

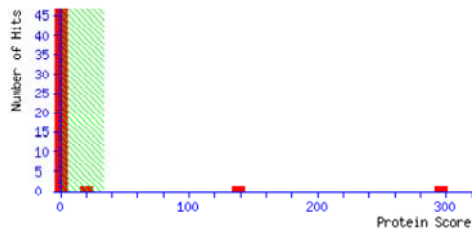


Mascot Search Results

User : JPROS
Email : pro@jbios.co.jp
Search title : D:\JPROS\N093\Upper2(x10)_1micro-2.wiff (sample number 1)
MS data file : mas42E.tmp
Database : UP589_M_musculus_M_musculus_20201007 (63738 sequences; 28575537 residues)
Timestamp : 5 Jul 2021 at 09:05:52 GMT
Protein hits : [A0A0R4J043](#) Meprin A subunit OS=Mus musculus OX=10090 GN=Mep1a PE=1 SV=1
[Q61847](#) Meprin A subunit beta OS=Mus musculus OX=10090 GN=Mep1b PE=1 SV=2
[Q91WV7](#) Neutral and basic amino acid transport protein rBAT OS=Mus musculus OX=10090 GN=Slc3a1 PE=1 SV=1

Mascot Score Histogram

Ions score is $-10 \cdot \log(P)$, where P is the probability that the observed match is a random event.
Individual ions scores > 33 indicate identity or extensive homology ($p < 0.05$).
Protein scores are derived from ions scores as a non-probabilistic basis for ranking protein hits.



Peptide Summary Report

Format As	Peptide Summary	Help
Significance threshold p<	0.05	Max. number of hits
Standard scoring	☐ MudPIT scoring ☒	Display non-significant matches ☒
Show pop-ups	☒ Suppress pop-ups ☐	Sort unassigned
		Decreasing Score
		Require bold red ☐

Select All Select None Search Selected ☐ Error tolerant

1. [A0A0R4J043](#) Mass: 85610 Score: 296 Matches: 20(12) Sequences: 12(6) emPAI: 0.33
Meprin A subunit OS=Mus musculus OX=10090 GN=Mep1a PE=1 SV=1
☐ Check to include this hit in error tolerant search

Query	Observed	Mr(expt)	Mr(calc)	Delta	Miss	Score	Expect	Rank	Unique	Peptide
94	414.2253	826.4359	826.4589	-0.0229	0	9	14	7	U	R.YVFLGTK.G
☒ 183	473.2621	944.5096	944.4927	0.0169	0	(39)	0.023	1	U	R.GEAALLES.R.I
☒ 184	473.2630	944.5115	944.4927	0.0188	0	(39)	0.026	1	U	R.GEAALLES.R.I
☒ 185	473.2637	944.5129	944.4927	0.0202	0	(40)	0.019	1	U	R.GEAALLES.R.I
☒ 186	473.2643	944.5141	944.4927	0.0214	0	41	0.015	1	U	R.GEAALLES.R.I
☒ 216	577.3063	1152.5980	1152.6139	-0.0158	0	(17)	3.1	1	U	K.IAHVTLNEEK.K
☒ 217	577.3530	1152.6915	1152.6139	0.0776	0	39	0.018	1	U	K.IAHVTLNEEK.K
☒ 238	618.7913	1235.5681	1235.5751	-0.0070	0	(56)	0.00035	1	U	K.TNVC G MIQGT.R.D + Carbamidomethyl (C)
☒ 239	618.7999	1235.5853	1235.5751	0.0102	0	62	9.7e-05	1	U	K.TNVC G MIQGT.R.D + Carbamidomethyl (C)
☒ 240	618.8056	1235.5966	1235.5751	0.0215	0	(44)	0.0056	1	U	K.TNVC G MIQGT.R.D + Carbamidomethyl (C)
☒ 244	626.7967	1251.5789	1251.5700	0.0089	0	(26)	0.37	1	U	K.TNVC G MIQGT.R.D + Carbamidomethyl (C); Oxidation
☒ 246	631.3019	1260.5893	1260.5961	-0.0069	0	42	0.011	1	U	K.QQCLQFFYK.M + Carbamidomethyl (C)
☒ 254	638.3050	1274.5955	1274.6250	-0.0296	0	11	14	1	U	R.MSLTLMFTTSK.N + Oxidation (M)
☒ 258	427.9187	1280.7344	1280.7088	0.0256	1	2	80	5	U	K.IAHVTLNEEKK.F
☒ 303	511.8884	1532.6433	1532.6388	0.0045	1	34	0.054	1	U	K.VGVYDKDC D CFR.S + 2 Carbamidomethyl (C)
☒ 307	525.9203	1574.7391	1574.7114	0.0277	0	24	0.61	1	U	K.IQTFQGDSDHNWK.I
☒ 310	802.9107	1603.8068	1603.7876	0.0192	0	(72)	9e-06	1	U	R.QAINTILDQEADTR.N
☒ 311	810.9123	1619.8101	1619.7825	0.0276	0	73	6.7e-06	1	U	R.QAINTILDQEADTR.N + Oxidation (M)
☒ 312	550.9294	1649.7664	1649.7984	-0.0320	1	24	0.53	1	U	K.MTGSPADRFEVWVR.R
☒ 337	766.3684	2296.0834	2296.0722	0.0112	0	44	0.0035	1	U	K.SCVDFKPYEGESSYIIFQK.L + Carbamidomethyl (C)

Proteins matching the same set of peptides:
[P28825](#) Mass: 84177 Score: 296 Matches: 20(12) Sequences: 12(6)
Meprin A subunit alpha OS=Mus musculus OX=10090 GN=Mep1a PE=1 SV=4

2. [Q61847](#) Mass: 79450 Score: 131 Matches: 6(4) Sequences: 6(4) emPAI: 0.19
Meprin A subunit beta OS=Mus musculus OX=10090 GN=Mep1b PE=1 SV=2
☐ Check to include this hit in error tolerant search

Query	Observed	Mr(expt)	Mr(calc)	Delta	Miss	Score	Expect	Rank	Unique	Peptide
89	410.2475	818.4804	818.4650	0.0154	0	6	38	2	U	R.VVFEGLR.G
☒ 242	623.7807	1245.5468	1245.5587	-0.0119	0	11	12	1	U	R.MDFSDYDLLK.L
☒ 261	642.8631	1283.7117	1283.6874	0.0243	0	47	0.0028	1	U	R.GIGYGTTFVITR.E
☒ 264	646.8363	1291.6580	1291.6408	0.0172	0	59	0.00022	1	U	R.ISEFEDVIGQR.M
☒ 313	825.9209	1649.8273	1649.8373	-0.0100	0	59	0.00018	1	U	R.EYTTGQQGGVLTQLR.Q
☒ 329	988.4795	1974.9444	1974.9494	-0.0051	0	39	0.014	1	U	R.GPGTSSGGLSIDINLSETR.C

Proteins matching the same set of peptides:

[Q61847-2](#) Mass: 80296 Score: 131 Matches: 6(4) Sequences: 6(4)
 Isoform 2 of Meprin A subunit beta OS=Mus musculus OX=10090 GN=Mep1b

3. [Q91WV7](#) Mass: 78069 Score: 23 Matches: 1(0) Sequences: 1(0)
 Neutral and basic amino acid transport protein rBAT OS=Mus musculus OX=10090 GN=Slc3a1 PE=1 SV=1
☐ Check to include this hit in error tolerant search

Query	Observed	Mr(expt)	Mr(calc)	Delta	Miss	Score	Expect	Rank	Unique	Peptide
☒ 215	571.2773	1140.5400	1140.5452	-0.0052	0	23	0.74	1	U	K.GVDGFSFDAVK.F

Peptide matches not assigned to protein hits: (no details means no match)

Query	Observed	Mr(expt)	Mr(calc)	Delta	Miss	Score	Expect	Rank	Unique	Peptide
☒ 175	460.7846	919.5546	919.5161	0.0385	1	25	0.58	1		LGVAMAKSK + Oxidation (M)
☒ 211	552.3330	1102.6515	1102.5632	0.0883	1	17	3.5	1		QGAFGRGAPSR
☒ 81	407.1888	812.3630	812.4756	-0.1126	0	17	2	1		VVIPTER
☒ 95	414.2289	826.4432	826.4409	0.0023	1	16	2.5	1		RSAPSPGR
☒ 96	414.2394	826.4642	826.3387	0.1255	0	16	2.8	1		ICMMGEK + Oxidation (M)
☒ 179	461.2742	920.5338	920.4749	0.0589	1	15	5.8	1		QIEKTMK + Oxidation (M)
☒ 94	414.2253	826.4359	826.5025	-0.0665	0	15	3.3	1		IQAVLQR
☒ 176	460.7939	919.5732	919.5491	0.0241	1	15	6	1		KLAFLSGGK
☒ 90	411.1726	820.3307	820.4807	-0.1500	0	14	4.9	1		ILIGYSR
☒ 61	400.1723	798.3301	798.4712	-0.1411	1	13	4.3	1		SNPVKVR
☒ 232	607.3537	1212.6928	1212.6826	0.0102	1	13	7.7	1		LSIGRIPNSEK
☒ 67	400.3000	798.5854	798.4851	0.1004	0	13	4.1	1		LVEIPTK
☒ 142	435.7846	869.5547	869.4178	0.1369	0	12	7.5	1		VVHECQR
☒ 93	412.2105	822.4065	822.5076	-0.1011	1	12	7	1		LLAGGHKK
☒ 209	531.2406	1060.4666	1060.5764	-0.1099	0	12	11	1		LETLTASQAK
☒ 302	507.2788	1518.8146	1518.7687	0.0459	1	12	8.9	1		VAGTQPTICKWMK + Carbamidomethyl (C)
☒ 231	607.3397	1212.6648	1212.6826	-0.0178	0	12	10	1		ILASQPALASSR
☒ 306	787.4210	1572.8274	1572.8698	-0.0424	0	12	9	1		VMPAEFILLGITNR
☒ 197	502.2176	1002.4207	1002.4843	-0.0635	1	11	14	1		QSRSPSEGR
☒ 195	499.3307	996.6469	996.4559	0.1909	1	11	11	1		TNRSFCGR + Carbamidomethyl (C)
☒ 64	400.2042	798.3938	798.4712	-0.0774	1	10	8.2	1		SNPVKVR
☒ 309	802.3835	1602.7525	1602.8035	-0.0510	1	10	12	1		QALMNILKQDGNK + Oxidation (M)
☒ 89	410.2475	818.4804	818.4069	0.0735	0	10	13	1		VVMQNGR + Oxidation (M)
☒ 153	445.1401	888.2657	888.3937	-0.1281	0	10	10	1		DGSTEQPR
☒ 205	523.2927	1044.5709	1044.5928	-0.0218	1	10	17	1		TVSLRDGAVK
☒ 291	481.3000	1440.8782	1440.7990	0.0792	1	10	10	1		KPAWTDRIILWR
☒ 87	409.2267	816.4389	816.4164	0.0226	0	10	15	1		DLPAWVR + Oxidation (M)
☒ 221	400.3000	1197.8782	1197.7193	0.1588	1	10	2.6	1		NASVAGLVKALR
☒ 92	411.1899	820.3653	820.4807	-0.1154	0	9	14	1		ILIGYSR
☒ 187	473.7654	945.5163	945.4291	0.0872	0	9	22	1		EESPDLEK
☒ 91	411.1783	820.3420	820.4807	-0.1387	0	9	15	1		ILIGYSR
☒ 181	463.1761	924.3377	924.5103	-0.1726	1	9	16	1		YSVIMGKK
☒ 65	400.2097	798.4048	798.4712	-0.0664	1	9	12	1		SNPVKVR
☒ 166	458.7269	915.4392	915.4926	-0.0534	1	9	25	1		KSPVGSWR
☒ 173	460.2904	918.5662	918.4671	0.0990	1	9	26	1		QSSRWQK
☒ 149	442.2316	882.4487	882.4092	0.0395	0	9	18	1		MTCLFPR + Oxidation (M)
☒ 171	460.2392	918.4639	918.4957	-0.0318	0	8	29	1		MTALQALR + Oxidation (M)
☒ 126	428.3000	854.5854	854.4610	0.1244	0	8	15	1		SGAPLTPGR
☒ 116	425.7764	849.5383	849.4127	0.1257	1	8	28	1		MEATR + Oxidation (M)
☒ 328	965.4955	1928.9764	1929.0360	-0.0596	0	8	19	1		AEQGAVTAVYLPHFVSLK
☒ 105	421.7640	841.5134	841.5062	0.0072	0	8	21	1		VAPAIIPK
☒ 70	400.3000	798.5854	798.4712	0.1143	1	8	12	1		SNPVKVR
☒ 144	436.1806	870.3466	870.4381	-0.0916	1	8	25	1		MHQKAEK
☒ 88	409.2408	816.4671	816.4276	0.0395	0	8	25	1		ILCANQR
☒ 63	400.1856	798.3566	798.4388	-0.0822	0	8	15	1		HFLASPK
☒ 66	400.2952	798.5758	798.4712	0.1046	1	8	13	1		SNPVKVR
☒ 104	421.7619	841.5093	841.5062	0.0031	0	7	24	1		VAPAIIPK
☒ 258	427.9187	1280.7344	1280.5853	0.1491	0	7	25	1		IDTSCVCALSR + 2 Carbamidomethyl (C)
☒ 201	516.2209	1030.4272	1030.5672	-0.1400	1	7	33	1		TPAGRNLF
☒ 62	400.1852	798.3558	798.4963	-0.1405	0	7	16	1		VGLQLAAK
☒ 198	502.2487	1002.4828	1002.5094	-0.0266	1	7	31	1		QREAEATAK
☒ 180	461.2754	920.5363	920.5014	0.0348	1	7	33	1		IRFGCLR + Carbamidomethyl (C)
☒ 140	434.7930	867.5715	867.3830	0.1885	1	7	24	1		TKCEEMK
☒ 301	507.2735	1518.7987	1518.6872	0.1115	1	7	28	1		VTEMPTQEPASKDS
☒ 68	400.3000	798.5854	798.4963	0.0891	0	7	16	1		IVEAVIR
☒ 177	461.2480	920.4814	920.4361	0.0453	0	7	37	1		MHMFIAK + Oxidation (M)
☒ 157	448.2055	894.3964	894.3389	0.0575	0	7	30	1		DMQNEK + Oxidation (M)
☒ 222	400.3000	1197.8782	1197.7193	0.1588	1	7	5.3	1		NASVAGLVKALR
☒ 71	400.3591	798.7037	798.5327	0.1710	1	6	3.2	1		IKQLLGK
☒ 237	614.2800	1226.5455	1226.6077	-0.0623	0	6	34	1		SCSQSPSLHK
☒ 325	637.6843	1910.0310	1910.0625	-0.0316	1	6	28	1		RSPAFTSPPIGTVPALK
☒ 304	516.2751	1545.8034	1545.7635	0.0399	1	6	40	1		RSPSTDITAEGSPTK
☒ 107	421.7909	841.5673	841.5385	0.0288	0	6	35	1		IGLLSALR
☒ 295	490.2401	1467.6985	1467.7941	-0.0957	1	6	39	1		KCMELIGLPLAHK + Oxidation (M)
☒ 118	425.7891	849.5636	849.4014	0.1621	0	5	49	1		TQMAEVR + Oxidation (M)
☒ 141	435.7709	869.5272	869.5083	0.0189	0	5	39	1		VVQANALR
☒ 112	424.1102	846.2058	846.3970	-0.1912	1	5	9.4	1		EAEKEEL
☒ 79	404.3000	806.5854	806.4286	0.1568	0	5	19	1		QFVQSAK
☒ 182	466.1851	930.3556	930.5208	-0.1652	0	5	62	1		LTPLSCLK + Carbamidomethyl (C)
☒ 169	460.2324	918.4502	918.4671	-0.0169	1	5	62	1		QSSRWQK
☒ 167	459.2665	916.5184	916.4007	0.1177	0	5	65	1		MCQGLHR + Carbamidomethyl (C); Oxidation (M)
☒ 324	637.6804	1910.0194	1910.0223	-0.0029	1	5	37	1		QVMVLKVTPEFTYDLK

☒	125	428.2144	854.4142	854.5338	-0.1196	1	5	37	1	APRTVLAK
☒	219	585.3735	1168.7325	1168.5949	0.1377	1	5	42	1	TQASLDKHNR
☒	121	427.2572	852.4998	852.4566	0.0432	0	4	42	1	LVNSAGHR
☒	172	460.2407	918.4668	918.4818	-0.0149	1	4	68	1	RSMRPT ⁺ R + Oxidation (M)
☒	199	504.2683	1006.5220	1006.4390	0.0831	0	4	62	1	TMPSGLDDR + Oxidation (M)
☒	332	680.7036	2039.0890	2038.9816	0.1074	1	4	39	1	NPDSKMMQINLTGFLNGK + 2 Oxidation (M)
☒	106	421.7742	841.5339	841.5062	0.0277	0	4	48	1	VAPAI ⁺ FPK
☒	206	525.3620	1048.7094	1048.5587	0.1508	0	4	41	1	ITMAIETVR + Oxidation (M)
☒	297	490.2563	1467.7470	1467.6884	0.0586	1	4	54	1	CVLK ⁺ CLES ⁺ MGQK + 2 Carbamidomethyl (C); Oxidation
☒	190	485.3285	968.6425	968.4675	0.1750	0	4	47	1	TEHGVAER
☒	296	490.2548	1467.7425	1467.6235	0.1190	0	4	55	1	ANEANPCPCDIGHK
☒	204	523.2611	1044.5077	1044.4732	0.0345	0	4	70	1	SGMHL ⁺ PVSAM + Oxidation (M)
☒	133	432.3000	862.5854	862.4661	0.1193	0	4	62	1	GYVG ⁺ VVNR
☒	72	401.3000	800.5854	800.4617	0.1238	1	4	45	1	TAGAIRGR
☒	119	425.7904	849.5662	849.4201	0.1462	0	4	69	1	QLMCLAR + Oxidation (M)
☒	124	428.2075	854.4005	854.3011	0.0994	1	4	46	1	SDRC ⁺ SAC + 2 Carbamidomethyl (C)
☒	132	432.3000	862.5854	862.4661	0.1193	0	4	65	1	GYVG ⁺ VVNR
☒	178	461.2727	920.5309	920.4208	0.1101	1	4	75	1	MRAGMDPK + Oxidation (M)
☒	200	504.2721	1006.5297	1006.4931	0.0367	1	4	72	1	KNEDTSVSK
☒	220	599.4131	1196.8116	1196.6951	0.1165	0	4	26	1	LLV ⁺ MLLAHGSK + Oxidation (M)
☒	84	408.1729	814.3313	814.4814	-0.1501	1	4	60	1	GRVGLWK
☒	168	460.2270	918.4395	918.5875	-0.1480	1	3	86	1	IRLKPHR
☒	283	463.1477	1386.4213	1386.6206	-0.1993	1	3	11	1	MNARTYMDVMR
☒	145	436.2648	870.5151	870.5439	-0.0289	1	3	73	1	KIVLWR
☒	114	425.2465	848.4784	848.4426	0.0358	0	3	74	1	MLTL ⁺ SER
☒	285	699.7999	1397.5853	1397.7514	-0.1661	1	3	59	1	PDDSL ⁺ KNLDIR
☒	191	486.2810	970.5475	970.5196	0.0279	0	3	78	1	EVSRPVER
☒	129	432.1936	862.3727	862.4508	-0.0781	1	3	81	1	VGSKSGSNK
☒	300	507.2667	1518.7782	1518.7171	0.0611	0	3	68	1	IGMIDGECVNPTR + Oxidation (M)
☒	189	481.3000	960.5854	960.4560	0.1295	1	3	98	1	GPMGTGRGGR + Oxidation (M)
☒	207	525.3916	1048.7686	1048.5778	0.1909	1	3	14	1	RLFLSSGNR
☒	159	449.2802	896.5458	896.4828	0.0630	1	3	74	1	TPAERAPR
☒	218	583.3702	1164.7259	1164.6404	0.0856	0	3	76	1	LQGWQIGVHK
☒	314	828.3677	1654.7209	1654.8777	-0.1568	1	3	66	1	VIPEGALESEKLDQK
☒	82	407.2212	812.4279	812.2681	0.1598	0	3	52	1	DCDCTEK
☒	109	423.2413	844.4681	844.4841	-0.0160	1	3	1e+02	1	TPGCVKIK
☒	208	530.3052	1058.5959	1058.5832	0.0126	1	2	96	1	AQSGSLRNVK
☒	143	435.7849	869.5553	869.4178	0.1376	0	2	74	1	VVHECQR
☒	158	448.2549	894.4953	894.3978	0.0976	1	2	83	1	MDQSSRR + Oxidation (M)
☒	193	498.1766	994.3387	994.4621	-0.1234	1	2	73	1	RSWDEFR
☒	331	680.3744	2038.1012	2038.0517	0.0495	1	2	57	1	RLSPGSDIYVTVSSMALAR + Oxidation (M)
☒	210	545.2437	1088.4729	1088.5899	-0.1170	1	2	1e+02	1	IKEQLMAEK
☒	75	404.3000	806.5854	806.4320	0.1534	1	2	35	1	QSAVK ⁺ MK + Oxidation (M)
☒	294	490.2189	1467.6350	1467.7318	-0.0968	0	2	76	1	VNEVDVSEVVHSR
☒	341	629.2213	2512.8563	2513.0452	-0.1889	0	2	2.5	1	AAVLFPQCGHMCACENCASLMK + 3 Carbamidomethyl (C); Oxidation
☒	73	404.3000	806.5854	806.4320	0.1534	1	2	36	1	QSAVK ⁺ MK + Oxidation (M)
☒	170	460.2343	918.4540	918.5069	-0.0529	1	2	1.1e+02	1	LRGSAMLR + Oxidation (M)
☒	130	432.3000	862.5854	862.4661	0.1193	0	2	91	1	GYVG ⁺ VVNR
☒	202	516.2787	1030.5429	1030.5481	-0.0053	1	2	1.1e+02	1	TPMKISGPGK + Oxidation (M)
☒	270	432.3000	1293.8782	1293.7041	0.1741	1	2	23	1	QSVVYGGKSTIR
☒	131	432.3000	862.5854	862.4661	0.1193	0	2	92	1	GYVG ⁺ VVNR
☒	269	432.3000	1293.8782	1293.7041	0.1741	1	2	23	1	QSVVYGGKSTIR
☒	78	404.3000	806.5854	806.3956	0.1898	1	2	37	1	KGEAMQK + Oxidation (M)
☒	266	432.3000	1293.8782	1293.7155	0.1627	0	2	23	1	QFLGYVPIMVK
☒	69	400.3000	798.5854	798.4348	0.1507	0	2	47	1	DKPGLNR
☒	212	552.3460	1102.6775	1102.6975	-0.0199	1	2	1.1e+02	1	RLLNILPK
☒	308	794.4009	1586.7872	1586.8140	-0.0268	1	2	93	1	FQFLSM ⁺ LQHHRK + Oxidation (M)
☒	163	457.2862	912.5578	912.3979	0.1599	1	2	97	1	SMKCCIR + Carbamidomethyl (C); Oxidation (M)
☒	286	702.2279	1402.4413	1402.6412	-0.1999	0	2	19	1	HGGTCLNTPGSFR + Carbamidomethyl (C)
☒	134	432.3000	862.5854	862.4661	0.1193	0	2	1e+02	1	GYVG ⁺ VVNR
☒	263	431.5000	1291.4782	1291.6568	-0.1786	1	2	89	1	CRNHG ⁺ TAHLK + Carbamidomethyl (C)
☒	120	426.1723	850.3301	850.4297	-0.0996	1	2	90	1	YGPSGKSR
☒	203	520.2468	1038.4790	1038.4982	-0.0191	1	2	1.1e+02	1	EYDAQKASK
☒	152	443.2845	884.5545	884.5192	0.0353	1	2	1e+02	1	RQLLAER
☒	299	507.2618	1518.7635	1518.7283	0.0352	0	1	1e+02	1	VMAQGSIGVAPGMNR + 2 Oxidation (M)
☒	320	628.2091	1881.6056	1881.7105	-0.1049	0	1	8.2	1	NDENSVSSTCHESGGEK + Carbamidomethyl (C)
☒	330	680.3735	2038.0988	2038.0742	0.0246	1	1	75	1	RGICSPRPNIIQLD ⁺ VD ⁺ SR
☒	127	431.0944	860.1742	860.3698	-0.1956	0	1	5.4	1	DVPENCK + Carbamidomethyl (C)
☒	315	555.6000	1663.7782	1663.7334	0.0448	1	1	98	1	CSSCGEGFANTYGLKK
☒	101	420.2149	838.4152	838.4548	-0.0396	0	1	88	1	EEIALHK
☒	164	457.2925	912.5705	912.5141	0.0564	1	1	1.1e+02	1	SQKAGLGPR
☒	230	404.3000	1209.8782	1209.6843	0.1939	1	1	15	1	AFRRPAHLSR
☒	151	443.2762	884.5378	884.4174	0.1204	0	1	1.2e+02	1	ANEMPAPR
☒	135	432.3000	862.5854	862.4661	0.1193	0	1	1.2e+02	1	GYVG ⁺ VVNR
☒	147	441.7893	881.5641	881.5447	0.0195	0	1	1.1e+02	1	RPAVAAGLK
☒	340	628.2216	2508.8573	2509.0308	-0.1735	1	1	3.6	1	CAEGYGGALCDQKND ⁺ SASACSAFK + 2 Carbamidomethyl (C)
☒	257	427.9106	1280.7101	1280.6547	0.0554	1	1	1.2e+02	1	LALSKGFETCR + Carbamidomethyl (C)
☒	102	420.2154	838.4162	838.3789	0.0373	1	1	96	1	MGRQGMK + 2 Oxidation (M)
☒	287	702.2287	1402.4428	1402.6155	-0.1727	1	1	24	1	MNARTYMDVMR + Oxidation (M)
☒	165	458.1970	914.3795	914.5437	-0.1642	1	1	1.7e+02	1	LEPSKITK
☒	85	408.3000	814.5854	814.4595	0.1259	1	0	1.1e+02	1	ARPKMGR
☒	162	456.2773	910.5401	910.5097	0.0304	1	0	1.3e+02	1	EPRT ⁺ PR
☒	321	628.2339	1881.6798	1881.8349	-0.1551	1	0	37	1	TFRMPSEVEEASCSR + Carbamidomethyl (C)
☒	76	404.3000	806.5854	806.4650	0.1204	1	0	59	1	FKNALSK
☒	148	441.7969	881.5792	881.4971	0.0821	0	0	1.2e+02	1	AATQPAPVK
☒	343	1078.4958	3232.4657	3232.5459	-0.0801	1	0	48	1	ADTGQERFNII ⁺ CDLLESPEETAAGAWAR + Carbamidomethyl

☒	103	421.2465	840.4784	840.4314	0.0470	1	0	98	1	ANGGPRNR
☒	188	478.2096	954.4047	954.5135	-0.1087	0	0	1.4e+02	1	IHVSTGATLG
☒	250	425.7782	1274.3127	1274.5127	-0.2000	1	0	3.3	1	CTCKDSTMVCK + Carbamidomethyl (C)
☒	253	425.8032	1274.3877	1274.5673	-0.1797	1	0	27	1	SAEHCSRLQTS + Carbamidomethyl (C)
☒	156	447.3591	892.7037	892.5204	0.1832	1	0	19	1	FKVMKPK + Oxidation (M)
☒	1	400.3000	399.2927							
☒	2	400.3000	399.2927							
☒	3	401.3000	400.2927							
☒	4	402.2120	401.2047							
☒	5	402.2157	401.2084							
☒	6	404.3000	403.2927							
☒	7	404.3000	403.2927							
☒	8	404.3000	403.2927							
☒	9	404.3000	403.2927							
☒	10	404.3000	403.2927							
☒	11	404.3000	403.2927							
☒	12	404.3000	403.2927							
☒	13	408.3000	407.2927							
☒	14	413.2783	412.2710							
☒	15	416.1000	415.0927							
☒	16	416.2388	415.2316							
☒	17	416.4000	415.3927							
☒	18	419.2211	418.2138							
☒	19	421.2197	420.2124							
☒	20	422.3000	421.2927							
☒	21	423.4000	422.3927							
☒	22	424.1045	423.0972							
☒	23	425.2790	424.2717							
☒	24	425.3350	424.3278							
☒	25	425.3850	424.3777							
☒	26	427.3000	426.2927							
☒	27	427.3910	426.3837							
☒	28	428.2172	427.2099							
☒	29	428.3000	427.2927							
☒	30	431.5000	430.4927							
☒	31	432.2220	431.2147							
☒	32	432.3000	431.2927							
☒	33	432.3000	431.2927							
☒	34	432.3000	431.2927							
☒	35	432.3000	431.2927							
☒	36	432.3000	431.2927							
☒	37	432.3000	431.2927							
☒	38	432.3000	431.2927							
☒	39	442.3325	441.3253							
☒	40	447.1000	446.0927							
☒	41	447.2122	446.2049							
☒	42	450.3779	449.3706							
☒	43	460.4000	459.3927							
☒	44	474.2360	473.2287							
☒	45	481.3000	480.2927							
☒	46	490.2007	489.1935							
☒	47	493.4406	492.4333							
☒	48	503.4378	502.4305							
☒	49	523.1268	522.1195							
☒	50	535.4794	534.4722							
☒	51	540.4489	539.4416							
☒	52	555.6000	554.5927							
☒	53	569.4697	568.4625							
☒	54	599.3999	598.3926							
☒	55	607.2181	606.2109							
☒	56	607.2222	606.2150							
☒	57	607.2332	606.2259							
☒	58	639.5000	638.4927							
☒	59	639.5000	638.4927							
☒	60	680.5136	679.5064							
☒	74	404.3000	806.5854							
☒	77	404.3000	806.5854							
☒	80	405.2618	808.5090							
☒	83	407.2511	812.4877							
☒	86	408.3271	814.6397							
☒	97	416.1000	830.1854							
☒	98	416.4000	830.7854							
☒	99	419.2114	836.4083							
☒	100	419.3299	836.6453							
☒	108	422.3000	842.5854							
☒	110	423.4000	844.7854							
☒	111	424.0972	846.1798							
☒	113	424.1160	846.2174							
☒	115	425.7722	849.5298							
☒	117	425.7809	849.5473							
☒	122	427.2747	852.5349							
☒	123	427.3970	852.7795							
☒	128	431.5000	860.9854							
☒	136	432.3000	862.5854							
☒	137	433.2127	864.4109							

☒			
☒	138	434.2387	866.4628
☒	139	434.2448	866.4751
☒	146	441.3000	880.5854
☒	150	442.2727	882.5309
☒	154	447.1000	892.1854
☒	155	447.1000	892.1854
☒	160	450.2616	898.5086
☒	161	453.1870	904.3594
☒	174	460.4000	918.7854
☒	192	497.2959	992.5772
☒	194	498.8172	995.6199
☒	196	500.3387	998.6629
☒	213	555.6000	1109.1854
☒	214	563.4982	1124.9818
☒	223	401.3000	1200.8782
☒	224	404.3000	1209.8782
☒	225	404.3000	1209.8782
☒	226	404.3000	1209.8782
☒	227	404.3000	1209.8782
☒	228	404.3000	1209.8782
☒	229	404.3000	1209.8782
☒	233	609.5788	1217.1431
☒	234	611.5003	1220.9861
☒	235	611.5369	1221.0592
☒	236	408.3000	1221.8782
☒	241	416.1000	1245.2782
☒	243	416.4000	1246.1782
☒	245	628.2113	1254.4081
☒	247	422.3000	1263.8782
☒	248	423.4000	1267.1782
☒	249	425.7683	1274.2831
☒	251	425.7838	1274.3297
☒	252	425.7895	1274.3465
☒	255	639.5000	1276.9854
☒	256	639.5000	1276.9854
☒	259	428.3000	1281.8782
☒	260	428.7710	1283.2910
☒	262	431.0932	1290.2577
☒	265	432.1000	1293.2782
☒	267	432.3000	1293.8782
☒	268	432.3000	1293.8782
☒	271	432.3000	1293.8782
☒	272	432.3000	1293.8782
☒	273	434.7837	1301.3291
☒	274	441.7884	1322.3434
☒	275	441.7964	1322.3675
☒	276	667.6036	1333.1927
☒	277	447.1000	1338.2782
☒	278	680.6922	1359.3699
☒	279	680.7127	1359.4109
☒	280	686.5974	1371.1803
☒	281	458.7707	1373.2903
☒	282	460.4000	1378.1782
☒	284	464.1512	1389.4318
☒	288	702.2429	1402.4712
☒	289	703.2530	1404.4915
☒	290	473.7560	1418.2462
☒	292	484.4385	1450.2938
☒	293	730.8577	1459.7008
☒	298	506.3238	1515.9497
☒	305	523.1311	1566.3715
☒	316	424.0936	1692.3454
☒	317	424.1015	1692.3769
☒	318	445.1410	1776.5348
☒	319	462.2431	1844.9431
☒	322	629.2101	1884.6084
☒	323	630.2136	1887.6188
☒	326	639.5000	1915.4782
☒	327	639.5000	1915.4782
☒	333	523.1358	2088.5141
☒	334	699.5409	2095.6009
☒	335	702.2428	2103.7064
☒	336	704.2331	2109.6775
☒	338	587.4231	2345.6633
☒	339	628.2064	2508.7965
☒	342	911.6551	2731.9436
☒	344	1030.8862	4119.5156

Search Parameters

Type of search : MS/MS Ion Search
 Enzyme : Trypsin
 Variable modifications : [Carbamidomethyl \(C\)](#), [Oxidation \(M\)](#)
 Mass values : Monoisotopic
 Protein Mass : Unrestricted

Peptide Mass Tolerance : ± 0.2 Da
Fragment Mass Tolerance: ± 0.2 Da
Max Missed Cleavages : 1
Instrument type : Default
Number of queries : 344

Mascot: <http://www.matrixscience.com/>