2.50E-11	22949.1
	P49720	33	62.4	7.53	7.60E-14	784.4756	2	59	DAVSGMGVIVHIIEK	53.3	4.70E-11	22949.1
	P49720	33	62.4	7.53	7.60E-14	761.0752	3	1.2	qIKPYTLMSMVANLLYEKR	47.8	1.60E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	604.36	3	51	DAVSGMGVIVHIIEKDK	46.7	1.80E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	720.054	3	8.7	QIKPYTLMSmVANLLYEK	43	2.40E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	1071.0276	2	-25	qIKPYTLMSmVANLLYEK	38.4	3.10E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	781.125	3	51	QIK(CarmK)PYTLMSMVANLLYEKR	36.3	4.70E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	885.4666	2	14	RFGIQAQMVTTDFQK	50	9.20E-10	22949.1
	P49720	33	62.4	7.53	7.60E-14	751.3343	2	-16	Acetyl-SIMSYNGGAVMAMK	46.9	1.80E-09	22949.1
	P49720	33	62.4	7.53	7.60E-14	902.4889	3	2.8	IFPMGDRLYIGLAGLATDVQTVAQR	38	3.20E-09	22949.1
	P49720	33	62.4	7.53	7.60E-14	893.428	2	-26	RFGIQAQmVTTDFQK	34	7.60E-09	22949.1
	P49720	33	62.4	7.53	7.60E-14	962.0165	2	13	RFGPYYTEPVIAGLDPK	47.1	1.50E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	766.445	3	51	qIKPYTLmSMVANLLYEKR	37	1.70E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	714.4293	3	80	qIKPYTLmSMVANLLYEK	36.3	2.20E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	1087.5527	2	-12	QIKPYTLmSmVANLLYEK	33.4	3.60E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	714.7022	3	-19	QIKPYTLMSMVANLLYEK	50.2	4.80E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	759.3314	2	-16	Acetyl-SIMSYNGGAVmAMK	30.4	8.80E-08	22949.1
	P49720	33	62.4	7.53	7.60E-14	834.1357	3	39	EGRQIKPYTLmSMVANLLYEK	34.8	1.90E-07	22949.1
	P49720	33	62.4	7.53	7.60E-14	399.1989	3	-85	FRLNLYELK	35.3	6.00E-07	22949.1
	P49720	33	62.4	7.53	7.60E-14	639.3407	2	-8.3	LNLYELK(CarmK)EGR	30.3	9.90E-07	22949.1
	P49720	33	62.4	7.53	7.60E-14	983.5117	2	4.7	RFGPYYTEPVIAGLDPK(CarmK)	33.1	1.50E-06	22949.1
	P49720	33	62.4	7.53	7.60E-14	729.0577	3	8.7	QIK(CarmK)PYTLMSMVANLLYEK	25.6	2.70E-06	22949.1
	P49720	33	62.4	7.53	7.60E-14	544.7736	2	-21	NCVAIAADRR	32.3	4.00E-06	22949.1
	P49720	33	62.4	7.53	7.60E-14	720.4074	3	44	QIKPYTLMSmVAN(Deamid)LLYEK	29.8	6.10E-06	22949.1
	P49720	33	62.4	7.53	7.60E-14	446.7532	2	-16	LNLYELK	29.1	6.60E-06	22949.1
UCH37	Q9Y5K5	30	66.9	8.07	1.20E-14	951.7703	3	7	QLAEEEPmDTDQGNSmLSAIQSEVAK	51.5	1.20E-14	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	941.0899	3	-11	QLAEEEPMDTDQGNSMLSAIQSEVAK	51.9	1.30E-13	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	946.4232	3	-9.3	QLAEEEPmDTDQGNSMLSAIQSEVAK	56.8	2.00E-13	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	767.415	2	6.1	HNYLPFImELLK	43.6	1.20E-12	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	752.0584	3	37	TSAKEEDAFHFVSYVPVN(Deamid)GR	43.4	2.40E-12	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	933.9431	2	7.1	EEDAFHFVSYVPVN(Deamid)GR	50.5	1.20E-11	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	935.4357	3	12	qLAEEEPMDTDQGNSMLSAIQSEVAK	45.3	6.50E-11	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	871.3727	2	-44	WQPGEEPAGSVVQDSR	61.4	1.20E-10	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	1002.989	2	7.9	GAQVEEIWSLEPENFEK	42.5	1.70E-10	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	946.7604	3	0.36	QLAEEEPmDTDQGN(Deamid)SMLSAIQSEVAK	47.7	1.80E-10	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	540.3133	3	5.7	TLAEHQQLIPLVEK	52.8	2.60E-10	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	485.6432	3	18	LK(CarmK)PVHGLIFLFK	36.1	3.30E-10	37607.2

	Q9Y5K5	30	66.9	8.07	1.20E-14	471.3198	3	44	LKPVHGLIFLFK	41	5.80E-10	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	759.4278	2	20	HNYLPFIMELLK	45.6	2.70E-09	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	572.8089	2	-19	GLALSNSDVIR	45.3	6.10E-08	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	431.9139	3	22	FNLMAIVSDRK	36.2	1.10E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	578.7487	2	-6.7	qQMFEFDTK	25.3	1.80E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	437.2477	3	27	FNLmAIVSDRK	31	1.90E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	630.7689	2	-21	EFSQSFDAAMK	32.5	2.00E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	681.3335	2	-1.5	N(Deamid)QMLIEEEVQK	36	2.60E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	549.34	3	56	KHNYLPFIMELLK	28.3	4.30E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	680.8201	2	-33	NQMLIEEEVQK	38.9	4.60E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	924.7109	4	-8.2	QVINNACATQAIVSVLLNCTHQDVHLGETLSEFK	22.8	9.50E-07	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	489.727	2	-81	LYELDGLR	32.7	1.30E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	586.7543	2	7.2	qQmFEFDTK	20.9	2.10E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	689.326	2	-8.7	N(Deamid)QmLIEEEVQK	36.4	2.40E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	688.8245	2	-22	NQmLIEEEVQK	32.9	4.50E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	587.2716	2	9.8	QQMFEFDTK	26.1	4.80E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	427.2165	2	24	YSEGEIR	25.3	7.30E-06	37607.2
	Q9Y5K5	30	66.9	8.07	1.20E-14	647.8226	2	-34	FN(Deamid)LMAIVSDRK	25.6	9.60E-06	37607.2
Alpha 5	P28066	27	46.1	8.7	6.50E-14	825.4157	3	-6.9	LNATNIELATVQPGQNFHMFTK	60.8	6.50E-14	26411.3
	P28066	27	46.1	8.7	6.50E-14	830.7486	3	-5.3	LNATNIELATVQPGQNFHmFTK	63	1.70E-13	26411.3
	P28066	27	46.1	8.7	6.50E-14	981.5008	2	19	AIGSASEGAQSSLQEVYHK	68.7	4.10E-13	26411.3
	P28066	27	46.1	8.7	6.50E-14	861.7116	4	21	LNATNIELATVQPGQNFHMFTKEELEEVIK	46.5	1.10E-10	26411.3
	P28066	27	46.1	8.7	6.50E-14	724.3533	2	-24	ITSPLmEPSSIEK	52.3	5.10E-10	26411.3
	P28066	27	46.1	8.7	6.50E-14	708.0154	3	39	GPQLFHmDPSGTFVQCDAR	36.9	8.70E-10	26411.3
	P28066	27	46.1	8.7	6.50E-14	825.7475	3	-2.4	LNATN(Deamid)IELATVQPGQNFHMFTK	40.6	3.10E-09	26411.3
	P28066	27	46.1	8.7	6.50E-14	712.4243	2	41	LFQVEYAIEAIK	43.8	3.90E-09	26411.3
	P28066	27	46.1	8.7	6.50E-14	1224.9828	3	24	LNATNIELATVQPGQN(Deamid)FHMFTKEELEEVIKDI	47.5	8.70E-09	26411.3
	P28066	27	46.1	8.7	6.50E-14	865.7162	4	28	LNATNIELATVQPGQNFHmFTKEELEEVIK	34.5	1.00E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	825.769	3	24	LN(Deamid)ATNIELATVQPGQNFHMFTK	38	1.10E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	861.9781	4	45	LNATN(Deamid)IELATVQPGQNFHMFTKEELEEVIK	42.1	2.20E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	831.0982	3	21	LN(Deamid)ATNIELATVQPGQNFHmFTK	36	2.40E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	1224.6598	3	28	LNATNIELATVQPGQNFHMFTKEELEEVIKDI	44.6	2.80E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	1230.2792	3	-5	LNATNIELATVQPGQN(Deamid)FHmFTKEELEEVIKDI	31.7	9.20E-08	26411.3
	P28066	27	46.1	8.7	6.50E-14	716.3504	2	-32	ITSPLMEPSSIEK	46.9	1.00E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	608.8415	2	37	EELEEVIKDI	40.4	1.20E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	668.9885	3	-5.6	AIGSASEGAQSSLQEVYHK(CarmK)	30.1	1.60E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	802.4255	2	4.8	RITSPLmEPSSIEK	42.3	2.00E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	532.2563	2	-11	GVNTFSPEGR	36.7	2.50E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	1230.0111	3	44	LNATNIELATVQPGQNFHmFTKEELEEVIKDI	38.3	3.40E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	794.4046	2	-25	RITSPLMEPSSIEK	50.4	5.40E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	918.9973	4	33	LNATN(Deamid)IELATVQPGQNFHMFTKEELEEVIKDI	34.1	6.20E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	919.0058	4	42	LN(Deamid)ATNIELATVQPGQNFHMFTKEELEEVIKDI	31.1	6.30E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	815.927	2	-0.15	RITSPLMEPSSIEK(CarmK)	29.9	7.50E-07	26411.3
	P28066	27	46.1	8.7	6.50E-14	865.9186	4	-23	LNATN(Deamid)IELATVQPGQNFHmFTKEELEEVIK	25.6	5.90E-06	26411.3
	P28066	27	46.1	8.7	6.50E-14	363.1625	2	-65	Acetyl-mFLTR	20.8	6.20E-06	26411.3
Alpha 4	O14818	26	67.3	8.34	4.10E-15	874.1156	3	-3.2	Carbamyl-AITVFSPDGHLFQVEYAQEAVKK	62.5	4.10E-15	27887.1
	O14818	26	67.3	8.34	4.10E-15	817.0851	3	0.35	AITVFSPDGHLFQVEYAQEAVK	60.7	1.00E-13	27887.1
	O14818	26	67.3	8.34	4.10E-15	869.4359	2	6	YVAEIEKEKEENEK	63.8	7.50E-13	27887.1
	O14818	26	67.3	8.34	4.10E-15	594.3124	3	35	YVAEIEK(CarmK)EKEENEK	46.3	2.10E-12	27887.1
	O14818	26	67.3	8.34	4.10E-15	871.3854	2	-22	N(Deamid)YTDEAIETDDLTIK	51.5	2.20E-12	27887.1
	O14818	26	67.3	8.34	4.10E-15	718.8978	4	46	YTQSN(Deamid)GRRPFGISALIVGFDFDGTPR	51.9	1.80E-11	27887.1
	O14818	26	67.3	8.34	4.10E-15	870.8842	2	-32	NYTDEAIETDDLTIK	52.5	3.60E-11	27887.1
	O14818	26	67.3	8.34	4.10E-15	817.9165	2	-23	LTVEDPVTVEYITR	58	4.00E-11	27887.1
	O14818	26	67.3	8.34	4.10E-15	556.2848	3	32	LYQTDPSGTYHAWK	58	1.80E-10	27887.1
	O14818	26	67.3	8.34	4.10E-15	959.0355	2	22	ILNPEEIEKYVAEIEK	58.8	2.80E-10	27887.1
	O14818	26	67.3	8.34	4.10E-15	689.045	3	16	RPFGISALIVGFDFDGTPR	50	1.00E-09	27887.1
	O14818	26	67.3	8.34	4.10E-15	481.7462	2	-13	N(Deamid)IELAVmR	30.9	2.30E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	592.8555	2	3.3	GRDIVVLGVEK	44.6	2.40E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	438.2837	3	32	GRDIVVLGVEKK	31.2	3.60E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	980.4976	2	-20	ILNPEEIEK(CarmK)YVAEIEK	34	4.10E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	733.3371	3	-20	KICALDDNVCMAFAGLTADAR	32.8	4.30E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	486.2792	2	-27	DIVVLGVEK	38.1	4.50E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	550.3524	2	23	DIVVLGVEKK	46.1	9.60E-08	27887.1
	O14818	26	67.3	8.34	4.10E-15	572.3715	2	87	ALLEVVQSGGK(CarmK)	25.4	1.00E-07	27887.1
	O14818	26	67.3	8.34	4.10E-15	550.7852	2	-62	ALLEVVQSGGK	47	1.70E-07	27887.1

	O14818	26	67.3	8.34	4.10E-15	580.3234	3	68	YVAEIEKEKEEN(Deamid)EK	29.6	2.80E-07	27887.1
	O14818	26	67.3	8.34	4.10E-15	370.214	3	35	YVAEIEKEK	26.1	2.90E-07	27887.1
	O14818	26	67.3	8.34	4.10E-15	426.2236	2	-13	YVAEIEK	29.1	5.90E-07	27887.1
	O14818	26	67.3	8.34	4.10E-15	481.2448	2	-32	NIELAVmR	36.5	1.20E-06	27887.1
	O14818	26	67.3	8.34	4.10E-15	529.2879	4	92	Carbamyl-ICALDDN(Deamid)VCMAFAGLTADAR	26.4	2.30E-06	27887.1
	O14818	26	67.3	8.34	4.10E-15	494.7647	2	-2.4	Carbamyl-NIELAVMR	25.6	9.00E-06	27887.1
Alpha 3	P25789	24	61.3	7.97	8.10E-15	865.0936	3	17	LNEDMACSVAGITSDANVLTNELR	54.4	1.40E-14	29484.1
	P25789	24	61.3	7.97	8.10E-15	1102.5123	2	15	HYGFQLYQSDPSGNYGGWK	59.6	8.10E-15	29484.1
	P25789	24	61.3	7.97	8.10E-15	670.7938	2	-18	qDYKEGEmTLK	55	3.10E-11	29484.1
	P25789	24	61.3	7.97	8.10E-15	735.688	3	37	HYGFQLYQSDPSGN(Deamid)YGGWK	43.9	4.70E-10	29484.1
	P25789	24	61.3	7.97	8.10E-15	453.1818	3	-73	QDYKEGEmTLK	48.8	6.80E-10	29484.1
	P25789	24	61.3	7.97	8.10E-15	678.3373	2	9.1	KHEEEEAKAER	52.4	9.40E-10	29484.1
	P25789	24	61.3	7.97	8.10E-15	491.7217	2	-27	qAYTQFGGK	37.9	2.40E-09	29484.1
	P25789	24	61.3	7.97	8.10E-15	662.7875	2	-31	qDYKEGEMTLK	46.4	5.30E-09	29484.1
	P25789	24	61.3	7.97	8.10E-15	737.4011	2	-22	LSAEK(CarmK)VEIATLTR	37.2	8.10E-09	29484.1
	P25789	24	61.3	7.97	8.10E-15	715.9149	2	0.8	LSAEKVEIATLTR	61.5	8.50E-09	29484.1
	P25789	24	61.3	7.97	8.10E-15	749.6769	3	12	HYGFQLYQSDPSGNYGGWK(CarmK)	28.1	1.30E-08	29484.1
	P25789	24	61.3	7.97	8.10E-15	466.9248	3	71	K(CarmK)HEEEEAKAER	33.7	2.60E-08	29484.1
	P25789	24	61.3	7.97	8.10E-15	671.333	2	17	QDYKEGEMTLK	49.3	2.70E-08	29484.1
	P25789	24	61.3	7.97	8.10E-15	504.2738	2	24	TTIFSPEGR	34.2	6.30E-08	29484.1
	P25789	24	61.3	7.97	8.10E-15	642.411	2	8	SALALAIK(CarmK)VLNK	39.4	6.80E-08	29484.1
	P25789	24	61.3	7.97	8.10E-15	825.9709	2	21	RPFGVSLLYIGWDK	47	1.40E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	1308.5855	2	-1.6	LNEDMACsVAGITSDANVLTNELR	57.3	1.50E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	746.8793	4	21	Carbamyl-IYKLN(Deamid)EDMACSVAGITSDANVLTNELR	34	1.70E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	613.798	2	-34	LLDEVFFSEK	46.1	1.80E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	500.24	2	-17	QAYTQFGGK	38.2	2.70E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	409.8431	3	-37	HEEEEAKAER	25.9	7.20E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	549.3202	2	12	qKEVEQLIK	35.1	8.20E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	749.9532	3	-57	HYGFQLYQSDPSGN(Deamid)YGGWK(CarmK)	28.6	9.30E-07	29484.1
	P25789	24	61.3	7.97	8.10E-15	451.7872	2	40	VEIATLTR	37	1.00E-06	29484.1
	P25789	24	61.3	7.97	8.10E-15	635.3214	2	-0.55	LLDEVFFSEK(CarmK)	20.6	3.60E-06	29484.1
Beta 7	P28070	21	47	9.03	1.30E-17	814.7156	3	-12	qVLGQmVIDEELLGDGHSYSPR	60.7	1.30E-17	29192.5
	P28070	21	47	9.03	1.30E-17	1213.5589	2	-23	qVLGQMVIDEELLGDGHSYSPR	72	1.20E-16	29192.5
	P28070	21	47	9.03	1.30E-17	820.3946	3	-7.3	QVLGQmVIDEELLGDGHSYSPR	69.9	1.90E-15	29192.5
	P28070	21	47	9.03	1.30E-17	1105.4809	2	-24	VNNSTmLGASGDYADFQYLK	58.6	2.80E-15	29192.5
	P28070	21	47	9.03	1.30E-17	1014.9959	2	-11	FEGGVVIAADmLGSYGSLAR	59.6	5.40E-15	29192.5
	P28070	21	47	9.03	1.30E-17	1222.1211	2	17	QVLGQMVIDEELLGDGHSYSPR	61.4	6.10E-15	29192.5
	P28070	21	47	9.03	1.30E-17	1175.9627	3	19	TQNPMVTGTSVLGVKFEGGVVIAADMLGSYGSLAR	46.6	2.80E-14	29192.5
	P28070	21	47	9.03	1.30E-17	1006.9763	2	-33	FEGGVVIAADMLGSYGSLAR	58	5.50E-14	29192.5
	P28070	21	47	9.03	1.30E-17	737.6676	3	-1.2	VNN(Deamid)STmLGASGDYADFQYLK	56.4	9.10E-13	29192.5
	P28070	21	47	9.03	1.30E-17	1105.9761	2	-21	VN(Deamid)NSTmLGASGDYADFQYLK	51	1.90E-12	29192.5
	P28070	21	47	9.03	1.30E-17	1316.6038	2	-8.8	GVEIEGPLSTETNWDIAHMISGFE	43.1	2.60E-12	29192.5
	P28070	21	47	9.03	1.30E-17	1097.4568	2	-48	VNNSTMLGASGDYADFQYLK	50.2	2.80E-12	29192.5
	P28070	21	47	9.03	1.30E-17	774.3708	2	-49	TQNPmVTGTSVLGVK	57.1	3.40E-12	29192.5
	P28070	21	47	9.03	1.30E-17	1098.4886	2	-4.6	VN(Deamid)N(Deamid)STMLGASGDYADFQYLK	43.3	4.40E-12	29192.5
	P28070	21	47	9.03	1.30E-17	1324.5916	2	-16	GVEIEGPLSTETNWDIAHmISGFE	46.6	2.60E-11	29192.5
	P28070	21	47	9.03	1.30E-17	1097.9768	2	-23	VNN(Deamid)STMLGASGDYADFQYLK	49	7.70E-11	29192.5
	P28070	21	47	9.03	1.30E-17	885.4555	2	-20	EVLEK(CarmK)QPVLSQTEAR	44.4	1.00E-09	29192.5
	P28070	21	47	9.03	1.30E-17	556.2806	2	-18	qPVLSQTEAR	49.4	9.00E-09	29192.5
	P28070	21	47	9.03	1.30E-17	766.3698	2	-54	TQNPMVTGTSVLGVK	51.8	4.60E-08	29192.5
	P28070	21	47	9.03	1.30E-17	564.8516	2	84	QPVLSQTEAR	43.9	4.70E-08	29192.5
	P28070	21	47	9.03	1.30E-17	492.2667	2	-16	AIHSWLTR	40.7	1.20E-06	29192.5
Rpn12	P48556	24	63	7.76	5.10E-15	1157.5748	3	10	GWVLGPNN(Deamid)YYSFASQQQKPEDTTIPSTELAK	59	5.10E-15	30005
	P48556	24	63	7.76	5.10E-15	907.2386	4	39	RGWVLGPNNYYSFASQQQKPEDTTIPSTELAK	55.9	2.40E-14	30005
	P48556	24	63	7.76	5.10E-15	955.9238	2	-29	HPVSLEQYLmEGSYNK	55.1	8.80E-14	30005
	P48556	24	63	7.76	5.10E-15	947.9451	2	-9.2	HPVSLEQYLMEGSYNK	56.8	1.90E-13	30005
	P48556	24	63	7.76	5.10E-15	1157.2205	3	-13	GWVLGPNNYYSFASQQQKPEDTTIPSTELAK	49.5	9.10E-12	30005
	P48556	24	63	7.76	5.10E-15	976.5177	3	-2.2	EQLPESAYMHQLLGLNLLFLLSQNR	48.8	3.90E-11	30005
	P48556	24	63	7.76	5.10E-15	829.9726	2	-21	LVLLELNFLPTTGTK	51.5	5.20E-11	30005
	P48556	24	63	7.76	5.10E-15	634.0756	3	32	LKLVLLELNFLPTTGTK	34.6	1.00E-10	30005
	P48556	24	63	7.76	5.10E-15	547.3191	3	38	VAEFHTELERLPAK	51.8	1.30E-10	30005
	P48556	24	63	7.76	5.10E-15	981.8515	3	0.11	EQLPESAYmHQLLGLNLLFLLSQNR	48.5	3.80E-10	30005
	P48556	24	63	7.76	5.10E-15	1004.8525	3	22	DIQTNVYIK(CarmK)HPVSLEQYLMEGSYNK	38.1	1.30E-09	30005
	P48556	24	63	7.76	5.10E-15	830.453	2	-35	LVLLELN(Deamid)FLPTTGTK	40.4	4.10E-09	30005

	P48556	24	63	7.76	5.10E-15	977.4712	2	-74	Carbamyl-ILFTEATRILFFNTPK	36.3	3.60E-08	30005
	P48556	24	63	7.76	5.10E-15	757.4384	2	21	DILEIGAQWSILR	37.8	8.70E-08	30005
	P48556	24	63	7.76	5.10E-15	615.7818	2	-45	VAEFHTELER	56.2	1.00E-07	30005
	P48556	24	63	7.76	5.10E-15	497.2656	2	-13	Carbamyl-ILFTEATR	33.6	1.70E-07	30005
	P48556	24	63	7.76	5.10E-15	646.6314	3	-14	HPVSLEQYLMEGSYNK(CarmK)	30.1	4.40E-07	30005
	P48556	24	63	7.76	5.10E-15	453.7063	2	-29	Carbamyl-DIPSFER	29.4	8.40E-07	30005
	P48556	24	63	7.76	5.10E-15	547.2732	2	-45	DIQTNVYIK	39.3	1.70E-06	30005
	P48556	24	63	7.76	5.10E-15	412.7281	2	-61	qQLILAR	32	2.30E-06	30005
	P48556	24	63	7.76	5.10E-15	377.199	2	-7.5	YMAQLK	24.6	2.80E-06	30005
	P48556	24	63	7.76	5.10E-15	1157.9126	3	18	GWVLGPN(Deamid)N(Deamid)YYSFASQQQKPEDTTIPSTELAK	26.3	3.10E-06	30005
	P48556	24	63	7.76	5.10E-15	878.9197	4	-11	GWVLGPNNYYSFASQQQK(CarmK)PEDTTIPSTELAK	23.4	5.40E-06	30005
	P48556	24	63	7.76	5.10E-15	490.2564	2	-57	ILFFNTPK	35.4	7.60E-06	30005
Beta 2	Q99436	24	61	8.25	3.40E-18	509.2282	3	-19	ATEGmVVADKNCSK	45.9	3.80E-13	29965.7
	Q99436	24	61	8.25	3.40E-18	1035.2	4	-46	IHFISPNIYCCGAGTAADTDMTTQLISSNLELHSLSTGR	60.9	3.40E-18	29965.7
	Q99436	24	61	8.25	3.40E-18	1052.0028	2	-7.3	LPYVTMGSGSLAAmAVFEDK	62.4	4.50E-15	29965.7
	Q99436	24	61	8.25	3.40E-18	837.9382	4	12	YQGYIGAALVLGGVDVTGPHLYSIYPHGSTDK	61.2	2.50E-14	29965.7
	Q99436	24	61	8.25	3.40E-18	1043.9836	2	-28	LPYVTMGSGSLAAMAVFEDK	59.1	3.80E-13	29965.7
	Q99436	24	61	8.25	3.40E-18	1051.9968	2	-13	LPYVTmGSGSLAAMAVFEDK	49.1	1.30E-12	29965.7
	Q99436	24	61	8.25	3.40E-18	1059.9856	2	-21	LPYVTmGSGSLAAmAVFEDK	49.6	5.60E-12	29965.7
	Q99436	24	61	8.25	3.40E-18	466.1667	3	-85	FRPDmEEEEAK	46.1	8.00E-11	29965.7
	Q99436	24	61	8.25	3.40E-18	530.9951	3	44	LDFLRPYTVPNKK	48	8.90E-11	29965.7
	Q99436	24	61	8.25	3.40E-18	518.7444	2	-16	ATEGmVVADK	34.8	1.80E-10	29965.7
	Q99436	24	61	8.25	3.40E-18	862.949	4	47	LPYVTMGSGSLAAMAVFEDKFRPDMEEEEAK	39.7	1.50E-09	29965.7
	Q99436	24	61	8.25	3.40E-18	481.7524	2	-19	Carbamyl-GTTAVLTEK	35.3	5.70E-09	29965.7
	Q99436	24	61	8.25	3.40E-18	510.7553	2	0.29	ATEGMVVADK	41.9	2.10E-08	29965.7
	Q99436	24	61	8.25	3.40E-18	1082.5396	2	6.6	ITPLEIEVLEETVQTmDTS	32	2.20E-08	29965.7
	Q99436	24	61	8.25	3.40E-18	690.8171	2	12	FRPDMEEEEAK	52.1	2.50E-08	29965.7
	Q99436	24	61	8.25	3.40E-18	1049.9808	4	-16	Carbamyl-IHFISPNIYCCGAGTAADTDmTTQLISSNLELHSLSTGR	29.6	5.00E-08	29965.7
	Q99436	24	61	8.25	3.40E-18	731.8876	2	-25	LDFLRPYTVPNK	44.3	8.30E-08	29965.7
	Q99436	24	61	8.25	3.40E-18	1074.5367	2	1.6	ITPLEIEVLEETVQTMDTS	33.4	1.00E-07	29965.7
	Q99436	24	61	8.25	3.40E-18	459.0303	4	33	NKLDFLRPYTVPNKK	33.1	1.40E-07	29965.7
	Q99436	24	61	8.25	3.40E-18	852.9775	2	2.6	NKLDFLRPYTVPNK	42.6	1.70E-07	29965.7
	Q99436	24	61	8.25	3.40E-18	508.7308	2	-81	DGIVLGADTR	45.4	1.80E-07	29965.7
	Q99436	24	61	8.25	3.40E-18	583.336	3	25	NK(CarmK)LDFLRPYTVPNK	29.6	9.50E-07	29965.7
	Q99436	24	61	8.25	3.40E-18	469.7922	4	55	NK(CarmK)LDFLRPYTVPNKK	24.7	1.60E-06	29965.7
	Q99436	24	61	8.25	3.40E-18	531.2815	3	-34	LDFLRPYTVPN(Deamid)KK	28.7	5.50E-06	29965.7
Alpha 7	P25788	22	55.9	8.06	1.30E-14	632.122	4	65	AFELELSWVGELTN(Deamid)GRHEIVPK	56.9	1.30E-14	28302.3
	P25788	22	55.9	8.06	1.30E-14	690.8515	2	-33	HVGMAVAGLLADAR	61.9	1.60E-13	28302.3
	P25788	22	55.9	8.06	1.30E-14	698.8798	2	11	HVGmAVAGLLADAR	55.8	4.50E-12	28302.3
	P25788	22	55.9	8.06	1.30E-14	980.3979	2	-53	Acetyl-SSIGTGYDLSASTFSPDGR	55.5	5.70E-12	28302.3
	P25788	22	55.9	8.06	1.30E-14	876.2911	2	-5	ESLKEEDEsDDDNm	30.2	8.50E-10	28302.3
	P25788	22	55.9	8.06	1.30E-14	565.7636	2	-31	VFQVEYAmK	46.9	2.50E-09	28302.3
	P25788	22	55.9	8.06	1.30E-14	757.9127	2	-2.1	Carbamyl-IIYIVHDEVKDK	52.5	3.60E-09	28302.3
	P25788	22	55.9	8.06	1.30E-14	609.3122	2	-26	AVENSSTAIGIR	48.9	5.50E-09	28302.3
	P25788	22	55.9	8.06	1.30E-14	557.77	2	-25	VFQVEYAMK	41.2	1.80E-08	28302.3
	P25788	22	55.9	8.06	1.30E-14	631.3147	2	-13	Carbamyl-AVEN(Deamid)SSTAIGIR	37.5	3.20E-08	28302.3
	P25788	22	55.9	8.06	1.30E-14	569.7917	2	24	Carbamyl-LYEEGSNKR	35.6	6.70E-08	28302.3
	P25788	22	55.9	8.06	1.30E-14	836.3214	2	11	ESLKEEDESDDDNm	26.1	9.40E-08	28302.3
	P25788	22	55.9	8.06	1.30E-14	876.2828	2	-14	EsLKEEDESDDDNm	27.9	1.80E-07	28302.3
	P25788	22	55.9	8.06	1.30E-14	692.9013	4	57	DKAFELELSWVGELTN(Deamid)GRHEIVPK	26.9	1.90E-07	28302.3
	P25788	22	55.9	8.06	1.30E-14	576.7587	2	-82	SNFGYNIPLK	33.5	2.80E-07	28302.3
	P25788	22	55.9	8.06	1.30E-14	475.225	2	-59	DGVVFGVEK	37.3	2.80E-07	28302.3
	P25788	22	55.9	8.06	1.30E-14	426.7037	2	18	EEASNFR	29.8	6.60E-07	28302.3
	P25788	22	55.9	8.06	1.30E-14	491.7217	2	-12	Carbamyl-LYEEGSNK	30.3	1.10E-06	28302.3
	P25788	22	55.9	8.06	1.30E-14	614.8618	2	19	IIYIVHDEVK	47.8	1.20E-06	28302.3
	P25788	22	55.9	8.06	1.30E-14	361.7236	2	28	HEIVPK	25.4	1.50E-06	28302.3
	P25788	22	55.9	8.06	1.30E-14	868.278	2	-23	ESLKEEDEsDDDNM	22.8	1.60E-06	28302.3
	P25788	22	55.9	8.06	1.30E-14	560.2888	3	-36	LVLSK(CarmK)LYEEGSNKR	25.3	3.80E-06	28302.3
Beta 5	P28074	21	62.5	8.33	2.60E-15	1070.4778	2	-25	ISGATFSVGSGSVYAYGVmDR	62.6	2.60E-15	22897.1
	P28074	21	62.5	8.33	2.60E-15	967.9368	2	-5.3	Carbamyl-GYSYDLEVEQAYDLAR	58.5	6.40E-14	22897.1
	P28074	21	62.5	8.33	2.60E-15	713.8015	2	-45	GPGLYYVDSEGNR	52.9	1.50E-13	22897.1
	P28074	21	62.5	8.33	2.60E-15	1062.5148	2	7.4	ISGATFSVGSGSVYAYGVMDR	54	1.50E-12	22897.1
	P28074	21	62.5	8.33	2.60E-15	508.2586	3	22	DAYSGGAVN(Deamid)LYHVR	49.5	4.50E-12	22897.1
	P28074	21	62.5	8.33	2.60E-15	761.3173	2	-77	DAYSGGAVNLYHVR	68	9.40E-12	22897.1

	P28074	21	62.5	8.33	2.60E-15	704.9116	2	26	ATAGAYIASQTVKK	57.6	3.30E-11	22897.1
	P28074	21	62.5	8.33	2.60E-15	791.862	2	-28	RGPGLYYVDSEGNR	50.1	1.50E-10	22897.1
	P28074	21	62.5	8.33	2.60E-15	640.8808	2	55	ATAGAYIASQTVK	45.5	3.70E-10	22897.1
	P28074	21	62.5	8.33	2.60E-15	512.735	2	-89	HGVIVAADSR	55.5	4.30E-10	22897.1
	P28074	21	62.5	8.33	2.60E-15	726.3848	2	-16	ATAGAYIASQTVKK(CarmK)	38.5	4.30E-09	22897.1
	P28074	21	62.5	8.33	2.60E-15	657.335	2	22	VSSDNVADLHEK	55.8	1.50E-08	22897.1
	P28074	21	62.5	8.33	2.60E-15	438.8963	3	43	VSSDN(Deamid)VADLHEK	46	2.60E-08	22897.1
	P28074	21	62.5	8.33	2.60E-15	381.2165	3	21	RAIYQATYR	30.1	3.60E-08	22897.1
	P28074	21	62.5	8.33	2.60E-15	643.3252	2	-14	LLANMVYQYK(CarmK)	25.6	3.90E-07	22897.1
	P28074	21	62.5	8.33	2.60E-15	443.2718	3	59	FRHGVIVAADSR	31.6	6.00E-07	22897.1
	P28074	21	62.5	8.33	2.60E-15	629.8508	2	35	LLANmVYQYK	53.9	6.30E-07	22897.1
	P28074	21	62.5	8.33	2.60E-15	621.8253	2	-9.4	LLANMVYQYK	38	6.40E-07	22897.1
	P28074	21	62.5	8.33	2.60E-15	622.3226	2	-0.97	LLAN(Deamid)MVYQYK	31.4	1.00E-06	22897.1
	P28074	21	62.5	8.33	2.60E-15	493.2275	2	-63	AIYQATYR	37.6	1.10E-06	22897.1
	P28074	21	62.5	8.33	2.60E-15	373.7186	2	-14	ISVAAASK	32.7	1.40E-06	22897.1
Rpn13/ADRM1	Q16186	13	21.4	8.33	6.80E-16	784.3735	2	-10	SQSAAVTPSSTTSSTR	48.2	2.20E-10	42153.6
	Q16186	13	21.4	8.33	6.80E-16	766.4784	2	90	Acetyl-TTSGALFPSLVPGSR	41.9	1.10E-09	42153.6
	Q16186	13	21.4	8.33	6.80E-16	461.2407	3	-0.78	RLFFWMQEPK	40.1	2.90E-09	42153.6
	Q16186	13	21.4	8.33	6.80E-16	699.3652	2	14	RLFFWmQEPK	36	2.50E-08	42153.6
	Q16186	13	21.4	8.33	6.80E-16	490.519	3	-36	DKKDEEEDmSLD	26.7	7.20E-08	42153.6
	Q16186	13	21.4	8.33	6.80E-16	613.2907	2	-27	LFFWMQEPK	34.4	1.50E-07	42153.6
	Q16186	13	21.4	8.33	6.80E-16	621.3324	2	44	LFFWmQEPK	27.2	2.30E-07	42153.6
	Q16186	13	21.4	8.33	6.80E-16	629.826	2	19	AMQNNAKPEQK	36.5	3.80E-07	42153.6
	Q16186	13	21.4	8.33	6.80E-16	727.3586	2	76	DKKDEEEDMSLD	32.7	3.70E-06	42153.6
	Q16186	13	21.4	8.33	6.80E-16	422.2056	2	-12	VPQCPSGR	21.8	4.30E-06	42153.6
	Q16186	13	21.4	8.33	6.80E-16	418.7225	2	27	GDVEAFAK	28.4	4.60E-06	42153.6
	Q16186	13	21.4	8.33	6.80E-16	413.74	2	33	YLVEFR	29.2	5.60E-06	42153.6
	Q16186	13	21.4	8.33	6.80E-16	605.7622	2	32	KDEEEDMSLD	18.3	8.20E-06	42153.6
Alpha 2	P25787	20	54.5	8.66	7.00E-15	739.8031	2	-79	GYSFSLTTFSPSGK	52	7.00E-15	25767.6
	P25787	20	54.5	8.66	7.00E-15	790.8766	2	-4.2	HIGLVYSGmGPDYR	55.5	5.20E-14	25767.6
	P25787	20	54.5	8.66	7.00E-15	786.4515	3	45	RYNEDLELEDAIHTAILTLK	67.2	8.90E-14	25767.6
	P25787	20	54.5	8.66	7.00E-15	734.3834	3	0.9	YNEDLELEDAIHTAILTLK	71.4	1.00E-13	25767.6
	P25787	20	54.5	8.66	7.00E-15	1035.5701	2	-13	Carbamyl-LVQIEYALAAVAGGAPSVGIK	64	3.10E-13	25767.6
	P25787	20	54.5	8.66	7.00E-15	841.1567	3	44	LAQQYYLVYQEPIPTAQLVQR	51.5	5.70E-13	25767.6
	P25787	20	54.5	8.66	7.00E-15	379.9187	3	69	SVHKVEPITK	48.4	1.80E-12	25767.6
	P25787	20	54.5	8.66	7.00E-15	883.8179	3	-0.28	KLAQQYYLVYQEPIPTAQLVQR	59.1	4.90E-12	25767.6
	P25787	20	54.5	8.66	7.00E-15	782.8771	2	-6.9	HIGLVYSGMGPDYR	61.5	6.50E-12	25767.6
	P25787	20	54.5	8.66	7.00E-15	734.7154	3	6.4	YN(Deamid)EDLELEDAIHTAILTLK	51.4	3.60E-11	25767.6
	P25787	20	54.5	8.66	7.00E-15	898.1399	3	-15	K(CarmK)LAQQYYLVYQEPIPTAQLVQR	41.9	2.80E-10	25767.6
	P25787	20	54.5	8.66	7.00E-15	558.7928	2	-10	Carbamyl-AAN(Deamid)GVVLATEK	44.5	9.30E-09	25767.6
	P25787	20	54.5	8.66	7.00E-15	558.297	2	-17	Carbamyl-AANGVVLATEK	41	1.50E-08	25767.6
	P25787	20	54.5	8.66	7.00E-15	600.8716	2	34	AANGVVLATEKK	43.4	1.90E-08	25767.6
	P25787	20	54.5	8.66	7.00E-15	601.3653	2	37	AAN(Deamid)GVVLATEKK	47.8	1.00E-07	25767.6
	P25787	20	54.5	8.66	7.00E-15	590.8539	2	27	SVHK(CarmK)VEPITK	27.1	1.50E-07	25767.6
	P25787	20	54.5	8.66	7.00E-15	690.7209	3	-5.5	LVQIEYALAAVAGGAPSVGIK(CarmK)	28.3	3.20E-07	25767.6
	P25787	20	54.5	8.66	7.00E-15	800.7701	3	23	RYNEDLELEDAIHTAILTLK(CarmK)	29.2	1.20E-06	25767.6
	P25787	20	54.5	8.66	7.00E-15	394.2185	2	-33	LTPTEVK	24.6	2.10E-06	25767.6
	P25787	20	54.5	8.66	7.00E-15	469.7271	2	-12	Carbamyl-SILYDER	25.7	9.80E-06	25767.6
Ubiquitin-protein ligase E3A	Q05086	23	23.5	6.34	3.30E-11	598.9723	3	38	EFWEIVHSFTDEQK	45.1	3.30E-11	100646.4
	Q05086	23	23.5	6.34	3.30E-11	882.1506	3	30	KPLIPFEEFINEPLNEVLEMDK	47.3	5.50E-11	100646.4
	Q05086	23	23.5	6.34	3.30E-11	862.2284	4	48	KPLIPFEEFINEPLNEVLEMDKDYTFFK	42.2	1.40E-10	100646.4
	Q05086	23	23.5	6.34	3.30E-11	1111.4767	2	-19	NLDFQALEETTEYDGGYTR	46.8	6.00E-10	100646.4
	Q05086	23	23.5	6.34	3.30E-11	754.4045	3	-34	RITVLYSLVQGQQLNPYLR	48.1	8.00E-10	100646.4
	Q05086	23	23.5	6.34	3.30E-11	809.3939	2	-22	EFVNLYSDYILNK	44.6	1.10E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	545.5849	3	-44	LEmIAmENPADLKK	42.1	1.20E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	786.4213	2	18	DLGDSHPVLYQSLK	49.1	1.50E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	742.8663	2	-23	LGPDDVSVDIDAIR	49.2	1.70E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	534.9518	3	11	LEMIAMENPADLKK	47	3.70E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	688.3133	2	-19	IGDSSQGDNNLQK	40.1	5.70E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	547.5993	3	-47	LGPDDVSVDIDAIRR	39.4	8.30E-09	100646.4
	Q05086	23	23.5	6.34	3.30E-11	866.5	4	78	KPLIPFEEFIN(Deamid)EPLNEVLEmDKDYTFFK	35.6	1.20E-08	100646.4
	Q05086	23	23.5	6.34	3.30E-11	722.8528	2	-20	NLVNDDDAIVAASK	37.7	1.30E-08	100646.4
	Q05086	23	23.5	6.34	3.30E-11	650.9971	3	22	EFWEIVHSFTDEQKR	36.6	4.20E-08	100646.4
	Q05086	23	23.5	6.34	3.30E-11	1149.6162	3	35	KPLIPFEEFINEPLN(Deamid)EVLEMDKDYTFFK	28.7	1.20E-07	100646.4

	Q05086	23	23.5	6.34	3.30E-11	583.7845	2	-47	DHIIDDALVR	27.1	1.30E-07	100646.4
	Q05086	23	23.5	6.34	3.30E-11	866.2426	4	65	KPLIPFEEFINEPLNEVLEmDKDYTFFK	29.6	1.70E-07	100646.4
	Q05086	23	23.5	6.34	3.30E-11	1149.9591	3	49	KPLIPFEEFIN(Deamid)EPLN(Deamid)EVLEMDKDYTFFK	33.9	2.30E-07	100646.4
	Q05086	23	23.5	6.34	3.30E-11	549.259	2	-23	DVTYLTEEK	20.9	5.90E-07	100646.4
	Q05086	23	23.5	6.34	3.30E-11	563.7784	2	11	GASSAYLENSK	27.2	9.40E-07	100646.4
	Q05086	23	23.5	6.34	3.30E-11	887.4614	3	6.4	KPLIPFEEFINEPLNEVLEmDK	27.6	3.90E-06	100646.4
	Q05086	23	23.5	6.34	3.30E-11	459.2007	3	-58	GFHmVTNESPLK	28.9	6.30E-06	100646.4
Alpha 1	P60900	16	59.8	7.9	1.40E-15	928.4303	2	10	ITENIGCVMTGMTADSR	54.5	6.80E-11	27399.7
	P60900	16	59.8	7.9	1.40E-15	1011.5225	2	-6.2	Carbamyl-ILTEAEIDAHLVALAERD	64.5	1.40E-15	27399.7
	P60900	16	59.8	7.9	1.40E-15	482.809	4	67	KVPDKLLDSSTVTHLFK	34.5	5.50E-12	27399.7
	P60900	16	59.8	7.9	1.40E-15	905.948	2	-16	ATAAGVK(CarmK)QTESTSFLEK	52	2.00E-11	27399.7
	P60900	16	59.8	7.9	1.40E-15	622.0399	3	47	ILTEAEIDAHLVALAER	54.4	6.80E-11	27399.7
	P60900	16	59.8	7.9	1.40E-15	578.7696	2	-68	HITIFSPEGR	41	2.60E-09	27399.7
	P60900	16	59.8	7.9	1.40E-15	1007.2408	4	-1.6	IADISQVYTQNAEMRPLGCCMILIGIDEEQGPQVYK	34.8	4.70E-09	27399.7
	P60900	16	59.8	7.9	1.40E-15	576.761	2	-24	qTESTSFLEK	40.3	1.00E-08	27399.7
	P60900	16	59.8	7.9	1.40E-15	664.9242	2	85	Carbamyl-AINQGGLTSVAVR	51.9	2.80E-08	27399.7
	P60900	16	59.8	7.9	1.40E-15	657.7325	3	47	K(CarmK)VPDKLLDSSTVTHLFK	33.3	6.20E-08	27399.7
	P60900	16	59.8	7.9	1.40E-15	454.2729	3	42	LLDSSTVTHLFK	55.5	1.20E-07	27399.7
	P60900	16	59.8	7.9	1.40E-15	643.8598	2	4.7	AIN(Deamid)QGGLTSVAVR	36.5	2.10E-07	27399.7
	P60900	16	59.8	7.9	1.40E-15	585.2494	2	-66	QTESTSFLEK	36.6	2.40E-07	27399.7
	P60900	16	59.8	7.9	1.40E-15	370.2129	3	64	ARYEAANWK	29.1	4.00E-07	27399.7
	P60900	16	59.8	7.9	1.40E-15	580.8053	2	4.1	LYQVEYAFK	35.5	5.90E-07	27399.7
	P60900	16	59.8	7.9	1.40E-15	433.2343	3	19	QTESTSFLEKK	32.8	8.30E-07	27399.7
Beta 1	P28072	14	60.7	7.9	1.30E-14	1209.5948	3	12	YREDLMAGIIIAGWDPQEGGQVYSVPMGGMMVR	63.5	1.30E-14	25358
	P28072	14	60.7	7.9	1.30E-14	1353.0292	3	13	SGSAADTQAVADAVTYQLGFHSIELN(Deamid)EPPLVHTAASLFK	57	2.30E-13	25358
	P28072	14	60.7	7.9	1.30E-14	1181.5543	2	1.2	QSFAIGGSGSSYIYGYVDATYR	54.5	9.90E-13	25358
	P28072	14	60.7	7.9	1.30E-14	1352.7027	3	14	SGSAADTQAVADAVTYQLGFHSIELNEPPLVHTAASLFK	53.8	2.00E-12	25358
	P28072	14	60.7	7.9	1.30E-14	1214.9549	3	35	YREDLMAGIIIAGWDPQEGGQVYSVPMGGMmVR	51.5	1.30E-11	25358
	P28072	14	60.7	7.9	1.30E-14	558.2802	2	-47	LAAIAESGVER	56.6	1.90E-10	25358
	P28072	14	60.7	7.9	1.30E-14	432.2676	3	59	VTDKLTPIHDR	42.3	2.20E-10	25358
	P28072	14	60.7	7.9	1.30E-14	547.3093	2	-13	qVLLGDQIPK	40	6.60E-10	25358
	P28072	14	60.7	7.9	1.30E-14	542.2777	2	4.9	TTTGSYIANR	46	4.00E-09	25358
	P28072	14	60.7	7.9	1.30E-14	1220.2184	3	-21	YREDLMAGIIIAGWDPQEGGQVYSVPmGGMmVR	34.1	7.40E-09	25358
	P28072	14	60.7	7.9	1.30E-14	445.7211	2	2.5	Carbamyl-DGSSGGVIR	24.1	5.60E-08	25358
	P28072	14	60.7	7.9	1.30E-14	577.3212	2	-20	Carbamyl-QVLLGDQIPK	35.1	1.10E-07	25358
	P28072	14	60.7	7.9	1.30E-14	669.3665	2	6.3	VTDK(CarmK)LTPIHDR	36.9	2.30E-07	25358
	P28072	14	60.7	7.9	1.30E-14	426.2583	2	42	LTPIHDR	22.8	4.20E-06	25358
Ubiquitin-protein ligase E3C	Q15386	11	15.4	6.76	2.20E-14	614.9733	3	22	SFTNYSGGYSADHPVIK	52.3	2.20E-14	123923.7
	Q15386	11	15.4	6.76	2.20E-14	822.3964	3	-15	TTNEGLLYPNPAAQMLVGDSFAR	38.6	4.80E-10	123923.7
	Q15386	11	15.4	6.76	2.20E-14	541.0247	4	-18	VHLLNAHGLDEAGIDGGGIFR	39.6	1.60E-09	123923.7
	Q15386	11	15.4	6.76	2.20E-14	434.9155	3	21	LAYPETKPEVR	40.9	2.10E-09	123923.7
	Q15386	11	15.4	6.76	2.20E-14	887.7879	3	-15	LIYADKQEVQGDGPFLDGINVTIR	40.3	3.60E-09	123923.7
	Q15386	11	15.4	6.76	2.20E-14	806.0339	3	-13	NYIYEDAYDKLSPENEPDLK	32.3	3.90E-08	123923.7
	Q15386	11	15.4	6.76	2.20E-14	608.2453	2	-9.2	GSPmSFEDSSR	26.5	6.50E-08	123923.7
	Q15386	11	15.4	6.76	2.20E-14	994.0309	2	-18	QLAVLTELPFVVPFEER	38	8.00E-08	123923.7
	Q15386	11	15.4	6.76	2.20E-14	743.4152	2	4	QQTNTLLNLVWR	36.3	2.80E-07	123923.7
	Q15386	11	15.4	6.76	2.20E-14	567.3085	2	-19	VTQLYVPASR	28.8	5.00E-06	123923.7
	Q15386	11	15.4	6.76	2.20E-14	423.8699	3	-58	LSPENEPDLKK	24.1	7.00E-06	123923.7
Ubiquitin	P62988	9	61.8	6.99	1.80E-09	725.0497	3	-12	TLSDYNIQK(CarmK)ESTLHLVLR	39.5	1.80E-09	8564.9
	P62988	9	61.8	6.99	1.80E-09	894.9655	2	6.9	TITLEVEPSDTIEN(Deamid)VK	45	2.80E-09	8564.9
	P62988	9	61.8	6.99	1.80E-09	596.6394	3	-13	TITLEVEPSDTIENVK	53.3	6.70E-09	8564.9
	P62988	9	61.8	6.99	1.80E-09	762.4185	2	32	IQDKEGIPPDQQR	51.6	8.30E-09	8564.9
	P62988	9	61.8	6.99	1.80E-09	520.2554	2	-13	EGIPPDQQR	34.6	1.10E-07	8564.9
	P62988	9	61.8	6.99	1.80E-09	541.2657	2	-26	TLSDYNIQK	37.6	1.90E-07	8564.9
	P62988	9	61.8	6.99	1.80E-09	534.3119	2	-4	ESTLHLVLR	47.7	3.50E-07	8564.9
	P62988	9	61.8	6.99	1.80E-09	783.8889	2	-11	IQDK(CarmK)EGIPPDQQR	31.3	3.90E-06	8564.9
	P62988	9	61.8	6.99	1.80E-09	730.8796	2	-23	LIFAGK(Ubiq)QLEDGR	52.1	1.00E-10	8564.9
PA28 gamma	P61289	8	31.9	6.46	6.90E-13	840.9061	2	-26	ITSEAEDLVANFFPK	47.5	6.90E-13	29506.3
	P61289	8	31.9	6.46	6.90E-13	834.8986	2	-11	TVESEAASYLDQISR	45.4	1.10E-09	29506.3
	P61289	8	31.9	6.46	6.90E-13	737.8686	2	-29	NQYVTLHDMILK	38.2	4.30E-08	29506.3
	P61289	8	31.9	6.46	6.90E-13	539.3065	2	-12	LLELDSFLK	33.5	7.10E-08	29506.3
	P61289	8	31.9	6.46	6.90E-13	745.8604	2	-36	NQYVTLHDmILK	29.9	1.20E-07	29506.3

	P61289	8	31.9	6.46	6.90E-13	578.3455	2	11	MWVQLLIPR	33.1	1.50E-06	29506.3
	P61289	8	31.9	6.46	6.90E-13	643.8551	2	6.1	SNQQLVDIIEK	35.7	3.70E-06	29506.3
	P61289	8	31.9	6.46	6.90E-13	568.7839	2	-21	VFVMPN(Deamid)GMLK	24.6	5.20E-06	29506.3
hHR23B	P54727	7	17.6	5.86	2.60E-11	426.5582	3	-54	NFVVVmVTKPK	46.5	2.60E-11	43171.5
	P54727	7	17.6	5.86	2.60E-11	1009.1589	3	33	QEKPAEKPAETPVATsPTATDSTSGDSSR	40	1.00E-10	43171.5
	P54727	7	17.6	5.86	2.60E-11	1035.8022	3	20	QEKPAEKPAEtPVATsPTATDSTSGDSSR	37.6	3.70E-10	43171.5
	P54727	7	17.6	5.86	2.60E-11	705.068	3	-11	qIIQQNPSLLPALLQQIGR	35.1	8.10E-09	43171.5
	P54727	7	17.6	5.86	2.60E-11	710.7346	3	-23	QIIQQNPSLLPALLQQIGR	38	1.20E-08	43171.5
	P54727	7	17.6	5.86	2.60E-11	631.3782	2	12	NFVVVMVTKPK	33.4	2.20E-08	43171.5
	P54727	7	17.6	5.86	2.60E-11	717.3615	2	-21	AVEYLLMGIPGDR	37.8	8.80E-08	43171.5
Gankyrin	O75832	7	33.2	6.52	4.10E-11	684.3682	3	27	NRHEIAVmLLEGGANPDAK	51.1	4.10E-11	24428.1
	O75832	7	33.2	6.52	4.10E-11	679.0698	3	77	NRHEIAVMLLEGGANPDAK	47.8	9.30E-11	24428.1
	O75832	7	33.2	6.52	4.10E-11	641.0181	3	6.3	LLVSQGASIYIENKEEK	41	5.90E-09	24428.1
	O75832	7	33.2	6.52	4.10E-11	597.3437	2	4.2	MIHILLYYK	41.4	1.70E-08	24428.1
	O75832	7	33.2	6.52	4.10E-11	410.8641	3	37	DHYEATAMHR	36	4.40E-08	24428.1
	O75832	7	33.2	6.52	4.10E-11	694.3611	2	-38	LEELKESILADK	41.5	2.40E-06	24428.1
	O75832	7	33.2	6.52	4.10E-11	385.7519	2	-22	GGLGLILK	24.3	9.00E-06	24428.1
PA28 beta	Q9UL46	7	41.2	7.67	1.00E-10	603.724	3	18	VLSLLALVKPEVWTLK	58.2	1.00E-10	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	680.3363	4	2.1	APLDIPIPDPPPKDDEMETDKQEK	33	1.10E-09	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	576.9528	3	-13	ALVHERDEAAYGELR	38.1	6.20E-09	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	949.4574	2	-33	AFYAELYHIISSNLEK	34.1	1.50E-08	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	843.9125	2	3.2	QNLFQEAEEFLYR	50.6	3.50E-08	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	684.3117	4	-32	APLDIPIPDPPPKDDEmETDKQEK	23.6	2.70E-06	27230.6
	Q9UL46	7	41.2	7.67	1.00E-10	767.8614	2	-15	IEDGNDFGVAIQEK	29.3	3.40E-06	27230.6
hPLIC-1	Q9UMX0	4	12.4	5.8	5.40E-10	604.9285	3	-36	NPEISHmLNNPDImR	35.4	5.40E-10	62519.5
	Q9UMX0	4	12.4	5.8	5.40E-10	984.7902	3	16	Acetyl-AESGESGGPPGSQDSAAGAEGAGAPAAAASAEPK	42.9	7.30E-10	62519.5
	Q9UMX0	4	12.4	5.8	5.40E-10	635.7442	2	-19	NPAmMQEmMR	27.9	1.40E-07	62519.5
	Q9UMX0	4	12.4	5.8	5.40E-10	476.9441	3	23	SHTDQLVLIFAGK	22.9	9.30E-06	62519.5
PA28 alpha	Q06323	4	18.9	5.36	1.30E-10	630.8438	2	-31	APLDIPVPDPVK	43.8	1.30E-10	28723.3
	Q06323	4	18.9	5.36	1.30E-10	634.8352	2	8.6	TENLLGSYFPK	31	1.60E-07	28723.3
	Q06323	4	18.9	5.36	1.30E-10	742.853	2	-2	qLVHELDEAEYR	27.4	9.30E-07	28723.3
	Q06323	4	18.9	5.36	1.30E-10	698.3922	2	-8	NAYAVLYDIILK	22.4	3.20E-06	28723.3
Rpn15/DSS1	P60896	3	48.6	2.29	6.10E-06	597.7478	2	-42	DDFSNQLRAE	29.4	6.10E-06	8277.7
	P60896	3	48.6	2.29	6.10E-06	763.3171	2	-14	FEEFPAEDWAGLD	30.3	1.00E-05	8277.7
	P60896	3	48.6	2.29	6.10E-06	620.8227	2	-32	KQPVDLGLLEE	32.4	1.00E-05	8277.7
PA200i	62467430	24	27.4	7.86	7.90E-15	417.2749	2	-8.3	SLFLIIK	25.1	2.70E-07	138280.9
	62467430	24	27.4	7.86	7.90E-15	1016.27	3	44	TGSLEAAQALQN(Deamid)LALmRPELVIPPVLER	28.6	3.60E-09	138280.9
	62467430	24	27.4	7.86	7.90E-15	523.7629	2	-7.7	qGVTQQQFK	28.6	2.50E-07	138280.9
	62467430	24	27.4	7.86	7.90E-15	587.8392	2	-32	LLYELVSIPK	31.2	5.80E-07	138280.9
	62467430	24	27.4	7.86	7.90E-15	762.8742	2	-35	QYETIGLDFTIPK	31.6	1.40E-10	138280.9
	62467430	24	27.4	7.86	7.90E-15	641.8177	2	-0.032	LEISMMQGFAR	32.1	1.60E-09	138280.9
	62467430	24	27.4	7.86	7.90E-15	665.3454	2	11	LYTGLEYDLSR	32.1	1.90E-08	138280.9
	62467430	24	27.4	7.86	7.90E-15	951.007	2	-0.094	AVQLQELWPGGLFWTR	34.2	8.80E-10	138280.9
	62467430	24	27.4	7.86	7.90E-15	558.3169	3	33	FFVENLNHDAIVVR	36.1	1.20E-13	138280.9
	62467430	24	27.4	7.86	7.90E-15	990.4672	2	-24	LATDNIGYIDWDPYVPK	36.3	5.60E-11	138280.9
	62467430	24	27.4	7.86	7.90E-15	704.3896	3	29	TEHLGLNWFPNSVENILK	36.9	3.80E-09	138280.9
	62467430	24	27.4	7.86	7.90E-15	608.9868	3	9.4	WFPEGPTHMLPLLMR	37.5	1.40E-12	138280.9
	62467430	24	27.4	7.86	7.90E-15	939.4637	2	-2.1	NYENLVDTLLDGVEQR	38.7	2.80E-10	138280.9
	62467430	24	27.4	7.86	7.90E-15	1015.9177	3	20	TGSLEAAQALQNLALmRPELVIPPVLER	41.7	4.90E-12	138280.9
	62467430	24	27.4	7.86	7.90E-15	745.0504	3	26	HLAGLFNSITSFYHPSNN(Deamid)GR	42.4	3.50E-13	138280.9
	62467430	24	27.4	7.86	7.90E-15	585.9773	3	23	AGVGEPPEPGGRPEPGPR	42.8	4.90E-11	138280.9
	62467430	24	27.4	7.86	7.90E-15	1010.554	3	-11	TGSLEAAQALQNLALMRPELVIPPVLER	43.6	2.20E-10	138280.9
	62467430	24	27.4	7.86	7.90E-15	726.8872	2	-27	NPSINQILLSPEK	44	4.70E-12	138280.9
	62467430	24	27.4	7.86	7.90E-15	668.3637	3	35	ADLELPWRPLYDMVER	44.3	7.20E-11	138280.9
	62467430	24	27.4	7.86	7.90E-15	791.0004	2	26	FEHIGIGLLSLLLR	46.5	1.20E-14	138280.9
	62467430	24	27.4	7.86	7.90E-15	865.1158	3	15	FLTNAYDIGHAVIWITAMMGGPSK	47.9	7.90E-15	138280.9
	62467430	24	27.4	7.86	7.90E-15	722.3742	2	-19	LDAESDLQLAQIK	48.6	5.10E-12	138280.9
	62467430	24	27.4	7.86	7.90E-15	528.9432	3	22	VFNFSTSHIFETR	49.3	1.80E-14	138280.9
	62467430	24	27.4	7.86	7.90E-15	783.438	2	-21	SLNLPVGSSQVLVPR	55.2	2.60E-12	138280.9

Rpn14/PAAF1	Q9BRP4	2	5.6	5.11	3.10E-10	601.8178	2	6.6	FLAPYTTFSR	29.9	8.00E-09	42190.4
	Q9BRP4	2	5.6	5.11	3.10E-10	599.8528	2	-14	SGAPVLSLLSVR	39.1	3.10E-10	42190.4

Note: The peptides listed here have expectation value >=10E-5, the fasle positive rate is below 0.1% as shown in Supplemental Fig. 1
s/t: phosphorylated serine/threonine

Supplemental Table II. Ion Assignments of the Peaks Observed in Fig. 2 Matched to the Identified N-terminal Sequence of α6 (Acetyl-MFRNQYDNDVTVWSPQGRIHQIEYA).

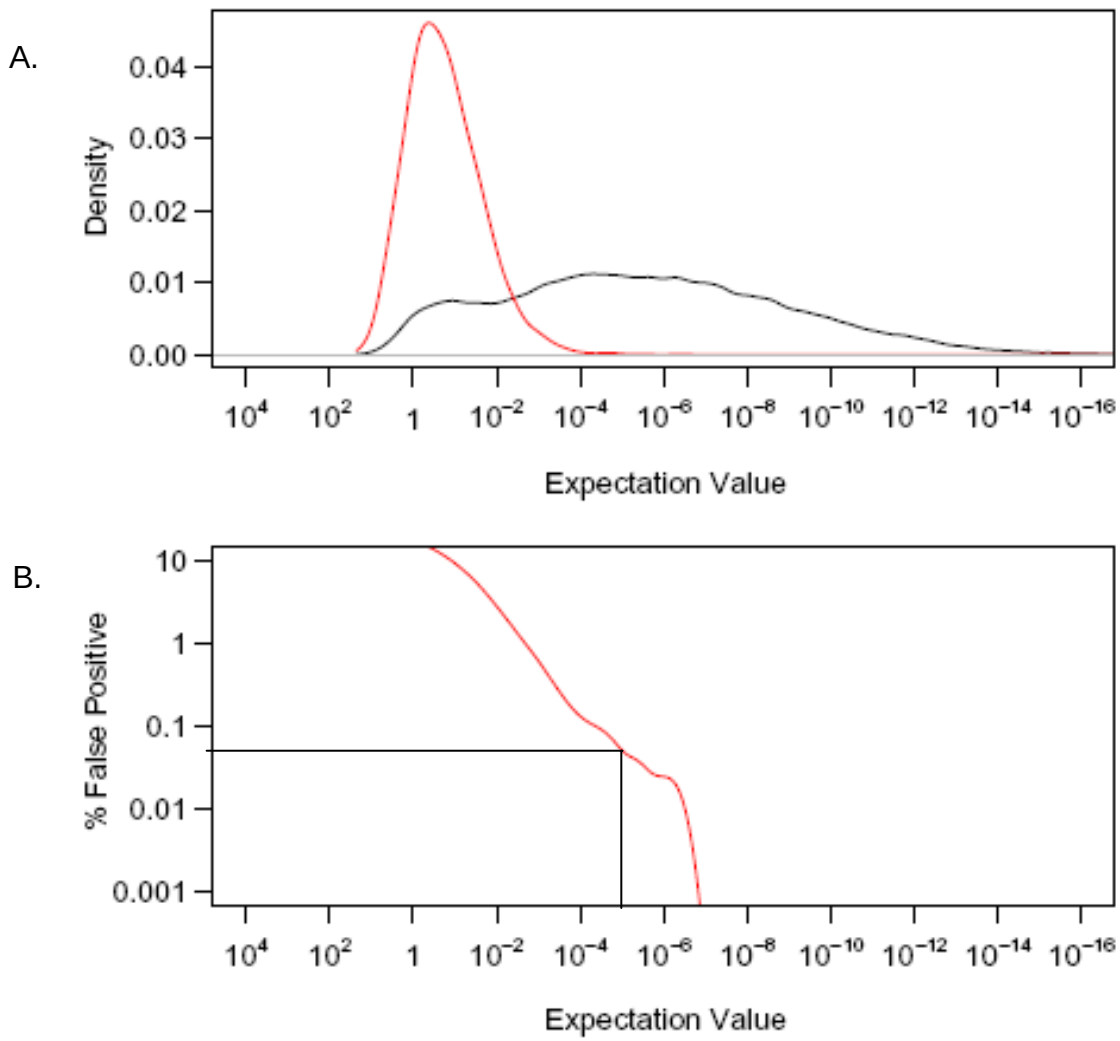
fragment ion (m/z)	72.0783	159.0894	243.1266	246.1265	253.1165	266.1157	275.0896	293.1148	298.1421
ion assignment	V(-34)	W(-14)	NQ(73) IE(-30) RN-28(-123)	WS-28(11)	y_2(-7.0)	PQG-NH_3(8.1) HQ(-34)	EY-H_2O(-47) QY-NH_3(-47)	EY(5.5) a_2(-58)	DVT-H_2O(7.9)
fragment ion (m/z)	345.1164	353.1908	364.1484	371.1897	379.2298	382.1499	387.1975	406.191	412.1814
ion assignment	DND(36)	SPQG-NH_3(128) WSP-H_2O(85) QIE-H_2O(25)	y_3-H_2O(-5.3)	WSP(49) QIE(-7.6) RNQ-28(-68)	HQI(55) IHQ(55) RIH-28(-70)	y_3(-29)	TVW(-13) DVTV-28(-68)	NQY(47) IEY(-15)	NDVT-H_2O(-3.1)
fragment ion (m/z)	455.2516	474.2353	477.2218	495.2479	508.2332	527.2131	545.2324	591.2603	605.2634
ion assignment	QGRI(-46)	TVWS(1.2)	b_3(-13)	y_4(6.0)	YDND(129) HQIE(-36) SPQGR-H_2O(-58)	DNDVT-H_2O(6.6)	DNDVT(22) RNQY-NH_3(-26) VTVWS-28(-139)	b_4(-18)	b_9-NH_3^{2+}(47)
fragment ion (m/z)	613.7374	623.2824	656.3048	663.2619	690.2928	699.8657	702.3282	704.7975	712.3663
ion assignment	b_9^{2+}(-18)	y_5(-34)	y_{11}^{2+}(-59)	b_{10}^{2+}(-31)	YDNDVT-H_2O(29)	y_{12}^{2+}(8.3)	b_5-NH_3(36)	b_{11}-H_2O^{2+}(-5.2)	WSPQGR(19)
fragment ion (m/z)	713.7943	719.3348	740.3701	748.3166	754.3211	760.3598	792.8915	817.4409	825.4425
ion assignment	b_{11}^{2+}(-17)	b_5(7.6)	a_{12}-H_2O^{2+}(43) b_{18}-H_2O^{3+}(39)	SPQGRIH-28(-140)	b_{12}-H_2O^{2+}(-19)	y_6(-3.5) RIHQIE-NH_3(-66)	y_{13}^{2+}(-10)	GRIHQIE-NH_3(11) PQGRIHQ(-2.3)	WSPQGRI(7.2)
fragment ion (m/z)	830.2694	842.4297	856.396	863.2712	865.3521	872.36	882.3869	891.3873	
ion assignment	DNDVTVW(-119)	a_{13}^{2+}(56) y_{14}^{2+}(-4.8)	b_{13}^{2+}(18)	a_{21}^{3+}(221)	b_6-NH_3(-16)	b_{21}^{3+}(57)	b_6(-6.6)	b_{14}-NH_3^{2+}(4.8)	
fragment ion (m/z)	900.8745	904.5596	910.07	947.5047	953.08	997.3983	1007.44	1025.5362	1031.1043
ion assignment	a_{22}^{3+}(111)	b_{22}-NH_3^{3+}(142) SPQGRIHQ(94)	b_{22}^{3+}(-40)	b_{23}-NH_3^{+3}(63)	b_{23}^{3+}(-42)	b_7(-21)	b_{24}^{3+}(-35)	FRNQYDND-28(90) TVWSPQGRI(-16)	MH-H_2O^{3+}(-48)

fragment ion (m/z)	1031.6896	1037.12	1059.561	1086.6261	1111.4675	1119.002	1146.5955	1161.5426	1175.584
ion assignment	PQGRIHQIE-28(112)	$M+3H^{3+}$(12)	PQGRIHQIE(-7.9)	y_9(52)	b_8(4.4)	b_{18}^{2+}(-10)	SPQGRIHQIE(-5.2)	a_{19}^{2+}(-13)	b_{19}^{2+}(24)
fragment ion (m/z)	1203.6419	1226.4972	1235.5632	1244.0647	1308.1888	1311.6666	1325.5625	1332.7089	1398.7251
ion assigment	WSPQGRIHQI(3.1)	b_9(6.3)	NQYDNDVTVW(25) FRNQYDNDVT-H_2O(16) b_{20}-NH_3^{2+}(-6.7)	b_{20}^{2+}(-16)	b_{21}^{2+}(57) y_{22}-H_2O^{2+}(55)	y_{11}(-11)	b_{10}(3.5)	WSPQGRIHQIE(21)	a_{11}(82) y_{12}(9.1)
fragment ion (m/z)	1408.5524	1426.6771	1525.6749	1584.8265					
ion assigment	b_{11}-H_2O(-30)	b_{11}(50)	b_{12}(0.59)	y_{13}(22)					

Note: the number in parenthesis is the mass error (ppm) of the fragment ion

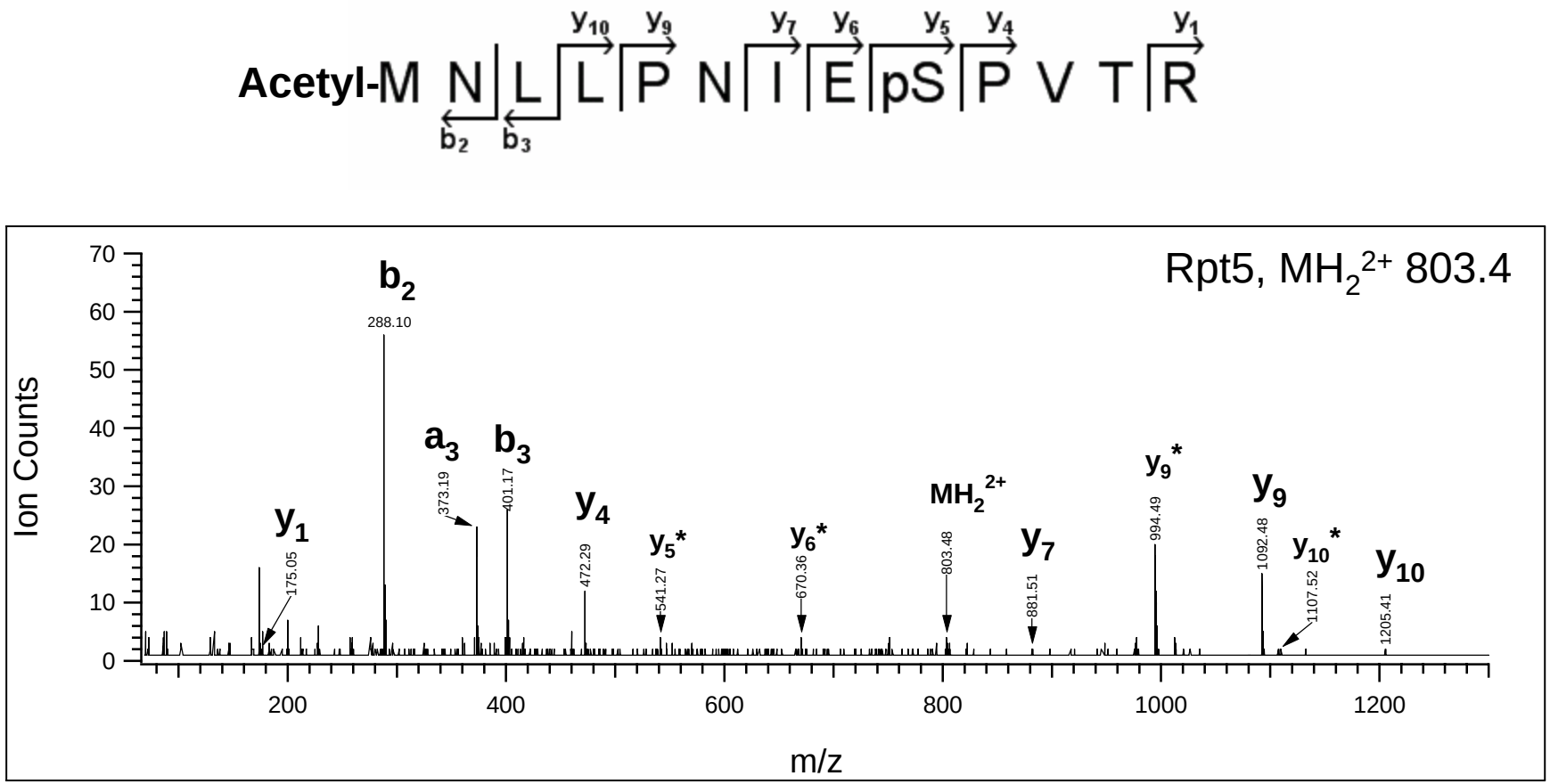
Supplemental Table III. Ion Assignments of the Peaks Observed in Fig. 5B and Matched to the Identified Sequence (^{303}TSSAFVGKpTPEApSPEPK^{319}).

Fragment Ion (m/z)	Ion Assignment	Fragment Ion (m/z)	Ion Assignment
244.16	y_2	919.46	y_9-$2H_3PO_4$
276.11	b_3	934.35	y_8
347.13	b_4	946.92	MH_2^{2+}
470.22	y_4	959.34	b_9
494.23	b_5	1017.45	y_9-H_3PO_4
539.32	y_5-H_3PO_4	1047.6	y_{10}-$2H_3PO_4$
593.29	b_6	1104.45	y_{11}-$2H_3PO_4$
610.25	y_6-H_3PO_4	1158.53	b_{12}-H_3PO_4
637.22	y_5	1202.53	y_{11}-H_3PO_4
708.22	y_6	1203.51	y_{12}-$2H_3PO_4$
778.43	b_8	1227.57	b_{13}-$2H_3PO_4$
836.32	y_8-H_3PO_4	1300.5	y_{11}
848.94	$(MH_2\text{-}2H_3PO_4)^{2+}$	1301.66	y_{12}-H_3PO_4
861.49	b_9-H_3PO_4	1325.61	b_{13}-H_3PO_4
897.89	$(MH_2\text{-}H_3PO_4)^{2+}$	1423.8	b_{13}

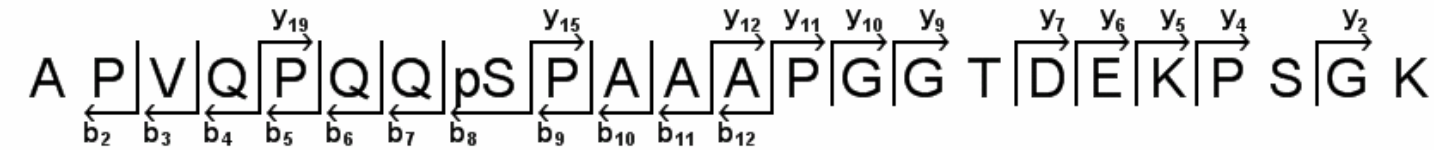


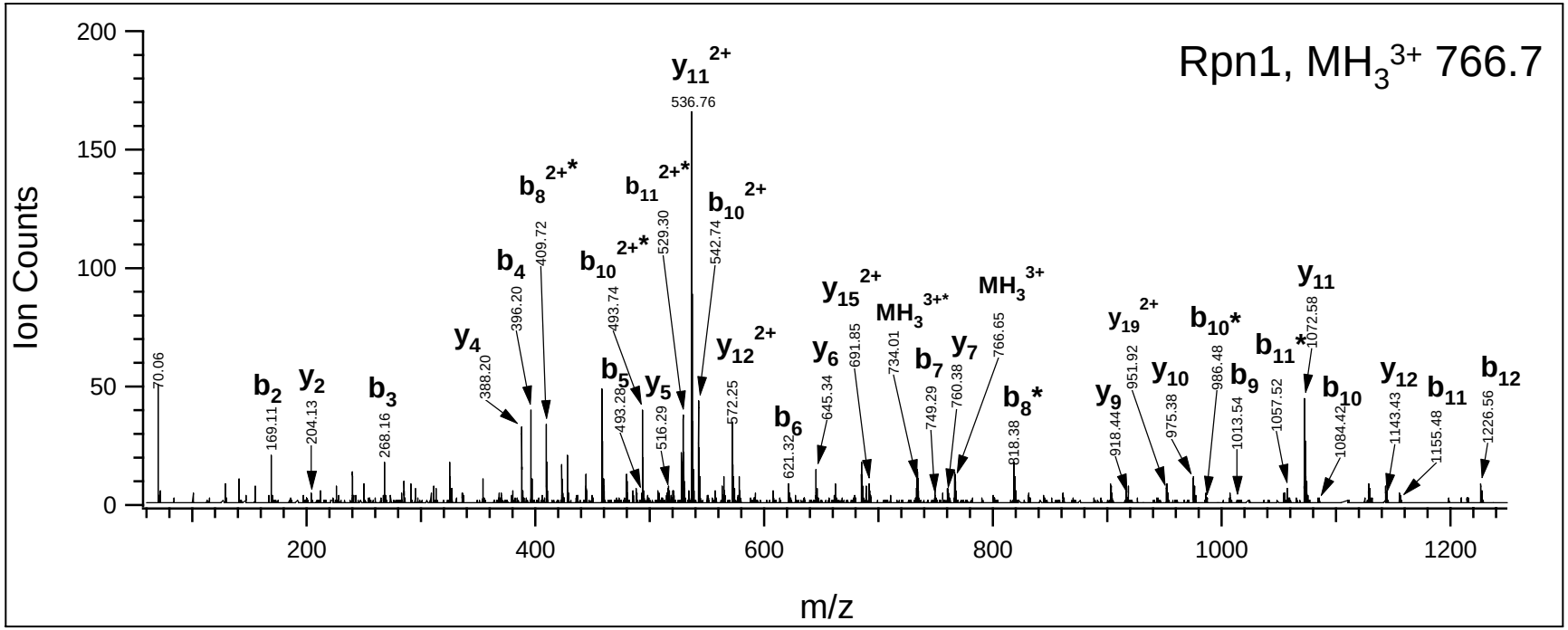
Supplemental Fig. 1. (A) shows density plots of the distribution of expectation values for searches against a reverse decoy database (red) and a target database (Uniprot Database) (black). (B) plots the false positive rate (%) as a function of the expectation value threshold. These plots were obtained from one dataset. The expectation values at 0.1% false positive rate from different datasets are very similar when the database searching parameters are set the same.

Supplemental Figure 2A-P: ESI MS/MS spectra of the phosphorylated peptides identified in Table III. *: ions after a single neutral loss (-H_3PO_4, -98Da); **: ions after double neutral losses (-2H_3PO_4, -196 Da).

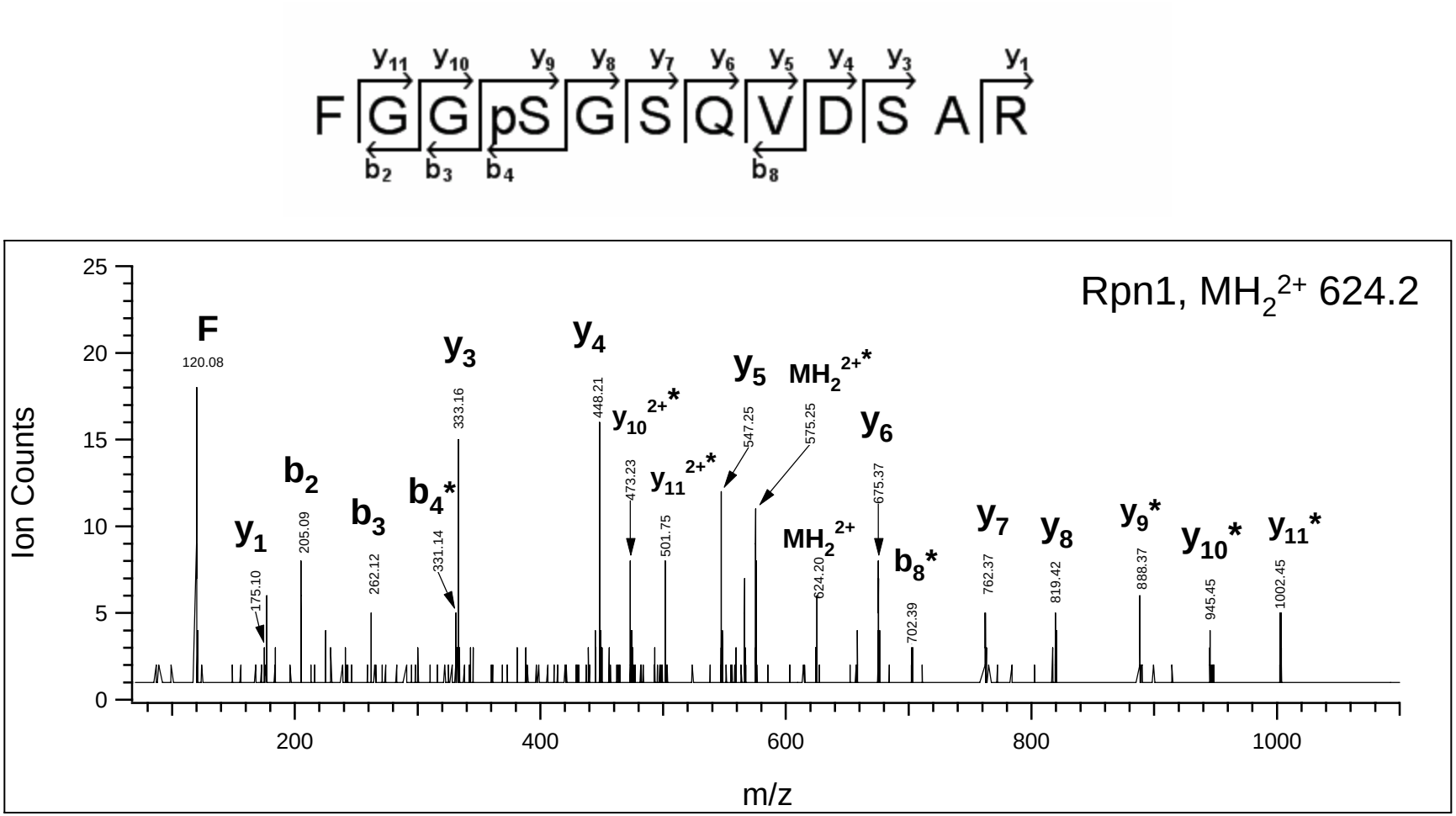

Acetyl-M N L L P N I E pS P V T R
y10 y9 y7 y6 y5 y4 y1
b2 b3
Rpt5, MH2 2+ 803.4
Ion Counts
m/z
b2
288.10
a3
373.19
b3
401.17
y1
175.05
y4
472.29
y5*
541.27
y6*
670.36
MH2 2+
803.48
y7
881.51
y9*
994.49
y9
1092.48
y10*
1107.52
y10
1205.41
0
10
20
30
40
50
60
70
200
400
600
800
1000
1200

Suppl. Fig. 2A

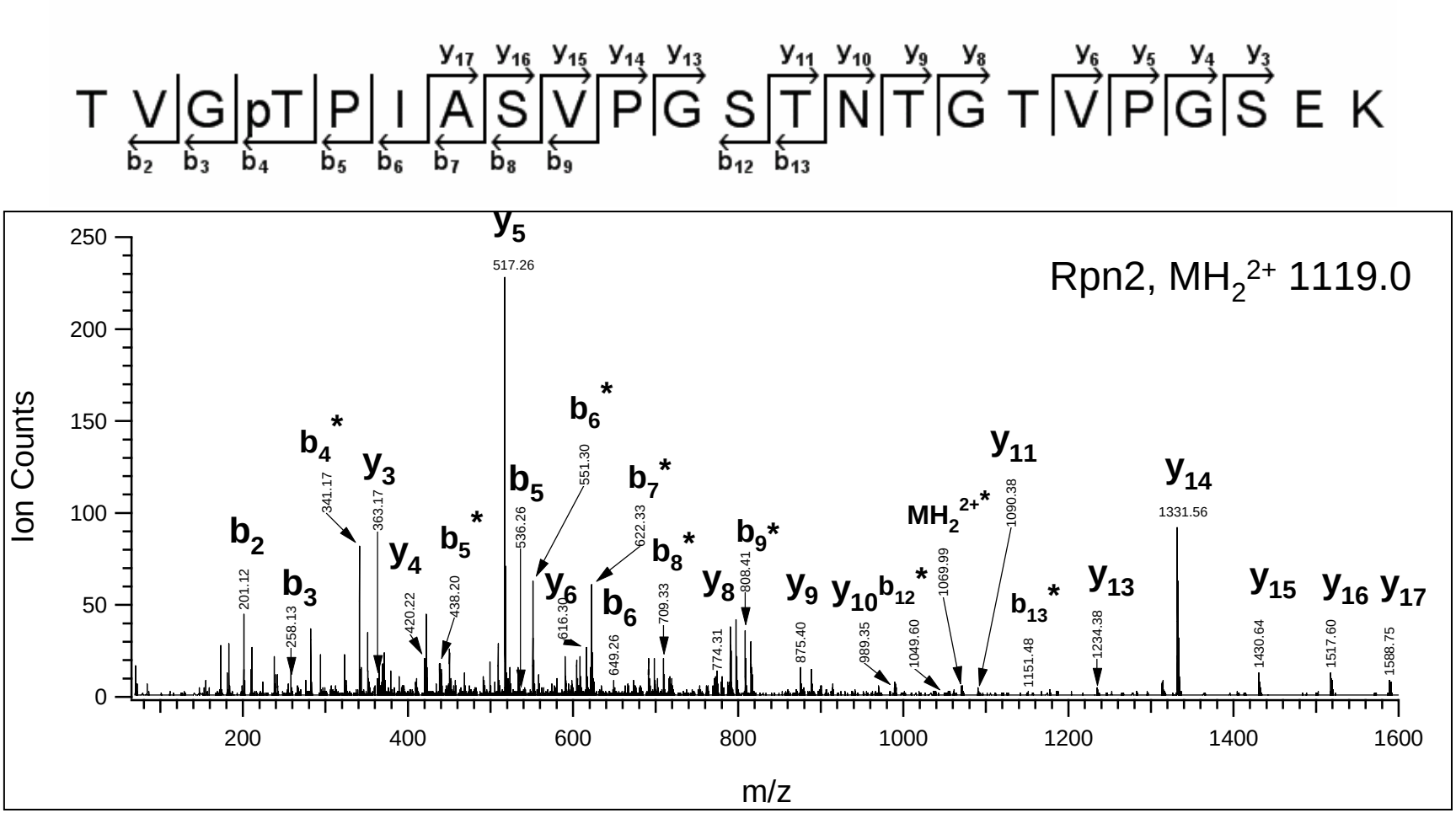

A P V Q P Q Q pS P A A A P G G T D E K P S G K
y19 y15 y12 y11 y10 y9 y7 y6 y5 y4 y2
b2 b3 b4 b5 b6 b7 b8 b9 b10 b11 b12


Rpn1, MH3 3+ 766.7
Ion Counts
m/z
y11 2+ 536.76
b8 2+*
b11 2+*
b10 2+
b10 2+*
b4
y4
b2
y2
b3
b5
y5
y12 2+
b6
y6
y15 2+
MH3 3+*
b7
y7
MH3 3+
b8*
y9
y19 2+
y10
b10*
b9
b11*
y11
b10
y12
b11
b12
70.06
169.11
204.13
268.16
388.20
396.20
409.72
493.74
493.28
516.29
529.30
542.74
572.25
621.32
645.34
691.85
734.01
749.29
760.38
766.65
818.38
918.44
951.92
975.38
986.48
1013.54
1057.52
1072.58
1084.42
1143.43
1155.48
1226.56

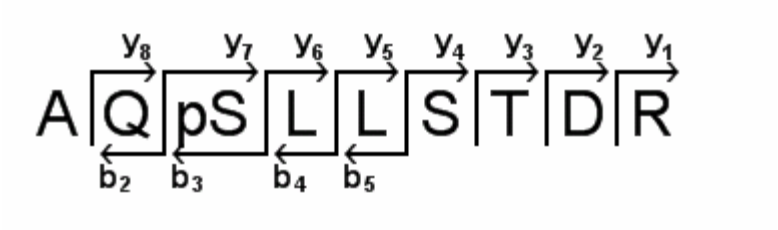
Suppl. Fig. 2B

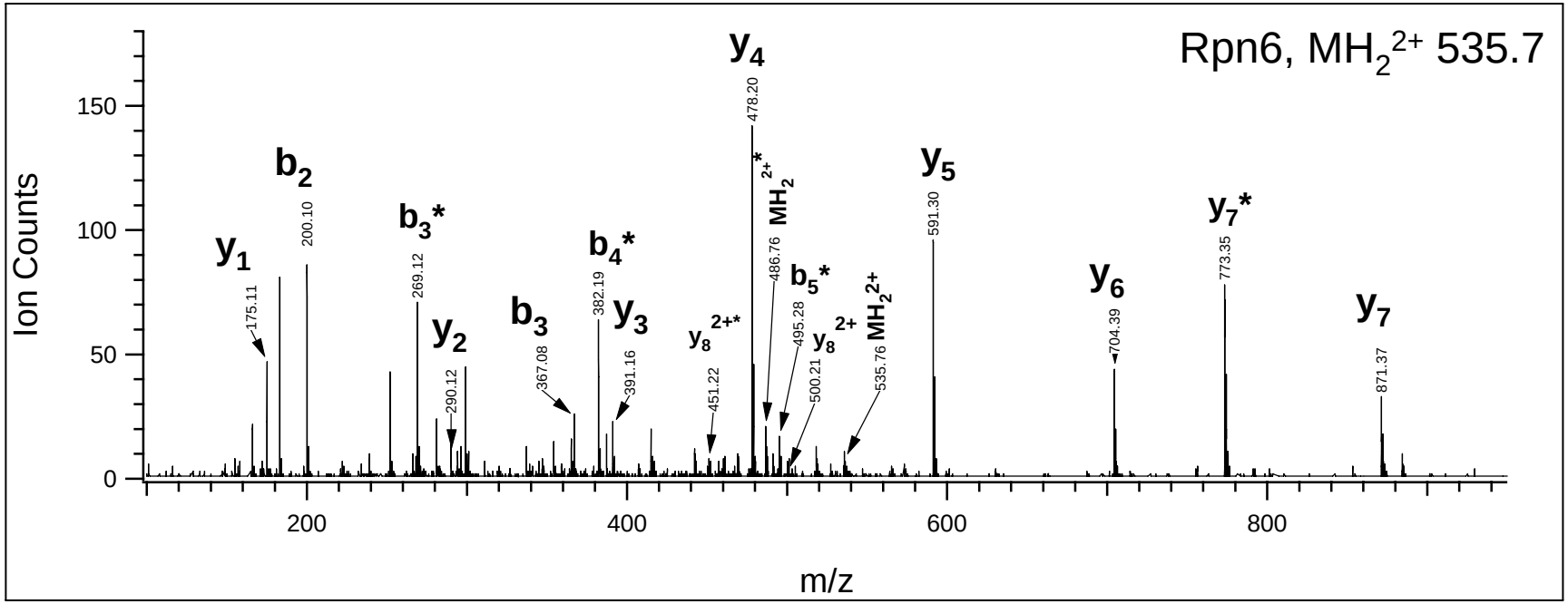

y11 y10 y9 y8 y7 y6 y5 y4 y3 y1
F G G pS G S Q V D S A R
b2 b3 b4 b8
Rpn1, MH2 2+ 624.2
Ion Counts
m/z
F 120.08
y1 175.10
b2 205.09
b3 262.12
b4* 331.14
y3 333.16
y4 448.21
y10 2+* 473.23
y11 2+* 501.75
y5 547.25
MH2 2+* 575.25
MH2 2+ 624.20
y6 675.37
b8* 702.39
y7 762.37
y8 819.42
y9* 888.37
y10* 945.45
y11* 1002.45

Suppl. Fig. 2C

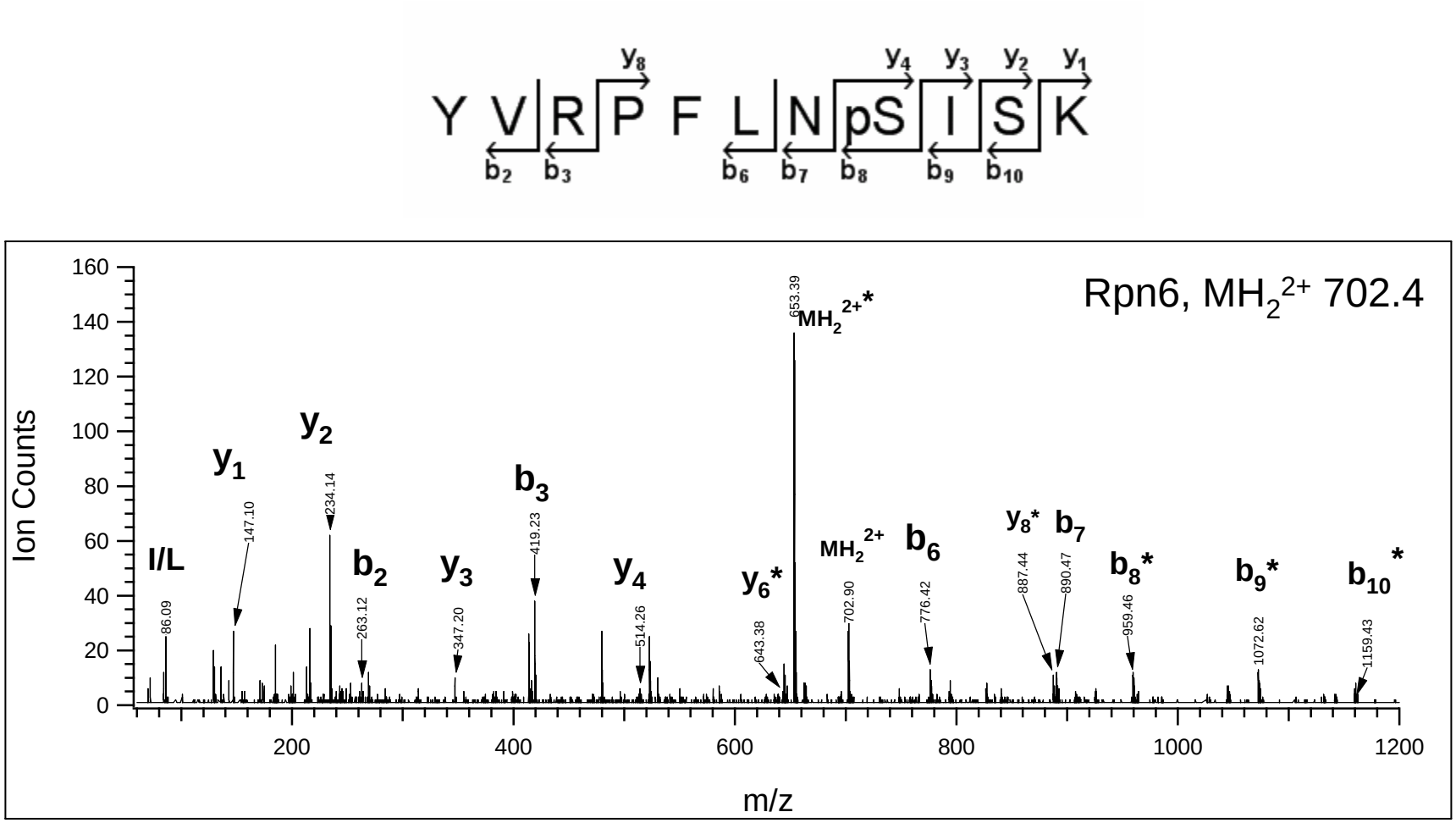

T V G pT P I A S V P G S T N T G T V P G S E K
Rpn2, MH2 2+ 1119.0
Ion Counts
m/z
y5
517.26
b6*
551.30
b4*
341.17
y3
363.17
b5
536.26
b7*
622.33
y11
1090.38
y14
1331.56
MH2 2+*
1069.99
b2
201.12
b3
258.13
y4
420.22
b5*
438.20
y6
616.30
b6
649.26
b8*
709.33
y8
774.31
b9*
808.41
y9
875.40
y10
989.35
b12*
1049.60
b13*
1151.48
y13
1234.38
y15
1430.64
y16
1517.60
y17
1588.75

Suppl. Fig. 2D

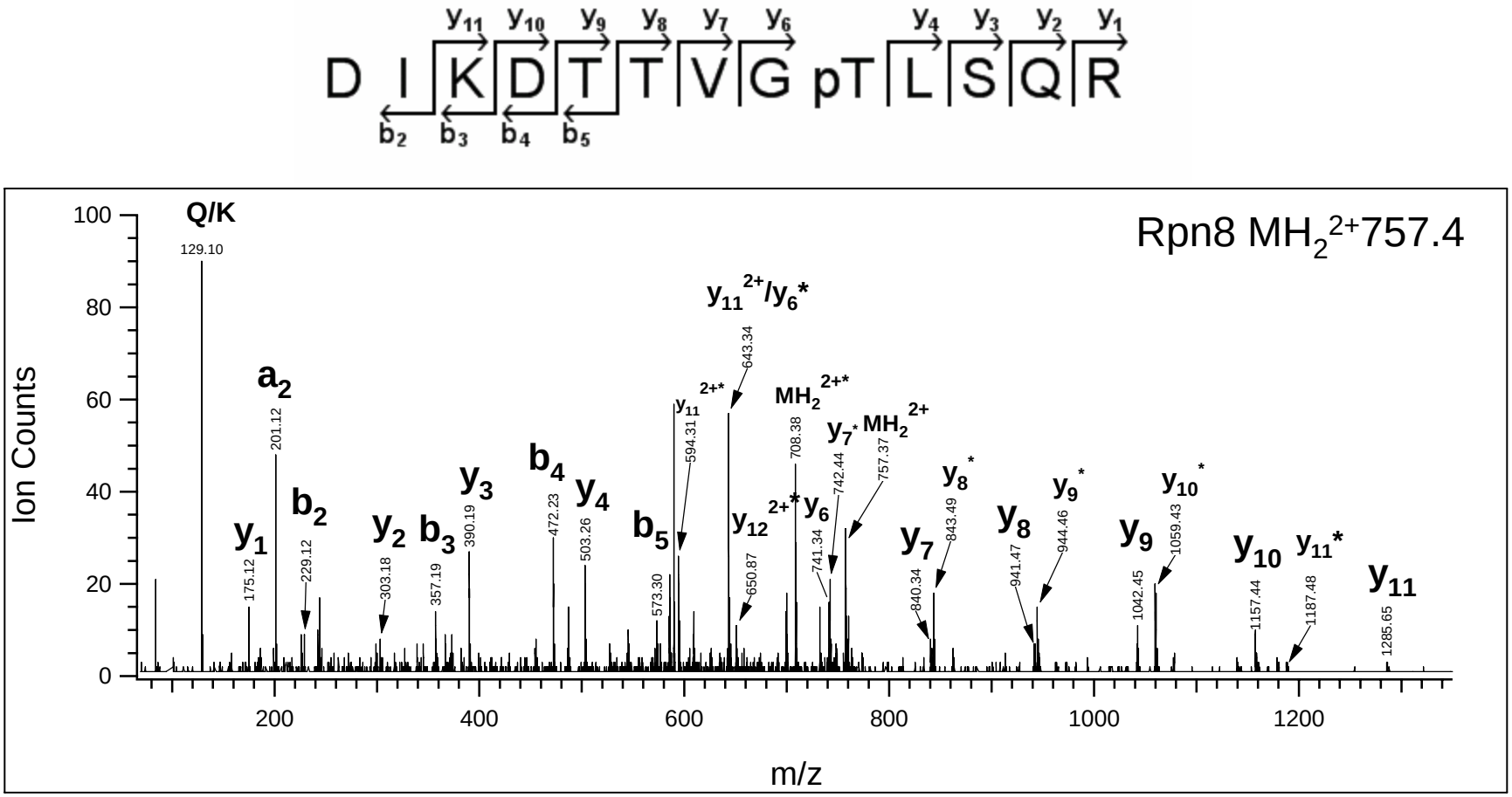

y8 y7 y6 y5 y4 y3 y2 y1
A Q pS L L S T D R
b2 b3 b4 b5


Rpn6, MH2 2+ 535.7
Ion Counts
m/z
y1
175.11
b2
200.10
b3*
269.12
y2
290.12
b3
367.08
b4*
382.19
y3
391.16
y8 2+*
451.22
y4
478.20
MH2 2+*
486.76
b5*
495.28
y8 2+
500.21
MH2 2+
535.76
y5
591.30
y6
704.39
y7*
773.35
y7
871.37
0
50
100
150
200
400
600
800

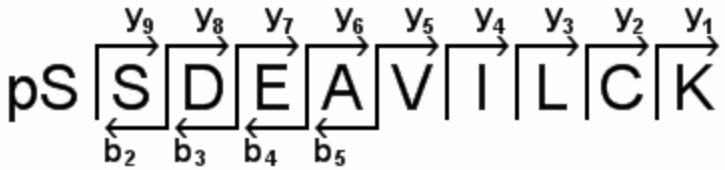
Suppl. Fig. 2E

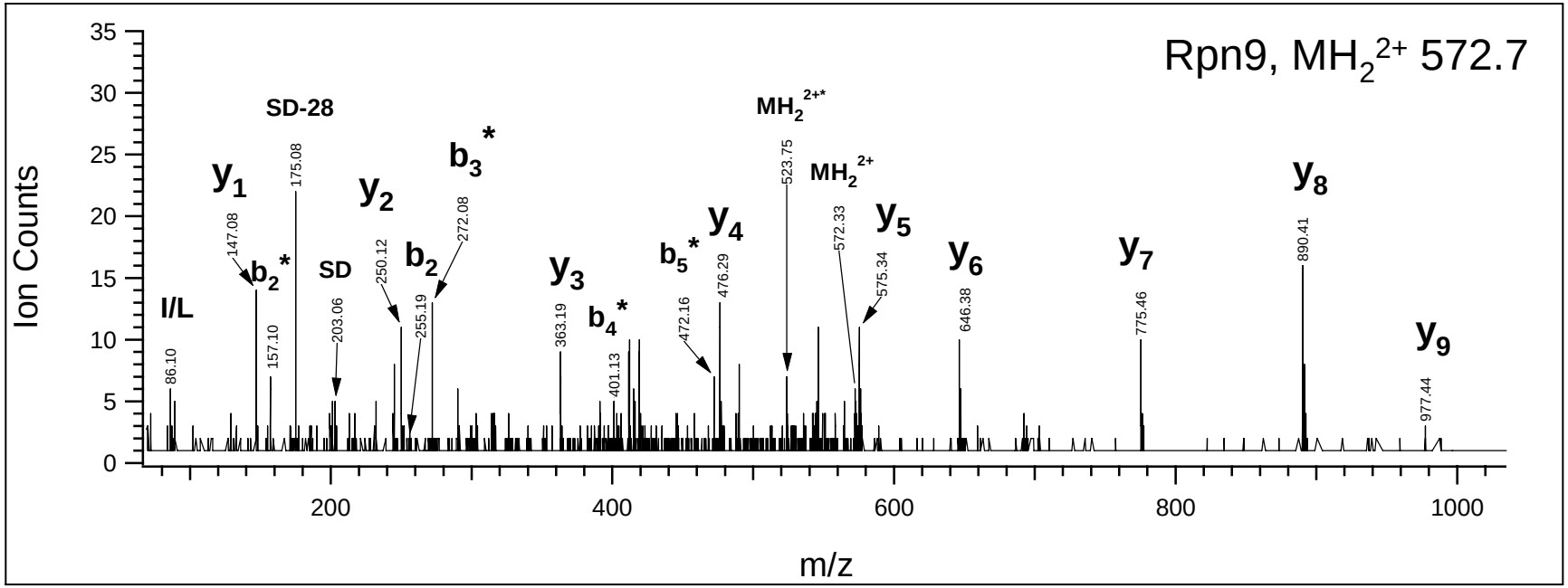

Y V R P F L N pS I S K
y8 y4 y3 y2 y1
b2 b3 b6 b7 b8 b9 b10
Rpn6, MH2 2+ 702.4
Ion Counts
m/z
I/L
y1
y2
b2
y3
b3
y4
y6*
MH2 2+*
MH2 2+
b6
y8*
b7
b8*
b9*
b10*
86.09
147.10
234.14
263.12
347.20
419.23
514.26
643.38
653.39
702.90
776.42
887.44
890.47
959.46
1072.62
1159.43

Suppl. Fig. 2F

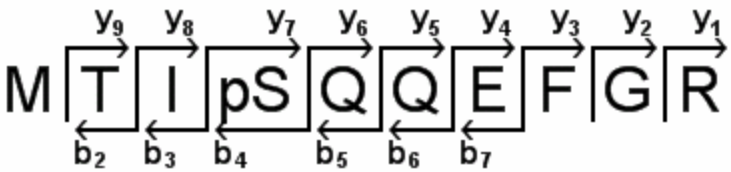

D I K D T T V G pT L S Q R
y11 y10 y9 y8 y7 y6 y4 y3 y2 y1
b2 b3 b4 b5
Rpn8 MH2 2+ 757.4
Q/K
129.10
a2
201.12
y1
175.12
b2
229.12
y2
303.18
b3
357.19
y3
390.19
b4
472.23
y4
503.26
b5
573.30
y11 2+*
594.31
y11 2+/y6*
643.34
y12 2+*
650.87
y6
741.34
MH2 2+*
708.38
y7*
742.44
MH2 2+
757.37
y7
840.34
y8*
843.49
y8
941.47
y9*
944.46
y9
1042.45
y10*
1059.43
y10
1157.44
y11*
1187.48
y11
1285.65
Ion Counts
m/z
0
20
40
60
80
100
200
400
600
800
1000
1200

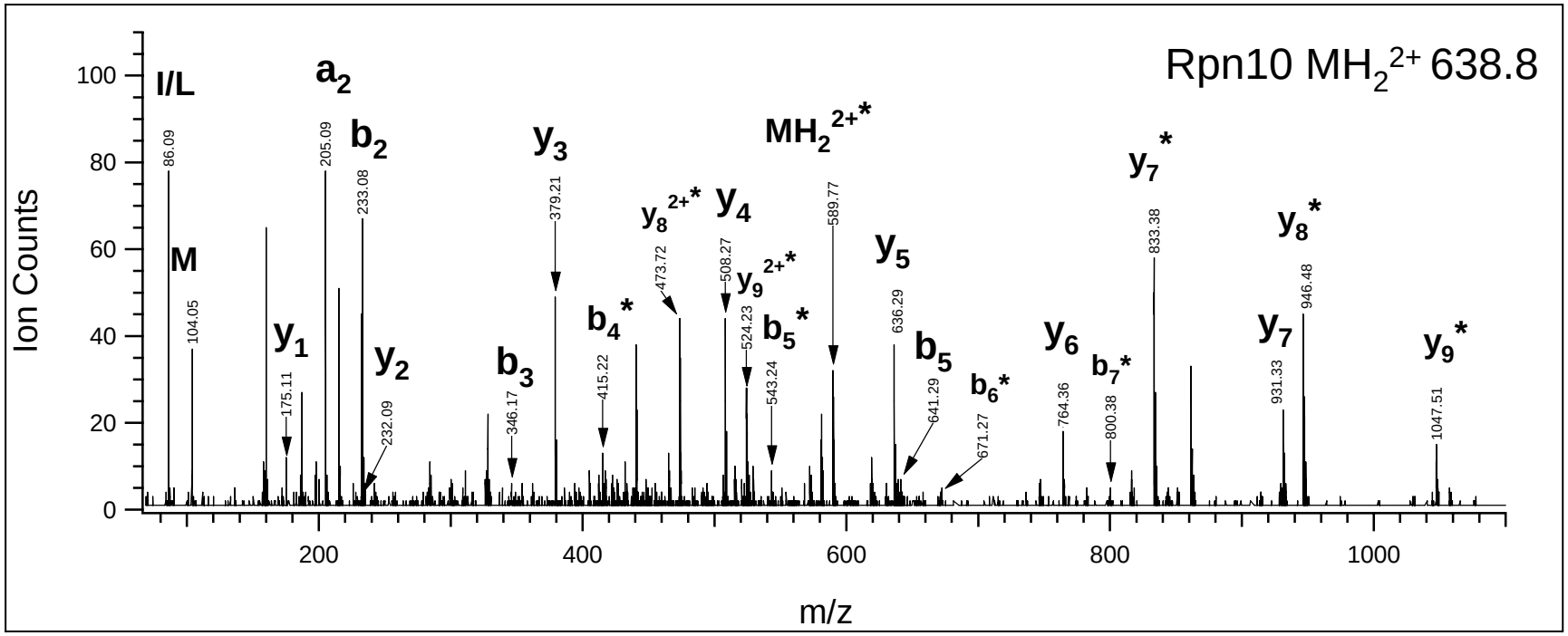
Suppl. Fig. 1G


y9 y8 y7 y6 y5 y4 y3 y2 y1
pS S D E A V I L C K
b2 b3 b4 b5

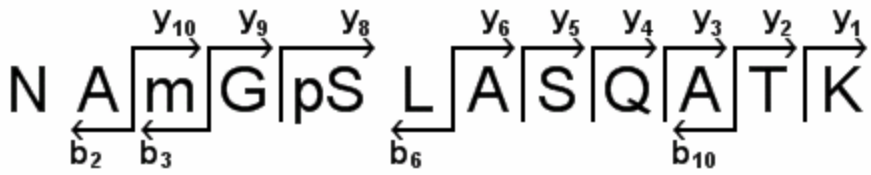

Rpn9, MH2 2+ 572.7
Ion Counts
m/z
SD-28
SD
I/L
y1
b2*
b2
b3*
y2
y3
b4*
b5*
y4
MH2 2+*
MH2 2+
y5
y6
y7
y8
y9
86.10
147.08
157.10
175.08
203.06
250.12
255.19
272.08
363.19
401.13
472.16
476.29
523.75
572.33
575.34
646.38
775.46
890.41
977.44

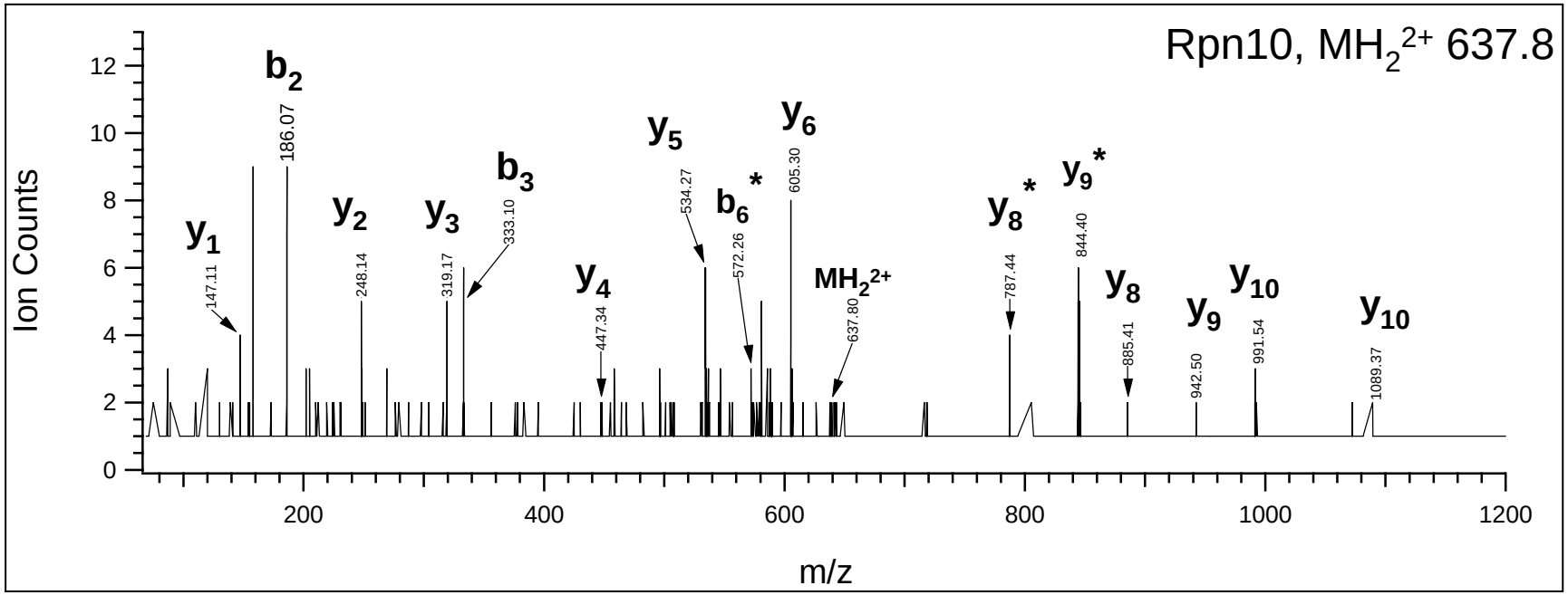
Suppl. Fig. 2H


y9 y8 y7 y6 y5 y4 y3 y2 y1
M T I pS Q Q E F G R
b2 b3 b4 b5 b6 b7

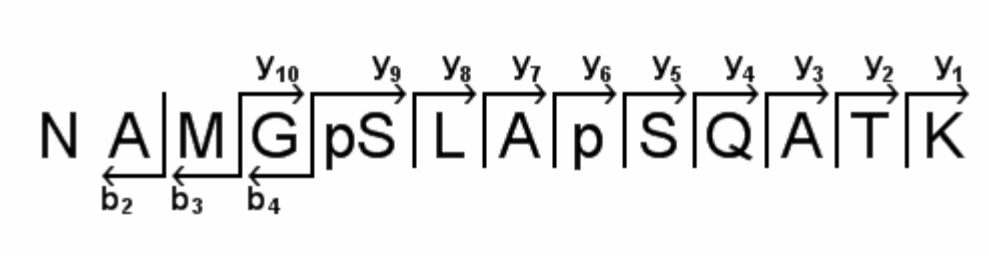

Rpn10 MH2 2+ 638.8
Ion Counts
m/z
I/L
M
a2
b2
y3
MH2 2+*
y7*
y8*
y8 2+*
y4
y9 2+*
y5
b4*
b5*
b5
y1
y2
b3
y6
b6*
b7*
y7
y9*
86.09
104.05
175.11
205.09
232.09
233.08
346.17
379.21
415.22
473.72
508.27
524.23
543.24
589.77
636.29
641.29
671.27
764.36
800.38
833.38
931.33
946.48
1047.51
0
20
40
60
80
100
200
400
600
800
1000

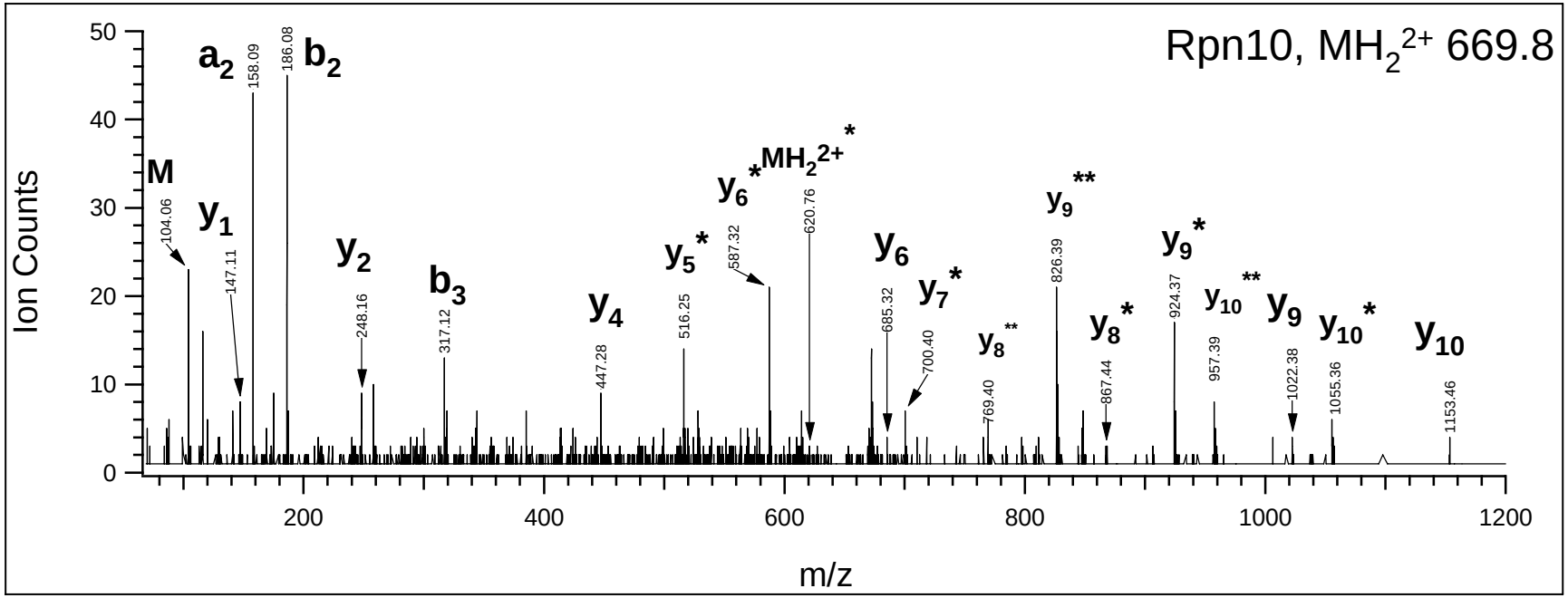
Suppl. Fig. 2I


y10 y9 y8 y6 y5 y4 y3 y2 y1
N A m G pS L A S Q A T K
b2 b3 b6 b10

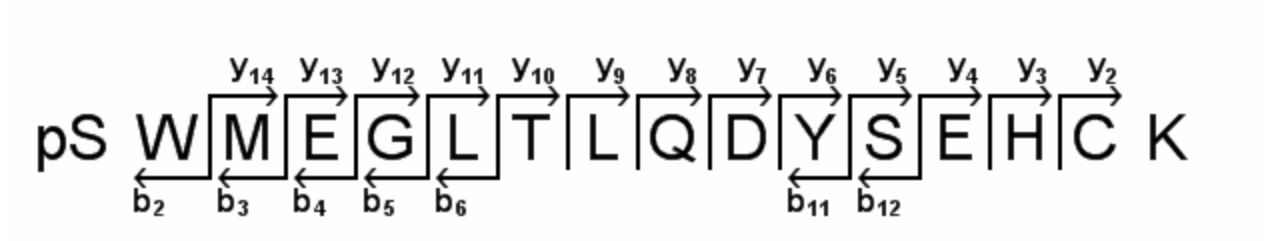

Rpn10, MH2 2+ 637.8
Ion Counts
m/z
b2
186.07
y1
147.11
y2
248.14
y3
319.17
b3
333.10
y4
447.34
y5
534.27
b6*
572.26
y6
605.30
MH2 2+
637.80
y8*
787.44
y9*
844.40
y8
885.41
y9
942.50
y10
991.54
y10
1089.37
0
2
4
6
8
10
12
200
400
600
800
1000
1200

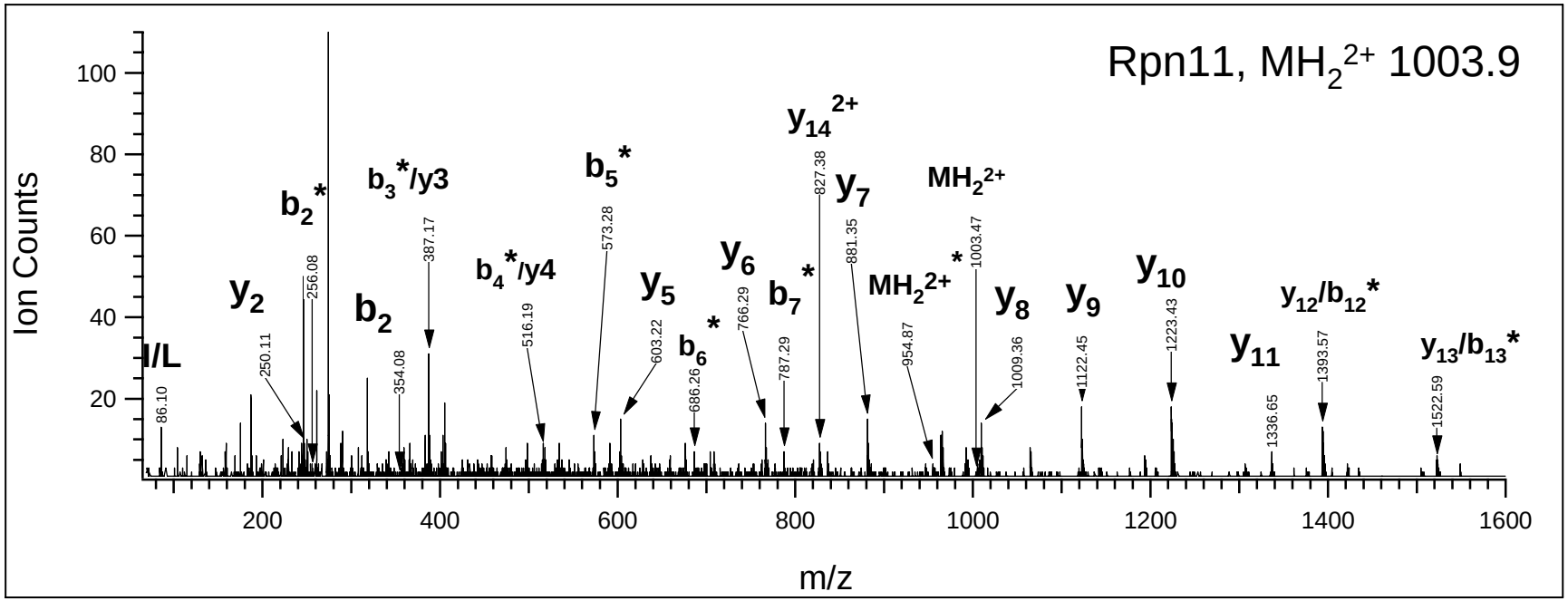
Suppl. Fig. 2J


y10 y9 y8 y7 y6 y5 y4 y3 y2 y1
N A M G pS L A p S Q A T K
b2 b3 b4

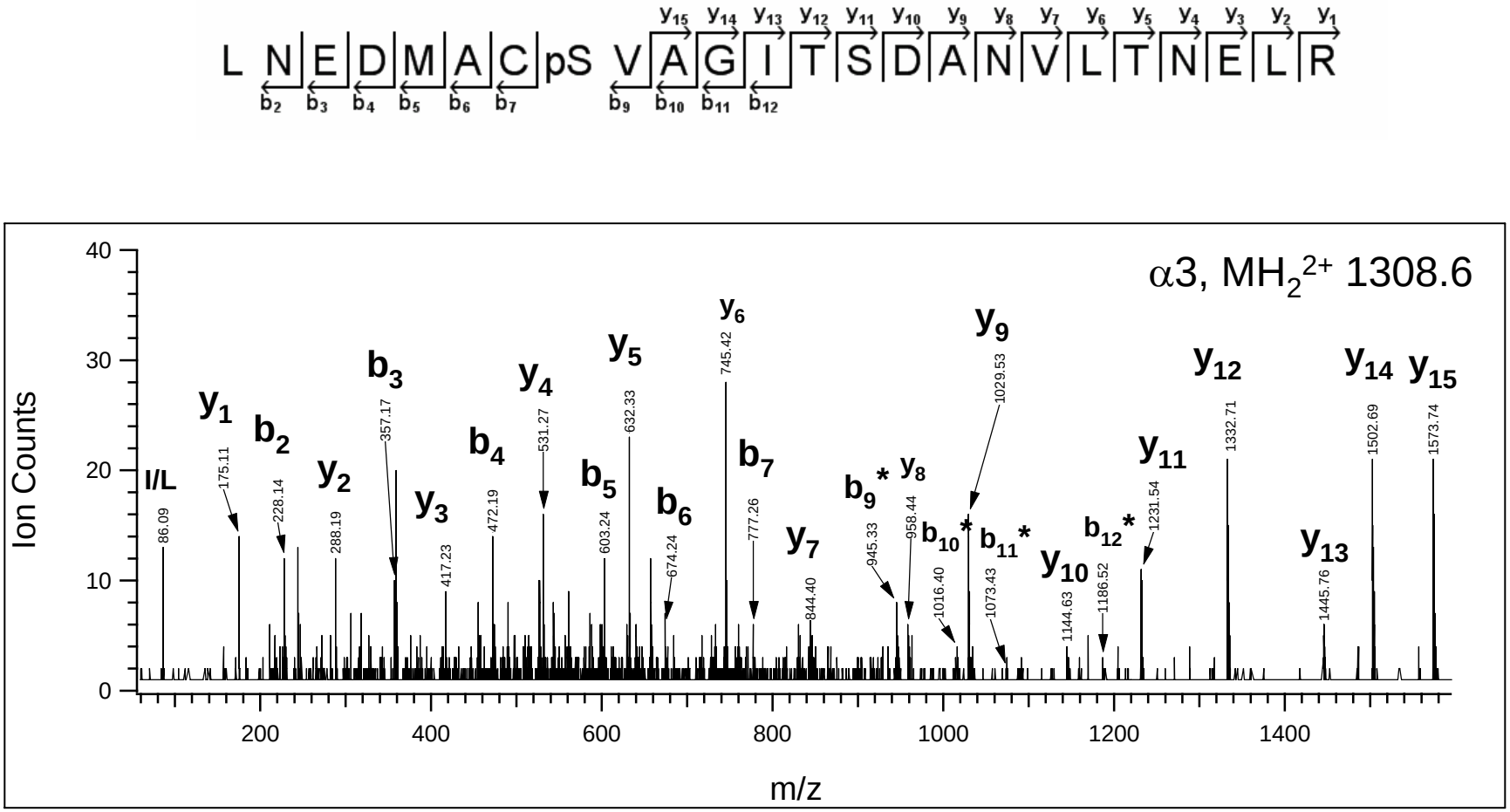

Rpn10, MH2 2+ 669.8
Ion Counts
m/z
M
a2
b2
y1
y2
b3
y4
y5*
y6*
MH2 2+*
y6
y7*
y8**
y9**
y8*
y9*
y10**
y9
y10*
y10
104.06
147.11
158.09
186.08
248.16
317.12
447.28
516.25
587.32
620.76
685.32
700.40
769.40
826.39
867.44
924.37
957.39
1022.38
1055.36
1153.46
0
10
20
30
40
50
200
400
600
800
1000
1200

Suppl. Fig. 2K

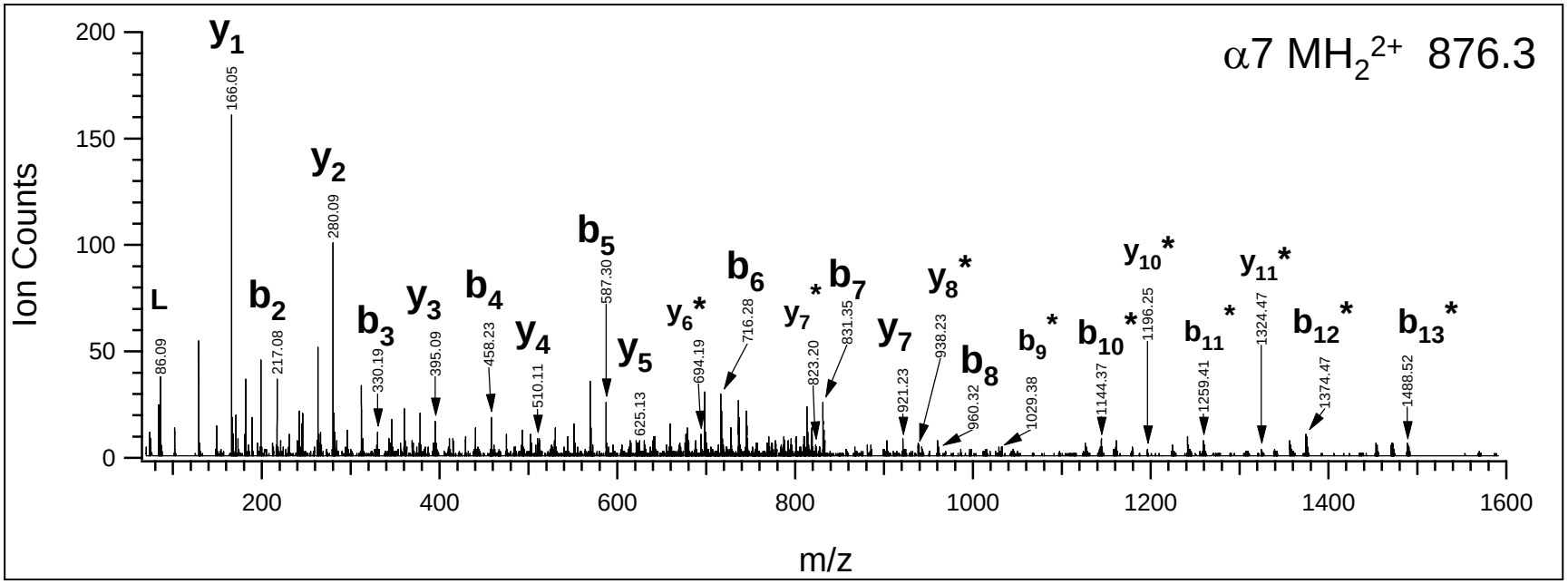

pS W M E G L T L Q D Y S E H C K
y14 y13 y12 y11 y10 y9 y8 y7 y6 y5 y4 y3 y2
b2 b3 b4 b5 b6 b11 b12


Rpn11, MH2 2+ 1003.9
Ion Counts
m/z
I/L
y2
b2*
b2
b3*/y3
b4*/y4
b5*
y5
b6*
y6
b7*
y14 2+
y7
MH2 2+
MH2 2+*
y8
y9
y10
y11
y12/b12*
y13/b13*
86.10
250.11
256.08
354.08
387.17
516.19
573.22
603.22
686.26
766.29
787.29
827.38
881.35
954.87
1003.47
1009.36
1122.45
1223.43
1336.65
1393.57
1522.59

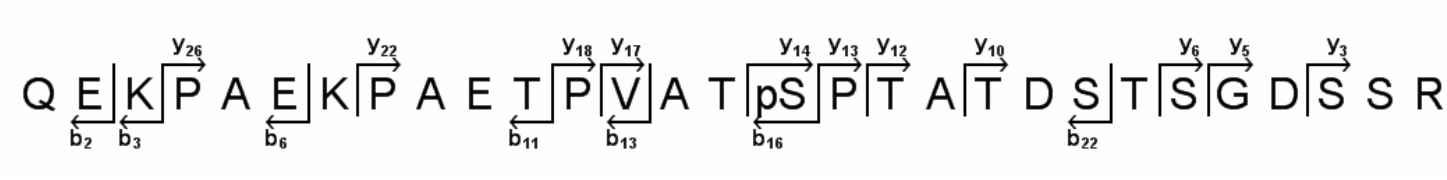
Suppl. Fig. 2L

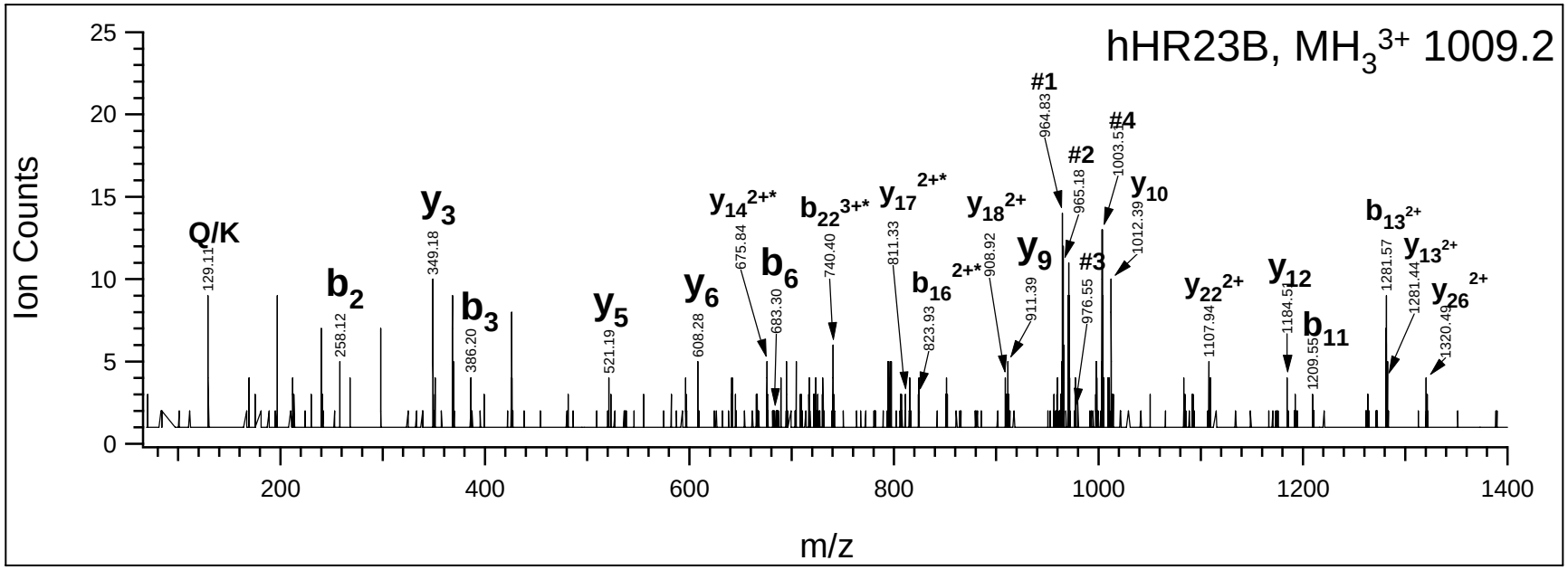

L N E D M A C pS V A G I T S D A N V L T N E L R
y15 y14 y13 y12 y11 y10 y9 y8 y7 y6 y5 y4 y3 y2 y1
b2 b3 b4 b5 b6 b7 b9 b10 b11 b12
α3, MH2 2+ 1308.6
Ion Counts
m/z
I/L
y1
b2
y2
b3
y3
b4
y4
b5
y5
b6
y6
b7
y7
b9*
y8
b10*
y9
b11*
y10
b12*
y11
y12
y13
y14
y15
86.09
175.11
228.14
288.19
357.17
417.23
472.19
531.27
603.24
632.33
674.24
745.42
777.26
844.40
945.33
958.44
1016.40
1029.53
1073.43
1144.63
1186.52
1231.54
1332.71
1445.76
1502.69
1573.74

Suppl. Fig. 2M


E S L K E E D E pS D D D N m
y11 y10 y8 y7 y6 y5 y4 y3 y2 y1
b2 b3 b4 b5 b6 b7 b8 b9 b10 b11 b12 b13
α7 MH2 2+ 876.3
Ion Counts
m/z
L
y1
166.05
b2
217.08
y2
280.09
b3
330.19
y3
395.09
b4
458.23
y4
510.11
b5
587.30
y5
625.13
y6*
694.19
b6
716.28
y7*
823.20
b7
831.35
y7
921.23
y8*
938.23
b8
960.32
b9*
1029.38
b10*
1144.37
y10*
1196.25
b11*
1259.41
y11*
1324.47
b12*
1374.47
b13*
1488.52
86.09
0
50
100
150
200
200
400
600
800
1000
1200
1400
1600

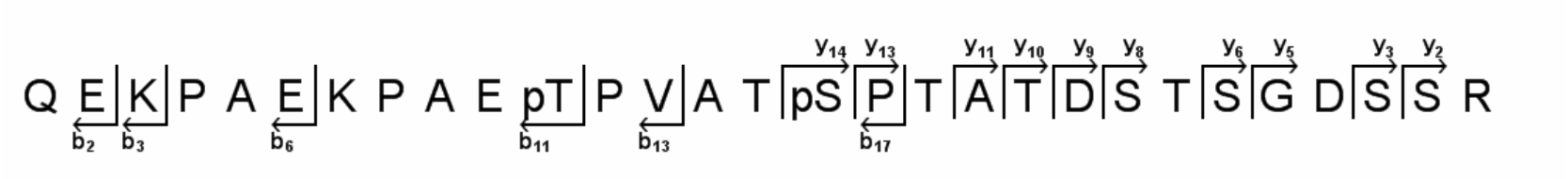
Suppl. Fig. 2N



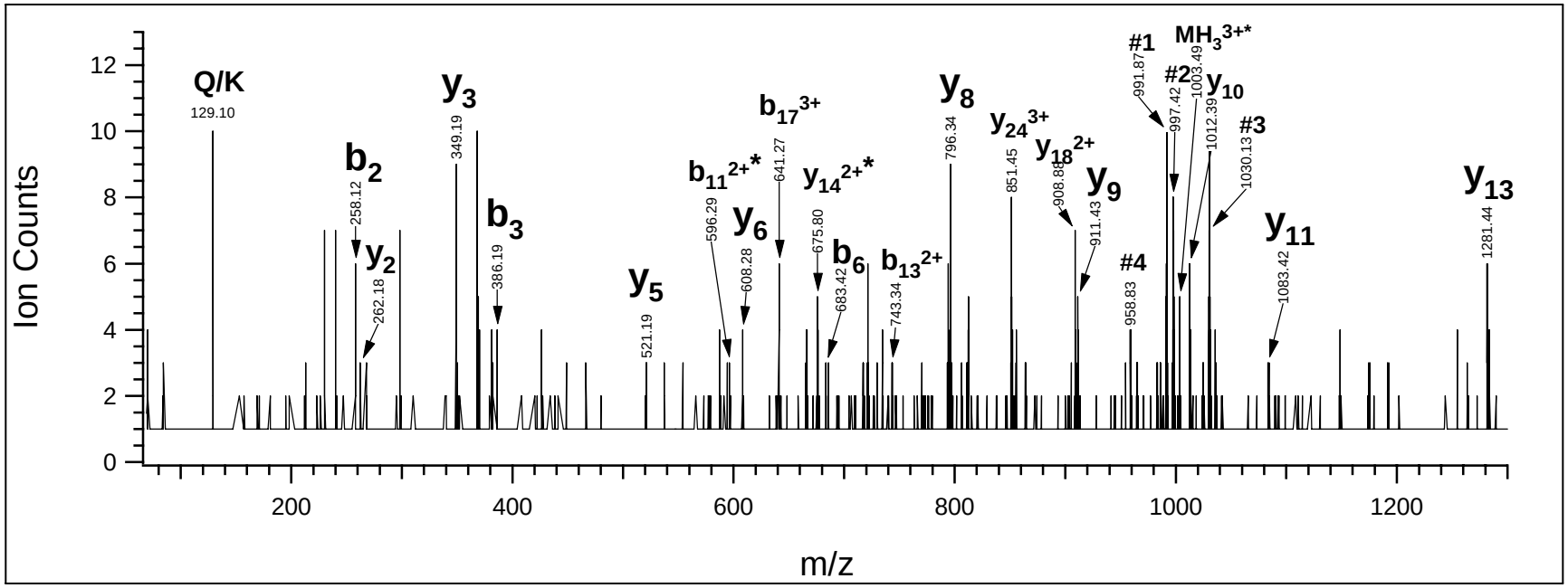


#1: $[MH_3\text{-}2NH_3\text{-}H_3PO_4]^{3+}$; **#2:** $[MH_3\text{-}NH_3\text{-}H_3PO_4]^{3+}$; **#3**: $[MH_3\text{-}NH_3\text{-}H_3PO_4]^{3+}$; **#4**: $[MH_3\text{-}NH_3]^{3+}$;

Suppl. Fig. 2O



hHR23B, MH_3^{3+} 1035.8



#1: $[MH_3\text{-}2NH_3\text{-}H_3PO_4]^{3+}$; #2: $[MH_3\text{-}NH_3\text{-}H_3PO_4]^{3+}$; #3: $[MH_3\text{-}NH_3]^{3+}$;
#4: $[MH_3\text{-}NH_3\text{-}H_2O\text{-}2H_3PO_4]^{3+}$;

Suppl. Fig. 2P