

Table S11: Dimethylated (naturally unmodified) N-termini identified in the TAILS experiment comparing wild-type and *Ctsf*^{-/-} skin (replicate 2). This is a comprehensive, non redundant listing. Up to two potential protein IDs per peptide are stated.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
NNTLHLDVYM KKTVVEEKR	AAANLFAQTYGLTGSQDR AAEELKSLVAPQR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da	49.1 28.9	43.7 45.9	3 3	1911.03 1464.96	1.561 -1.515	0.148 0.216	UBA1_MOUSE TITIN_MOUSE	E9Q8K5_MOUSE	Ubiquitin-like modifier-activating enzyme 1; Titin;	Ubiquitin-activating enzyme E1; Ubiquitin-activating enzyme E1 X; Ubiquitin-like modifier-activating enzyme 1 X; Connectin; Procollagen I N-proteinase; Procollagen I/II amino propeptide-processing enzyme; Procollagen N-endopeptidase;	0.75 - 0.85 0.15 - 0.25
TAGAGVRARR MRVYASYLL NAVGPVPTAN	AALDQTSGLPGGAQAQDPGGR AALGGNSSPSAKDIKKILDVSGIEADDDR AALPADPPASVVGPPVVPR	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	39.5 31.5 74.2	45.4 81.8 44.5	3 3 3	1872.04 3053.87 1938.22	-0.916 -3.322 -0.761	0.121 0.997 0.155	ATS2_MOUSE RLA2_MOUSE FETUA_MOUSE		A disintegrin and metalloproteinase with thrombospondin motifs 2; 60S acidic ribosomal protein P2; Alpha-2-HS-glycoprotein;	Countertryppin; Fetuin-A; Ubiquitin-activating enzyme E1; Ubiquitin-activating enzyme E1 X; Ubiquitin-like modifier-activating enzyme 1 X; Endomembrane proton pump 58 kDa subunit; Vacuolar proton pump subunit B 2; Neurite outgrowth inhibitor;	0.25 - 0.75 0.00 - 0.15 0.25 - 0.75
NTLHLDVYMA	AANLFAQTYGLTGSQDR	N-ter +28.03 Da	30.2	47.3	3	1840.00	-0.737	0.074	UBA1_MOUSE		Ubiquitin-like modifier-activating enzyme 1;	Ubiquitin-like modifier-activating enzyme 1 X; Endomembrane proton pump 58 kDa subunit; Vacuolar proton pump subunit B 2; Neurite outgrowth inhibitor;	0.25 - 0.75
LRAMRGINVNG LERKPAAGLS ASASTSQSSR QTQDPLYGYF TDPRVQKAAQ QRKTDWSSL LTARDEARR	AAPELVPVTGGPMAGAR AAPVPPAAAPLLDSSSDVPPAPR AASIFGGAKPVDTAAR AAVAGQDQIDADELQR AAVASYNMGSGLSYFRR AAVETPVPSDLQAQR AAVQQLQAEGLSPR	N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da	39.9 41.6 34.9 55.9 46.6 29.6 41.5	48.1 49.6 60.4 45.2 64.5 16.6 38.5	3 4 3 3 3 3 3	1618.93 2370.38 1599.04 1783.95 1942.02 1608.87 1494.87	0.124 0.214 3.005 -0.667 2.043 -1.059 0.556	0.023 0.059 0.842 0.064 0.248 0.243 0.038	VATB2_MOUSE RTN4_MOUSE IF48_MOUSE SORCN_MOUSE Q9D1B1_MOUSE Q6NZR5_MOUSE Q8K354_MOUSE		V-type proton ATPase subunit B, brain isoform; Reticulon-4; Eukaryotic translation initiation factor 4B; Sorcin;	Beta-1-globin; Hemoglobin beta-1 chain; Hemoglobin beta-major chain;	0.25 - 0.75 0.25 - 0.75 0.85 - 1.00 0.25 - 0.75 0.85 - 1.00 0.15 - 0.25 0.25 - 0.75
MVHLTDAEK LWLLPSLALA	AAVSCLWGWKVNSEVVGGEALGR AAVTEPADLEYTEVPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +28.03 Da	54.0 58.8	63.5 51.6	4 3	2330.32 1787.99	0.941 1.86	0.167 0.497	HBB1_MOUSE Q8BVL6_MOUSE		Hemoglobin subunit beta-1;	Beta-1-globin; Hemoglobin beta-1 chain; Hemoglobin beta-major chain;	0.25 - 0.75 0.85 - 1.00
SVTRESGQY IQNLHSDPF LCVFSVQTQA LLSQVLLVTS SKEWGFTKFN PKKSMKMTMY	AAISNAVGAAYSSAR ADASKGDLLPAGTEDYIHIR ADDYDEPTDLDAR ADDDLECTGFQFR ADEFEDMVAEKR ADEVESQKLSIR	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	37.9 64.9 37.2 25.6 20.1 21.8	62.4 75.3 79.3 54.7 84.0 59.7	3 3 3 3 3 3	1604.94 2312.34 1724.84 1441.75 1506.89 1441.93	-3.837 0.864 -0.943 0.926 -1.837 2.104	0.548 0.161 0.181 0.175 0.328 0.142	OBSCN_MOUSE EIF1_MOUSE RIBB_MOUSE CAD13_MOUSE RLI1_MOUSE CQO85_MOUSE	E9Q96_MOUSE	Obscurin; Eukaryotic translation initiation factor 1; Fibrinogen beta chain; Cadherin-13; 60S ribosomal protein L10; Uncharacterized protein C17orf85 homolog;	Obscurin-RhoGEF; Obscurin-myosin light chain kinase; Protein translation factor SUI1 homolog; Fibrinogen beta chain; Heart cadherin; Truncated cadherin; Protein QM homolog;	0.00 - 0.15 0.25 - 0.75 0.15 - 0.25 0.25 - 0.75 0.00 - 0.15 0.85 - 1.00
AGDEESEYEVF	ADLFDPVIKLR	N-ter +34.06 Da, K +34.06 Da	30.9	50.0	3	1353.93	-3.837	0.548	KCRS_MOUSE		Creatine kinase S-type, mitochondrial;	Basic-type mitochondrial creatine kinase; Sarcomeric mitochondrial creatine kinase;	0.00 - 0.15
IWTTRHPVQG	ADLVQDLISICTR	N-ter +34.06 Da, C +57.02 Da	41.4	48.6	3	1510.86	0.014	0.002	LYVE1_MOUSE		Lymphatic vessel endothelial hyaluronan receptor 1;	Cell surface retention sequence-binding protein 1; Extracellular link domain-containing protein 1;	0.25 - 0.75
RFDYPQGDFP IQTQLQHAAM	ADMGPPHHHPGHR ADTFLEHMCRR	N-ter +34.06 Da N-ter +28.03 Da, C +57.02 Da	22.3 21.9	65.4 58.2	3 3	1478.81 1306.66	-6.644 0.791	0.001 0.128	CHERP_MOUSE KPYM_MOUSE		Calcium homeostasis endoplasmic reticulum protein; Pyruvate kinase isozymes M1/M2;	SR-related CTD-associated factor 6; Pyruvate kinase muscle isozyme; Mesoderm development candidate 2; Mesoderm development protein;	0.00 - 0.15 0.25 - 0.75 0.25 - 0.75
LLLPPNAY TLGISPFHEF VREKEAQPLE	ADTPGEATPPPR ADVVFANDSGHR EAEPGVDLGILPEGR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da	24.5 45.3 39.7	53.0 64.2 44.2	3 3 3	1235.68 1415.77 1520.89	0.07 -0.737 0.111	0.008 0.074 0.022	MESD_MOUSE TTHY_MOUSE NIBAN_MOUSE	D3YVR4_MOUSE	LDL chaperone MESD; Transthyretin; Protein Niban;	Prealbumin; Protein FAM129A; Transplantation antigen P198; Tum-P198 antigen;	0.25 - 0.75 0.25 - 0.75 0.25 - 0.75
M RNRESRIRRD	AEGQVLLVDR AEKELCKEFENQVR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	46.8 20.6	19.1 76.1	2 4	1183.68 1863.10	-0.322 0.566	0.032 0.096	RL13A_MOUSE Q148R4_MOUSE	Q3TDS9_MOUSE	60S ribosomal protein L13a;	Transplantation antigen P198; Tum-P198 antigen;	0.25 - 0.75 0.25 - 0.75
AGDEEYEVF SLQLVSWTALA	AELFDVPIQER AEPVDVLEAWGVHR	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	30.1 68.5 33.3	50.9 66.2 54.8	3 3 3	1349.81 1604.94 1482.90	8.239 -0.269 -1.474	0.374 0.023 0.164	KCRU_MOUSE Q9JLJ2_MOUSE TNPO1_MOUSE	B0R0F0_MOUSE	Creatine kinase U-type, mitochondrial;	Acidic-type mitochondrial creatine kinase; Ubiquitous mitochondrial creatine kinase;	0.85 - 1.00 0.25 - 0.75
LEACEFWLTL	AEQPICKDVLVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	33.3	54.8	3	1482.90	-1.474	0.164	TNPO1_MOUSE		Transportin-1;	Importin beta-2; Karyopherin beta-2; Protein phosphatase 1 myosin-binding subunit of 85 kDa;	0.15 - 0.25 0.25 - 0.75 0.25 - 0.75
ERATQRQERF HHAFGQGRDM ARSKPSPQLS	AERPALLELER AETFQGAHHAFAQGQGR AETPVAALEPFR	N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da	31.9 34.4 22.1	61.4 72.2 50.6	3 4 3	1329.86 1818.99 1430.87	-1.218 -0.837 -0.474	0.057 0.209 0.066	PP12C_MOUSE SBSN_MOUSE E9Q056_MOUSE	F6XWD4_MOUSE E9QP82_MOUSE	Protein phosphatase 1 regulatory subunit 12C; Suprabasin;	Protein phosphatase 1 myosin-binding subunit of 85 kDa;	0.15 - 0.25 0.25 - 0.75 0.25 - 0.75
GVKVLAFSL GLDNVHKQRV ISLEVSRGR PKHLSRKTIV	AEVQVAGVGPQQR AEVLNDPESMEKR AEVSTHLSQSGR AFPOKVMPPQAR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	37.6 36.5 35.1 36.0	36.7 57.4 64.2 45.0	3 3 3 3	1292.73 1584.94 1427.89 1521.92	1.014 -1.218 -0.184 0.993	0.05 0.142 0.015 0.04	CAND2_MOUSE KLC1_MOUSE SYNEM_MOUSE Q3U422_MOUSE	Q5UE9_MOUSE F6VN34_MOUSE	Cullin-associated NEDD8-dissociated protein 2; Kinesin light chain 1; Synemin;	Cullin-associated and neddylation-dissociated protein 2; TBP-interacting protein of 120 kDa Bp120 CAND2; Desmuslin;	0.25 - 0.75 0.15 - 0.25 0.25 - 0.75 0.25 - 0.75
TGASTSSHCK DFRHTMHVGR RTFGTGGRR DKVIRPGVQSQ VCDNGSGLCK	AGAVTSSASLSPALAKGTQR AGDAFGDTSFLTSKAR AGEEAADSPERP AGEEMEQFGQVPR AGFAGDDAPR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da	55.0 45.6 56.7 27.5 43.1	54.3 59.6 35.0 54.0 35.5	3 3 2 3 2	2015.21 1698.96 1368.70 1464.75 1009.54	3.695 1.007 -0.184 1.57 0.111	0.79 0.11 0.013 0.095 0.013	TCOF_MOUSE BORG4_MOUSE ADXL_MOUSE SBSN_MOUSE ACTA_MOUSE	Q05C0_MOUSE A2A6Q2_MOUSE	Treacle protein; Cdc42 effector protein 4; Adrenodoxin-like protein, mitochondrial; Suprabasin;	Treacher Collins syndrome protein homolog; Binder of rho GTPases 4; Ferrodoxin-1-like protein;	0.85 - 1.00 0.25 - 0.75 0.25 - 0.75 0.75 - 0.85 0.25 - 0.75

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
M	AGGEAGVTLGQPHLSR	N-ter +28.03 Da	43.3	29.6	3	1576.88	-0.396	0.052	IF2H_MOUSE		Eukaryotic translation initiation factor 2 subunit 3, Y-linked;	Eukaryotic translation initiation factor 2 subunit gamma, Y-linked;	0.25 - 0.75
GKLFGAGGGK	AGKGGPTPQEAIDR	N-ter +28.03 Da, K +28.03 Da	27.2	43.1	3	1464.87	0.782	0.136	CHM48_MOUSE		Charged multivesicular body protein 4b;	Chromatin-modifying protein 4b;	0.25 - 0.75
YSGLQGLPGL	AGLHGDQAGPVPGPAGPR	N-ter +34.06 Da	41.7	63.4	3	1744.03	-2.252	0.214	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
RGSSSANRR	AGSSSGSQVQASAGGLAADASR	N-ter +34.06 Da	74.9	37.5	3	1954.03	0.651	0.381	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.25 - 0.75
QADCAVLIVA	AGVGEFEAGISKNGQTR	N-ter +34.06 Da, K +34.06 Da	34.7	54.7	3	1788.08	-1.218	0.113	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.15 - 0.25
HLDKLGTVF	AGVLDKKEGPAEELR	N-ter +28.03 Da, K +28.03 Da	26.9	53.6	3	1595.94	1.444	0.191	DHB2_MOUSE		Estradiol 17-beta-dehydrogenase 2;	17-beta-hydroxysteroid dehydrogenase type 2;Testosterone 17-beta-dehydrogenase;	0.75 - 0.85
GARGAQVRGN	AGVSDGSEVAKAQAAPGGASPTIFSR	N-ter +28.03 Da, K +28.03 Da	25.9	75.6	4	2642.60	0.333	0.082	HINT2_MOUSE		Histidine triad nucleotide-binding protein 2, mitochondrial;	HINT-3;	0.25 - 0.75
VLLGLTPARA	AHEDPVEKVIIEGFSR	N-ter +28.03 Da, K +28.03 Da	37.3	85.2	4	1768.07	0.918	0.024	SBSN_MOUSE	E9QP82_MOUSE	Suprabasin;		0.25 - 0.75
RAISTSVCLR	AHGSVVKSEDIYAFPTYADRR	N-ter +28.03 Da, K +28.03 Da	20.4	71.5	4	2324.32	-0.761	0.103	COX41_MOUSE		Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;	Cytochrome c oxidase polypeptide IV;Cytochrome c oxidase subunit IV isoform 1;	0.25 - 0.75
RAISTSVCLR	AHGSVVKSEDIYAFPTYADR	N-ter +28.03 Da, K +28.03 Da	24.8	55.5	4	2168.17	0.029	0.006	COX41_MOUSE		Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;	Cytochrome c oxidase polypeptide IV;Cytochrome c oxidase subunit IV isoform 1;	0.25 - 0.75
SELLHSITLL	AHLTGDITIQGSATSLR	N-ter +28.03 Da	49.9	62.6	3	1768.06	0.731	0.092	HIP1_MOUSE		Huntingtin-interacting protein 1;	Huntingtin-interacting protein I;	0.25 - 0.75
EAAKNKYVPR	AILVDEPGETMDSVR	N-ter +28.03 Da	32.9	54.7	3	1642.95	2.118	0.356	TBB2A_MOUSE	TBB2B_MOUSE	Tubulin beta-2A chain;		0.85 - 1.00
PNFASPVITL	AIPENTNIGSLFPIPLATDR	N-ter +28.03 Da	45.8	42.9	3	2166.26	3.3	1.102	Q8CFX3_MOUSE	F7BJK1_MOUSE			0.85 - 1.00
AAAAAASRI	AIPGLAGAGNSVLLVSNLNPFR	N-ter +28.03 Da	58.6	48.1	3	2189.32	1.029	0.373	PTBP1_MOUSE	Q92Z17_MOUSE	Polypyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;	0.25 - 0.75
AMRILGGVIS	AISEAAAQNPPEPPPPR	N-ter +34.06 Da	50.8	49.2	3	1841.04	0.111	0.014	CPNS1_MOUSE	D3YW48_MOUSE	Calpain small subunit 1;	Calcium-activated neutral proteinase small subunit;Calcium-dependent protease small subunit;Calcium-dependent protease small subunit 1;Calpain regulatory subunit;	0.25 - 0.75
EFEQLPMMQ	AISNNKDDGGYEDFVEGLR	N-ter +34.06 Da, K +34.06 Da	28.6	55.3	3	2179.24	0.496	0.102	MYL1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;	0.25 - 0.75
IVEGLMTTVH	AITATQKTVDGSGKLR	N-ter +28.03 Da, K +28.03 Da	20.9	58.3	4	2012.26	-0.396	0.073	G3P_MOUSE	F8WJL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;	0.25 - 0.75
RVLLEGGIT	AIVFLEPLEAR	N-ter +28.03 Da	23.6	55.5	3	1413.87	3.377	0.468	RBM19_MOUSE		Probable RNA-binding protein 19;	RNA-binding motif protein 19;	0.85 - 1.00
LLPLLAGAQA	AIVFIKEPSSDQALQGR	N-ter +34.06 Da, K +34.06 Da	22.0	50.4	3	1926.22	2.501	0.376	PTK7_MOUSE	Q3V2W2_MOUSE	Inactive tyrosine-protein kinase 7;	7;Pseudo tyrosine kinase receptor 7;Tyrosine-protein kinase-like 7;	0.85 - 1.00
PDLXKHNHMH	AKVLTPLDYNKLR	N-ter +34.06 Da, K +34.06 Da	19.7	58.9	4	1632.18	0.043	0.005	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.25 - 0.75
AEKSAVCLW	AKVNPDEVGGEALGR	N-ter +28.03 Da, K +28.03 Da	55.5	62.4	3	1566.93	1.895	0.148	HBB2_MOUSE		Hemoglobin subunit beta-2;	Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain;	0.85 - 1.00
LSNAEREVVK	ALEGINNGITQAGR	N-ter +28.03 Da	23.2	32.8	3	1440.82	0.322	0.023	SBSN_MOUSE	E9QP82_MOUSE	Suprabasin;		0.25 - 0.75
MRYVASYLVA	ALGGNSPSSAKDIKKILDVSGIEADDDR	N-ter +28.03 Da, K +28.03 Da	29.5	89.7	4	2982.86	-2.396	0.504	RLA2_MOUSE		60S acidic ribosomal protein P2;		0.00 - 0.15
RQNKDLMELQ	ALIDSHFEAR	N-ter +34.06 Da	29.4	69.5	3	1191.73	-1.218	0.057	TNNT3_MOUSE	A2A6J0_MOUSE	Troponin T, fast skeletal muscle;	Fast skeletal muscle troponin T;	0.15 - 0.25
MLAQSNPQLF	ALIGTQANVTKELEK	N-ter +28.03 Da, K +28.03 Da	34.1	62.7	3	1698.07	1.367	0.196	SELO_MOUSE	A4FUU9_MOUSE	Selenoprotein O;		0.75 - 0.85
RKDAQMVHSH	ALNEDTQDELGDPR	N-ter +34.06 Da	28.0	56.9	3	1605.86	-0.396	0.047	AMRP_MOUSE	F6SY09_MOUSE	Alpha-2-macroglobulin receptor-associated protein;	Heparin-binding protein 44;Low density lipoprotein receptor-related protein-associated protein 1;	0.25 - 0.75
KNERVQKHLK	ALTSELANAR	N-ter +28.03 Da	40.3	29.0	2	1072.62	-1	0.06	MOES_MOUSE		Moesin;	Membrane-organizing extension spike protein;	0.15 - 0.25
KTDQVIQFFI	ALVNDPQPEHLR	N-ter +28.03 Da	45.5	59.6	3	1512.90	2.198	0.321	UB2L3_MOUSE		Ubiquitin-conjugating enzyme E2 L3;	UbcM4;Ubiquitin carrier protein L3;Ubiquitin-protein ligase L3;	0.85 - 1.00
LAAVAGCVRA	AMDECADEGRRPQR	N-ter +28.03 Da, C +57.02 Da	17.0	70.7	3	1618.80	-0.556	0.164	LAMC1_MOUSE	F8VQJ3_MOUSE	Laminin subunit gamma-1;	Laminin B2 chain;Laminin-1 subunit gamma;Laminin-10 subunit gamma;Laminin-11 subunit gamma;Laminin-2 subunit gamma;Laminin-3 subunit gamma;Laminin-4 subunit gamma;Laminin-6 subunit gamma;Laminin-7 subunit gamma;Laminin-8 subunit gamma;Laminin-9 subunit gamma;S-laminin subunit gamma;	0.25 - 0.75
LALAFGLAHA	AMEGPWKTVIAAADR	N-ter +28.03 Da, K +28.03 Da	26.7	68.1	3	1671.00	2.409	0.209	AZANEN_MOUSE	Q9D3H2_MOUSE			0.85 - 1.00
EPKRRSARLS	AMPVPFTPELKPKR	N-ter +28.03 Da, K +28.03 Da	20.1	64.2	4	1694.10	-0.837	0.045	HMGNS_MOUSE		High mobility group nucleosome-binding domain-containing protein 5;	Nucleosome-binding protein 1;Nucleosome-binding protein 45;Protein GARP45;	0.25 - 0.75
EVDYGLRVQ	AMQISEKEDDDNEKR	N-ter +28.03 Da, K +28.03 Da	25.1	85.2	4	1891.06	-0.599	0.136	CDV3_MOUSE		Protein CDV3;	Carnitine deficiency-associated protein 3;Tyrosine-phosphorylated protein 36;	0.25 - 0.75
PREFKQKER	AMSTTSVTSSQPGKLR	N-ter +28.03 Da, K +28.03 Da	47.9	61.0	3	1706.01	2.446	0.75	DBNL_MOUSE		Drebrin-like protein;	Actin-binding protein 1;SH3 domain-containing protein 7;	0.85 - 1.00
SPVSSGVNLF	ANDGSFLEFKR	N-ter +34.06 Da, K +34.06 Da	36.5	70.7	3	1463.94	-0.889	0.165	CSO43_MOUSE		Uncharacterized protein C19orf43 homolog;		0.25 - 0.75
QPISVRAIQ	ANINIPMGAFRRPAGQPPR	N-ter +28.03 Da	24.4	51.8	3	1991.16	0.322	0.041	SMPX_MOUSE		Small muscular protein;	Stretch-responsive skeletal muscle protein;	0.25 - 0.75
NPEESIEDLY	ANIPDLSSYIPSR	N-ter +34.06 Da	34.3	39.0	3	1562.91	-1.12	0.073	PALMD_MOUSE	Q3UVT7_MOUSE	Palmdelphin;		0.15 - 0.25
CDIDIRKDLV	ANNVMSGGTMYPGIADR	N-ter +28.03 Da	30.1	61.2	3	1881.99	-4.322	0.864	ACT5_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;	0.00 - 0.15
SPSEIGPGMP	ANQDTIFEGIGGPR	N-ter +34.06 Da	61.3	32.6	2	1507.83	-2.556	0.15	COSA1_MOUSE		Collagen alpha-1(V) chain;		0.00 - 0.15

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VIQHRPSQQY	ATLDVYNPFENR	N-ter +34.06 Da	33.7	62.0	3	1471.84	0.202	0.028	SCAM3_MOUSE	Q3UXS0_MOUSE	Secretory carrier-associated membrane protein 3;		0.25 - 0.75
KHKKEKAVTI	ATPATAAPAAVAASATTTSAQEPEAAAEPR	N-ter +34.06 Da	62.9	53.4	4	2839.59	-0.535	0.078	SRRM1_MOUSE	A2A8V8_MOUSE	Serine/arginine repetitive matrix protein 1;	Plenty-of-prolines 101; Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;	0.25 - 0.75
HLAQSSEVTVQ	ATPESLEVPEVTEVDVDR	N-ter +34.06 Da	34.1	58.5	3	1919.07	-2.737	0.547	AKA12_MOUSE		A-kinase anchor protein 12;	Generally expressed protein 4.1;	0.00 - 0.15
GRRDSKSPTK	ATPLPAEKKNTLR	N-ter +34.06 Da, K +34.06 Da	21.6	55.1	4	1597.13	-0.916	0.086	E41L2_MOUSE		Band 4.1-like protein 2;	Cargo selection protein TIP47;Mannose-6-phosphate receptor-binding protein 1;	0.25 - 0.75
PLTEAELALI	ATPPEDSDMASLQQQR	N-ter +28.03 Da	51.7	49.0	3	1800.92	2.417	0.339	PLIN3_MOUSE		Perilipin-3;		0.85 - 1.00
LSTVASTDIL	ATVLEEMPPFER	N-ter +28.03 Da	35.3	58.0	3	1542.86	-0.12	0.013	AP2A1_MOUSE	AP2A2_MOUSE	AP-2 complex subunit alpha-1;		0.25 - 0.75
AMGVAVPAQAL	AVAASGPGSSFR	N-ter +28.03 Da	37.2	32.4	2	1133.62	1.227	0.142	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;		0.75 - 0.85
SDTTTRIKLL	AVAATAPPDAPNREEVFDER	N-ter +28.03 Da	34.6	45.8	3	2182.17	2.7	0.357	WINC_MOUSE		Vinculin;		0.85 - 1.00
HQITHQAMVA	AVASAAAGQVQVGFPTAPTR	N-ter +28.03 Da	39.3	34.8	3	1924.08	0.014	0.002	Q3TDI4_MOUSE				0.25 - 0.75
ADEDALRKIR	AVEEQIEYLQKK	N-ter +28.03 Da, K +28.03 Da	14.1	54.2	3	1560.96	-1.556	0.229	BRE1A_MOUSE		E3 ubiquitin-protein ligase BRE1A;		0.15 - 0.25
QKIGQPTLLL	AVEEQVSCYSGSR	N-ter +34.06 Da, C +57.02 Da	48.8	53.6	3	1667.82	-1.152	0.23	E9PX16_MOUSE				0.15 - 0.25
IIPASTGAAK	AVGKIVPELNGKLTMAFR	N-ter +28.03 Da, K +28.03 Da	34.4	82.9	4	2084.39	1.632	0.168	G3P_MOUSE	F8WIL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;	0.75 - 0.85
KMVEEIGVEL	AVLDLPLPEDELAR	N-ter +28.03 Da	22.6	51.9	3	1692.98	0.227	0.023	HYOU1_MOUSE		Hypoxia up-regulated protein 1;		0.25 - 0.75
GPEPTDCFV	AVMHGETGTVPGNALVVDPEKFFR	N-ter +28.03 Da, K +28.03 Da	55.9	64.1	4	2705.56	2.141	0.325	EHD2_MOUSE		EH domain-containing protein 2;		0.85 - 1.00
SSLLSPMSVN	AVMKVIDPATATSVDLR	N-ter +28.03 Da, K +28.03 Da	46.7	73.8	3	1842.16	2.141	0.913	TCPD_MOUSE		T-complex protein 1 subunit delta;	A45;CCT-delta;	0.85 - 1.00
VLTFGFMFLC	AVPIAQKSEPQSLNEALMR	N-ter +34.06 Da, K +34.06 Da	31.5	58.4	4	2236.38	1.043	0.157	Q542V8_MOUSE	D3ZK5_MOUSE			0.25 - 0.75
TIAAPELLAC	AVQEEWLDIPSKLDNR	N-ter +28.03 Da, K +28.03 Da	51.5	68.3	3	1968.17	0.251	0.021	E9Q7D5_MOUSE				0.25 - 0.75
LSLEVEQLQA	AVRPLQLLGTCAELCR	N-ter +34.06 Da, C +57.02 Da	62.0	71.2	3	1890.17	-0.136	0.022	Q8BTE6_MOUSE				0.25 - 0.75
MIDIQDPKYR	AVSEQGVCTLEIR	N-ter +28.03 Da, C +57.02 Da	28.4	38.9	3	1488.82	-0.713	0.047	MYBPH_MOUSE		Myosin-binding protein H;	H-protein;	0.25 - 0.75
LQSELSMTL	AVSKEEEETSPTSIPR	N-ter +28.03 Da, K +28.03 Da	25.9	77.0	4	2215.29	-0.786	0.081	E9Q7D5_MOUSE				0.25 - 0.75
AASRATLSN	AVSSLASTGLSLTKVDER	N-ter +34.06 Da, K +34.06 Da	48.1	52.8	3	1901.21	-0.184	0.029	PICA_MOUSE		Phosphatidylinositol-binding clathrin assembly protein;		0.25 - 0.75
VNVKTSASR	AVSSLATKAGPSEVR	N-ter +28.03 Da, K +28.03 Da	32.3	52.1	3	1584.97	1.718	0.397	DCLK1_MOUSE	Q8BRN4_MOUSE	Serine/threonine-protein kinase DCLK1;	Clathrin assembly lymphoid myeloid leukemia; Doublecortin-like and CAM kinase-like 1;Doublecortin-like kinase 1;	0.75 - 0.85
FISNPNIL	AVTAANTDMATSEALKISR	N-ter +28.03 Da, K +28.03 Da	65.8	49.5	3	2005.15	1.239	0.241	DNM1L_MOUSE	E9PUD2_MOUSE	Dynamin-1-like protein;	Dynamin family member proline-rich carboxyl-terminal domain less;Dynamin-related protein 1;	0.75 - 0.85
LWSAVGASNM	AVVTCGSVKVLLNTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.7	44.6	3	1672.05	-0.644	0.06	SDF2_MOUSE		Stromal cell-derived factor 2;		0.25 - 0.75
IFGDYIERLW	AYLTIEQLLEKR	N-ter +28.03 Da, K +28.03 Da	41.3	61.8	3	1531.99	1.322	0.233	ITH3_MOUSE	F6ZJ7_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;		0.75 - 0.85
ARNLGRVGTK	CCTLPEDQR	N-ter +28.03 Da, C +57.02 Da	33.8	41.6	2	1205.57	0.766	0.117	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
MEPYS	CDTFVALPVTGNGR	N-ter +34.06 Da, C +57.02 Da	30.6	52.4	3	1650.95	-1.12	0.049	SCRN3_MOUSE	A2AWQ9_MOUSE	Secernin-3;		0.15 - 0.25
QAGRFVHNL	CGEEQGAADALHFNPR	N-ter +28.03 Da, C +57.02 Da	74.5	73.3	3	1798.94	2.485	0.484	Q9CRB1_MOUSE	LEG7_MOUSE			0.85 - 1.00
DDFAQFLDTC	CKAADKDTCFSTEGPNLVTR	N-ter +28.03 Da, C +57.02 Da	29.9	73.8	4	2353.31	-0.12	0.033	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
GNSTHPMHSR	CSPDPGLTALLSDHR	N-ter +28.03 Da, C +57.02 Da	48.8	72.9	3	1665.94	1.433	0.175	HEMO_MOUSE		Hemopexin;		0.75 - 0.85
KPTDGASSNS	CVTDISHLVR	N-ter +28.03 Da, C +57.02 Da	38.2	69.7	3	1226.73	1.395	0.244	NASP_MOUSE	B1AU75_MOUSE	Nuclear autoantigenic sperm protein;		0.75 - 0.85
AEFKAADFMD	DADGGDISVVKELGTVMR	N-ter +34.06 Da, K +34.06 Da	43.0	47.0	3	1887.09	-6.644	0.001	TNRC2_MOUSE		Troponin C, skeletal muscle;	STNC;	0.00 - 0.15
FKLEENYNMN	DALYKLGMTDAFGGR	N-ter +34.06 Da, K +34.06 Da	34.9	56.4	3	1682.01	-1.889	0.28	SPB6_MOUSE	F8WIV2_MOUSE	Serpin B6;	Placental thrombin inhibitor;Proteinase inhibitor 6;	0.00 - 0.15
LGKVSQVQLL	DAVDYVIPVTR	N-ter +34.06 Da	22.7	50.0	3	1379.82	1.828	0.525	EFTU_MOUSE	D3YVN7_MOUSE	Elongation factor Tu, mitochondrial;		0.85 - 1.00
ASGTTLEAL	DCILPPTRPDKPLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.1	52.9	4	1834.11	-2.12	0.184	EF1A1_MOUSE	D3Y268_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.00 - 0.15
LPLLARLSAG	DCPCSEALCQPIR	N-ter +28.03 Da, C +57.02 Da	49.3	48.7	3	1703.83	0.496	0.183	DIAC_MOUSE		Di-N-acetylchitobiose;		0.25 - 0.75
ESAAKDEAVF	DDEVAPDAAEAENCLAER	N-ter +28.03 Da, C +57.02 Da	50.5	65.1	3	1872.94	-0.184	0.046	E9PV1_MOUSE				0.25 - 0.75
VLLTFGVARR	DDEVDVDTVEEDLGKSR	N-ter +34.06 Da, K +34.06 Da	57.1	48.7	3	2045.11	1.852	0.405	ENPL_MOUSE		Endoplasmic;		0.85 - 1.00
QARLKLVRAR	DDLITDLLNEAKQR	N-ter +28.03 Da, K +28.03 Da	34.4	69.6	3	1699.03	0.454	0.146	VATE1_MOUSE		V-type proton ATPase subunit E 1;		0.25 - 0.75
AAGGGGENY	DDPHKTPASVVHIR	N-ter +34.06 Da, K +34.06 Da	30.7	71.7	4	1736.13	-1.218	0.113	HNRPL_MOUSE	E9Q8W8_MOUSE	Heterogeneous nuclear ribonucleoprotein L;		0.15 - 0.25
PPPCPGREL	DDPSYVNIQLDKAR	N-ter +28.03 Da, K +28.03 Da	44.3	61.3	3	1803.03	0.111	0.007	SHC1_MOUSE		SHC-transforming protein 1;	SHC-transforming protein A;Src homology 2 domain-containing-transforming protein C1;	0.25 - 0.75
EDDEERGEV	DDVDHAAVSSPQR	N-ter +28.03 Da	39.5	60.6	3	1520.81	-1.059	0.11	SKAP2_MOUSE		Src kinase-associated phosphoprotein 2;	Pyk2/RAFTK-associated protein;SKAP55 homolog;Src family-associated phosphoprotein 2;Src kinase-associated phosphoprotein 55-related protein;Src-associated adapter protein with PH and SH3 domains;	0.15 - 0.25

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
DVIRNAFACF	DEEAIGTIQEDYLR	N-ter +28.03 Da	34.5	56.8	3	1678.90	1.705	0.288	Q6ZW09_MOUSE				0.75 - 0.85
DVIRNAFACF	DEEATGTIQEDYLR	N-ter +28.03 Da	33.7	49.9	3	1666.85	1.475	0.324	ML12B_MOUSE	Myosin regulatory light chain 12B;	Myosin regulatory light chain 2-B, smooth muscle isoform;Myosin regulatory light chain 20 kDa;Myosin regulatory light chain MRLC2;		0.75 - 0.85
KAVLSAEKLR	DEEVTHTGLGELLR	N-ter +28.03 Da	33.8	45.8	3	1494.84	1.546	0.222	SERPH_MOUSE	Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;		0.75 - 0.85
QTRDTQLITV	DEKLDITLTVGPEEHKTR	N-ter +34.06 Da, K +34.06 Da	27.3	84.4	4	2396.60	-0.578	0.069	NDUS4_MOUSE	E9QPX3_MOUSE	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial;	Complex I-18 kDa;Complex I-AQDQ;NADH-ubiquinone oxidoreductase 18 kDa subunit;	0.25 - 0.75
NFASQMSYGY	DEKSAGVSVPGPMGPSGPR	N-ter +34.06 Da, K +34.06 Da	32.6	50.2	3	1892.10	-3.059	0.255	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
GSQAWHVWQQ	DEPOSQWDKVKDFANVYVDVKDSGR	N-ter +34.06 Da, K +34.06 Da	33.5	82.2	4	3131.94	-3.644	0.911	APOA1_MOUSE	Q8BP45_MOUSE	Apolipoprotein A-1;	Apolipoprotein A1;	0.00 - 0.15
SGFSKGFQFK	DETEQALANER	N-ter +28.03 Da	44.8	78.9	2	1302.71	-0.578	0.086	DDX46_MOUSE	F8WHR6_MOUSE	Probable ATP-dependent RNA helicase DDX46;	DEAD box protein 46;	0.25 - 0.75
YKGWYFEMVM	DEVAPFLTAQATHLR	N-ter +34.06 Da	24.4	45.0	4	1702.00	-2.556	0.301	E9PZQ0_MOUSE			DEAD box protein 46;	0.00 - 0.15
RLFVYGDGAN	DFCPMGLLAGGDVAFPRR	N-ter +34.06 Da, C +57.02 Da	28.2	38.4	3	2012.10	-2.322	0.464	PHOP1_MOUSE		Phosphoethanolamine/phosphocholine phosphatase;		0.00 - 0.15
ELKGTVCAAN	DFNPDADAKALR	N-ter +28.03 Da, K +28.03 Da	22.7	97.7	3	1387.85	-0.044	0.006	ANKA6_MOUSE	F8WIT2_MOUSE	Annexin A6;	67 kDa calelectrin;Annexin VI;Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;	0.25 - 0.75
SQASDSEGH5	DFSEGOAVGAHR	N-ter +28.03 Da	16.3	67.7	3	1300.70	-2.252	0.322	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.00 - 0.15
GKSTTKRKR	DGDKLVVECVMKGVYSTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.6	91.4	4	2077.28	0	0.001	FABP4_MOUSE		Fatty acid-binding protein, adipocyte;	3T3-L1 lipid-binding protein;Adipocyte lipid-binding protein;Adipocyte-type fatty acid-binding protein;Fatty acid-binding protein 4;Myelin P2 protein homolog;P15;P2 adipocyte protein;Protein 422;	0.25 - 0.75
GLVAGMASLL	DGGGAGGGGAGGAGAAGGGPDR	N-ter +34.06 Da	24.6	52.4	3	1978.01	-2.474	0.825	ONEC3_MOUSE		One cut domain family member 3;	ONECUT-3;	0.00 - 0.15
VSSGVNLFAN	DGSFLEFKR	N-ter +28.03 Da, K +28.03 Da	25.9	73.6	3	1266.79	-0.252	0.087	CS043_MOUSE		Uncharacterized protein C19orf43 homolog;		0.25 - 0.75
LGLLQSGIRA	DGTEASCGAVIQPR	N-ter +28.03 Da, C +57.02 Da	23.2	56.0	3	1487.79	2.036	0.293	PRSS8_MOUSE	Q99L44_MOUSE	Prostasin;	Channel-activating protease 1;Serine protease 8;	0.85 - 1.00
SASNRIIAK	DHASIQMNVAEVDR	N-ter +28.03 Da	47.9	80.9	3	1611.90	0.454	0.099	RS21_MOUSE		40S ribosomal protein S21;		0.25 - 0.75
ASSASAFFA	DIALAPMEAAYKVR	N-ter +28.03 Da, K +28.03 Da	40.5	58.1	3	1439.90	1.189	0.104	MPCP_MOUSE		Phosphate carrier protein, mitochondrial;	Phosphate transport protein;Solute carrier family 25 member 3;	0.75 - 0.85
KLPGRVAFGE	DIDLPETFDAR	N-ter +28.03 Da	44.0	20.7	2	1318.67	2.592	0.529	CATB_MOUSE		Cathepsin B;	Cathepsin B1;	0.85 - 1.00
LLWFFPGIKC	DIKMTQSPSSMYASLGER	N-ter +28.03 Da, K +28.03 Da	55.9	57.5	3	2056.12	-0.252	0.045	KV5A5_MOUSE	KV5A6_MOUSE	Ig kappa chain V-V region T1;		0.25 - 0.75
LLFWIPASRG	DILLTQSPALISVSPGER	N-ter +28.03 Da	50.8	47.5	3	1923.16	-0.556	0.262	KV5A8_MOUSE		Ig kappa chain V-V region L7;		0.25 - 0.75
RGLALRAVAR	DIQEGADMLMVKPLPLDMVDR	N-ter +28.03 Da, K +28.03 Da	26.0	51.9	4	2546.43	3.437	1.304	HEM2_MOUSE		Delta-aminolevulinic acid dehydratase;	Porphobilinogen synthase;	0.85 - 1.00
LLWFFPGARC	DIQMTQSPSSLASLGER	N-ter +28.03 Da	56.1	45.3	3	1934.03	-0.862	0.172	KV5A7_MOUSE	KV5A8_MOUSE	Ig kappa chain V-V region MOPC 41;		0.25 - 0.75
LSLLAARANA	DISMEACCTDGNQMANQHR	N-ter +28.03 Da, C +57.02 Da	53.3	59.7	4	2265.04	-0.074	0.02	FBLN1_MOUSE		Fibulin-1;	Basement-membrane protein 90;	0.25 - 0.75
LLLLGPVAA	DITDGNSEHLKR	N-ter +28.03 Da, K +28.03 Da	24.2	70.0	3	1439.84	-0.044	0.006	LMAN2_MOUSE		Vesicular integral-membrane protein VIP36;	Lectin mannose-binding 2;Vesicular integral-membrane protein 36;	0.25 - 0.75
MLLWLSGVEG	DIVMTQSHKFMSTVSGDR	N-ter +28.03 Da, K +28.03 Da	38.3	69.9	4	2094.17	-0.535	0.093	KV5A1_MOUSE		Ig kappa chain V19-17;	Ig kappa chain V-V region MPC11;	0.25 - 0.75
QLDTCCKAA	DKDCTCFSTEGPNLVTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	37.3	46.5	3	1895.00	0.333	0.045	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
QQLIDDDFLF	DKPVSPLLAAGMAR	N-ter +28.03 Da, K +28.03 Da	26.8	53.9	3	1581.98	0.163	0.009	KCRU_MOUSE	A2ARP5_MOUSE	Creatine kinase U-type, mitochondrial;	Acidic-type mitochondrial creatine kinase;Ubiquitous mitochondrial creatine kinase;	0.25 - 0.75
NRVYREELKR	DLAKDITSSTSGDPR	N-ter +28.03 Da, K +28.03 Da	29.2	70.7	3	1695.95	-0.454	0.087	ANXA1_MOUSE	E9QA30_MOUSE	Annexin A1;	Annexin I;Annexin-1;Calpactin II;Calpactin-2;Chromobindin-9;Lipocortin I;Phospholipase A2 inhibitory protein;p35;	0.25 - 0.75
GKHVPRAVVF	DLEPTVIDEVR	N-ter +28.03 Da	41.5	22.4	2	1312.72	1.556	0.307	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;	0.75 - 0.85
HHDYNTYFL	DLNLDLSKFR	N-ter +34.06 Da, K +34.06 Da	27.0	63.2	3	1287.86	-2.252	0.429	NDUV3_MOUSE	Q3U422_MOUSE	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial;	Complex I-9kD;NADH-ubiquinone oxidoreductase 9 kDa subunit;	0.00 - 0.15
SPGEAIUHL	DLPCTPPPPAIPISVR	N-ter +28.03 Da, C +57.02 Da	42.7	40.8	3	1740.99	3.342	0.26	AP1G2_MOUSE		AP-1 complex subunit gamma-like 2;	Gamma2-adaptin;	0.85 - 1.00
ALANAAGHLD	DLPGLSALSALDHAHLR	N-ter +28.03 Da, K +28.03 Da	31.3	69.4	4	1969.25	1.766	0.099	HBA_MOUSE	Q91V88_MOUSE	Hemoglobin subunit alpha;	Alpha-globin;Hemoglobin alpha chain;	0.75 - 0.85
PRTLASPKKK	DLSLEEQKLEAAEER	N-ter +34.06 Da, K +34.06 Da	24.1	85.2	4	2102.41	0.422	0.063	STMN1_MOUSE	STMN2_MOUSE	Stathmin;	Leukemia-associated gene protein;Leukemia-associated phosphoprotein p18;Metablastin;Oncoprotein p18;Phosphoprotein p19;Protein 18;Protein 18;pp17;	0.25 - 0.75
LTSESSRPTR	DLSSSDLTASKIVK	N-ter +34.06 Da, K +34.06 Da	45.3	53.5	3	1652.10	0.585	0.113	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;	0.25 - 0.75
LTSESSRPTR	DLSSSDLTASK	N-ter +28.03 Da, K +28.03 Da	47.0	34.3	2	1265.68	0.214	0.057	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;	0.25 - 0.75
RKTRVSGEHM	DLTTCPLAAGGQQEKLK	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.0	59.6	4	1913.12	1.227	0.131	Q901B1_MOUSE				0.75 - 0.85
KAKKAANAKK	DLVSSKMFEELKLR	N-ter +28.03 Da, K +28.03 Da	21.2	78.2	4	1779.10	1.683	0.283	TETN_MOUSE	Q8CFZ6_MOUSE	Tetranectin;	C-type lectin domain family 3 member B;Plasminogen kringle 4-binding protein;	0.75 - 0.85
IMKCDIDIRK	DLVANNVMSGGTMYPGIADR	N-ter +28.03 Da	52.2	47.3	3	2273.15	4.723	1.255	ACT5_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;	0.85 - 1.00
GAHHAFGQGR	DMAETFDQGAHHAFGQGR	N-ter +34.06 Da	41.8	92.3	4	2065.12	0.496	0.134	S6SN_MOUSE	E9QP82_MOUSE	Suprabasin;		0.25 - 0.75
KGKGRREKEY	DMVYDCSHTVAQVR	N-ter +34.06 Da, C +57.02 Da	26.9	49.1	3	1677.87	-2.556	0.451	DLFL3_MOUSE		Olfactomedin-like protein 3;		0.00 - 0.15

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
KDCKEKPKER LLWAAACAQS	EQQCCYNGKPGHLAR EQDFYDFKAVNIR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da	27.7 19.5	79.7 66.6	4 3	1905.00 1699.97	0.84 -0.396	0.338 0.089	CNBP_MOUSE GPX7_MOUSE	D3YF6_MOUSE E9PVY3_MOUSE	Cellular nucleic acid-binding protein; Glutathione peroxidase 7;	Zinc finger protein 9; Apolipoprotein J;Clustrin;Sulfated glycoprotein 2;	0.25 - 0.75 0.25 - 0.75
LIWDNGMVLG KKGKSCRTTF	EQEVSDNELQELSTQGSR EQEQAELELAKKR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da	59.0 29.5	46.0 83.1	3 4	2076.06 1820.24	1.124 -1.69	0.201 0.218	CLUS_MOUSE TPPP_MOUSE	E9Q9B8_MOUSE	Clusterin; Tubulin polymerization-promoting protein;		0.75 - 0.85 0.00 - 0.15
KRSRWNQDTM	EQKTVPGMPTVIPPLTR	N-ter +28.03 Da, K +28.03 Da	51.3	54.3	3	2089.31	-0.358	0.023	SFO1_MOUSE	Q3U145_MOUSE	Splicing factor 1;	CW17;Mammalian branch point-binding protein;Transcription factor ZFM1;Zinc finger gene in MEN1 locus;Zinc finger protein 162;	0.25 - 0.75
LQVFRQVVRH MCAQLPNQVL	ESEVASSLVLER ESISIIDTPGILSGAKQR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	32.4 41.5	34.5 57.2	2 3	1345.76 1940.21	5.271 2.021	0.984 0.309	SSBP_MOUSE EHD2_MOUSE	Q8R2K3_MOUSE Q8R2X0_MOUSE	Single-stranded DNA-binding protein, mitochondrial; EH domain-containing protein 2;		0.85 - 1.00 0.85 - 1.00
VSEAGPAGAG	ESKCPMLVKVLDADR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.5	85.9	4	1828.19	0.669	0.017	TTHY_MOUSE		Transthyretin;	Prealbumin; Apoptosis inhibitor expressed by macrophages;Apoptosis inhibitory 6;CT-2;SP- alpha;	0.25 - 0.75
LSIFVGSCFS	ESPTKVQLVGGahr	N-ter +34.06 Da, K +34.06 Da	35.8	79.8	4	1546.05	-0.943	0.163	CD5L_MOUSE		CD5 antigen-like;	Interferon-induced, double-stranded RNA- activated protein kinase inhibitor;Protein kinase inhibitor of 58 kDa;	0.15 - 0.25
GRYTDATSKY HAFGQGRDMA GPAKGNGDRG	ESVMKTEPSVAEYTVR ETFDQGAHHAFGQGGRR ETGPAAGAPGIPAGAR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +34.06 Da	27.0 22.2 39.0	58.3 83.7 46.0	3 4 3	1881.07 1741.94 1508.89	-0.713 1.189 -0.152	0.129 0.318 0.01	DNIC3_MOUSE S8SN_MOUSE CO1A1_MOUSE	E9QP82_MOUSE F8WGB7_MOUSE	DnaJ homolog subfamily C member 3; Suprabasin; Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.25 - 0.75 0.75 - 0.85 0.25 - 0.75
RRSGRLLTRW VQGRDSRLV LASLLSGGA SGTKVGIQLP FSRGLSNAER	ETTSIPEAGEGQIR EVAQHLGESTVR EVEDASEEAAPLR EVELSVSTK EVGKALEGINNGITQAGR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	31.5 28.2 38.2 24.3 57.1	47.2 59.3 61.1 58.3 36.0	3 3 3 3 3	1601.87 1352.79 1371.74 1349.93 1882.10	0.39 1.753 -0.434 0.422 -1.218	0.054 0.182 0.029 0.104 0.142	ISCA2_MOUSE ATPB_MOUSE SRCA_MOUSE E9Q616_MOUSE S8SN_MOUSE	E9Q1H8_MOUSE E9QP82_MOUSE	Iron-sulfur cluster assembly 2 homolog, mitochondrial; ATP synthase subunit beta, mitochondrial; Sarcalumenin;	HE5B-like domain-containing protein 1; ATP synthase subunit beta, mitochondrial;	0.25 - 0.75 0.75 - 0.85 0.25 - 0.75 0.25 - 0.75 0.15 - 0.25
VLSAELRDE TCKVEHDEQA	EVHTGLGELLR EVIETHVLVTEHOR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	39.1 25.1	67.1 54.9	3 3	1250.78 1818.06	0.151 1.444	0.014 0.143	SERPH_MOUSE QGf5F2_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;	0.25 - 0.75 0.75 - 0.85
LTKLPGYPVK GAGFRPKVKR	EVKCDMEVSPCEPYTCCR EVKVDCEYLALSRR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	54.6 23.6	54.2 50.8	3 4	2335.07 1880.10	1.124 -1.599	0.299 0.048	GRN_MOUSE Q148R4_MOUSE	Q3U9N4_MOUSE Q8BM18_MOUSE	Granulins;	PC cell-derived growth factor;Proepithelin;	0.75 - 0.85
VLMDFQVKA LMAVVGINS TNCDLYEKLG RSFSTSIVRP	EVLDMAENAFDEYLLKCKSR EVQLQSQGAELVR EYFGNAILVR FAKLVRPPVQYVIGIEGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	49.1 41.4 40.6 30.3	81.2 41.5 32.0 60.5	4 3 2 4	2534.49 1489.89 1336.76 1996.35	-2.556 -0.599 -1.322 0.333	0.902 0.073 0.165 0.04	NAR3_MOUSE HVM02_MOUSE ALBU_MOUSE ATPO_MOUSE	E9Q1U7_MOUSE	Ecto-ADP-ribosyltransferase 3; Ig heavy chain V region 93G7; Serum albumin;	Mono(ADP-ribosyl)transferase 3;NAD(P)(+)- arginine ADP-ribosyltransferase 3;	0.00 - 0.15 0.25 - 0.75 0.15 - 0.25 0.25 - 0.75
ASRVLVASRN ELSCPLCLQL	FANDATFEIKKCDLHR FDAPVTAECGH5FCR	N-ter +28.03 Da, K +34.06 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da	25.9 46.8	64.0 55.0	4 3	2048.18 1780.86	0.345 2.592	0.052 0.959	ODPA_MOUSE TRI72_MOUSE		Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial; Tripartite motif-containing protein 72;	PDHE1-A type I; Mitsugumin-53;	0.25 - 0.75 0.85 - 1.00
MVNPVTF YEDFVEGLRV QQQLQIDHFL	FDITADDEPLGR FDKEGNGTVMGAELR FDKPVSPLLLASGMAR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	49.4 43.3 33.1	41.5 70.6 57.7	2 3 3	1375.72 1691.02 1769.16	1.245 -1.837 -1	0.231 0.262 0.08	PPIA_MOUSE MYL1_MOUSE KCRM_MOUSE	E9Q1E3_MOUSE MYL3_MOUSE KCRB_MOUSE	Peptidyl-prolyl cis-trans isomerase A; Myosin light chain 1/3, skeletal muscle isoform; Creatine kinase M-type;	Cyclophilin A;Cyclosporin A-binding protein;Rotamase A;SP18; Myosin light chain alkali 1/2; Creatine kinase M chain;M-CK;	0.75 - 0.85 0.00 - 0.15 0.15 - 0.25
SVLVYLAP AEGSNVPSFM	FDNEQSDLVHR FDQQTQEQFKAFTVIDONR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da	29.2 60.0	92.8 64.3	3 4	1386.78 2524.49	-0.862 -1.515	0.188 0.563	PSD12_MOUSE F6ULR7_MOUSE	B1AT36_MOUSE MLRS_MOUSE	26S proteasome regulatory subunit 12; 26S proteasome non-ATPase regulatory subunit 12;	26S proteasome regulatory subunit RPNS;26S proteasome regulatory subunit p55;	0.25 - 0.75 0.15 - 0.25
TPKKQALYLM TEGVKAGNF DTEEYNLRDY	FDPQESPVSKPPVR FEAKVQAINVSSR FEYKGIETIEMEDR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	32.4 28.3 30.2	49.8 50.4 74.3	3 3 4	1739.01 1515.98 2088.32	1.07 0.485 -1.837	0.066 0.083 0.262	TACC2_MOUSE EHD2_MOUSE ROA3_MOUSE	E9Q8T1_MOUSE Q8C845_MOUSE A2AL12_MOUSE	Transforming acidic coiled-coil-containing protein 2; EF-hand domain-containing protein D2; Heterogeneous nuclear ribonucleoprotein A3;	Swiprosin-1;	0.25 - 0.75 0.25 - 0.75 0.00 - 0.15
KAVKDLVLL	FETALLSGFSLEDPOQHSNR	N-ter +28.03 Da	39.3	70.2	4	2363.31	3.714	0.589	H590B_MOUSE	Q71LX8_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen; Metastasin;Metastatic cell protein;PEL98;Placental calcium-binding protein;Protein 18A2;Protein Mts1;S100 calcium- binding protein A4;	0.85 - 1.00
LSCIAMMCNE	FFEGCPDKEPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	24.0	72.2	3	1436.78	0.299	0.029	S10A4_MOUSE	D3YU9_MOUSE	Protein S100-A4;	Adapter-related protein complex 1 subunit beta- 1;Adaptor protein complex AP-1 subunit beta- 1;Beta-1-adaptin;Beta-adaptin 1;Clathrin assembly protein complex 1 beta large chain;Golgi adaptor HA1/AP1 adaptin beta subunit;	0.25 - 0.75
DESEGIQDSN GGPKLPGRVA DEKLRKRKR EQALEDHFS	FGAPSASVAAPAPAR FGEDIDLPEFDAR FGIVTSSAGTGTTEDTEAKKR FGPISEVVVKDR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	29.5 31.3 46.0 34.8	40.6 60.7 73.8 53.0	3 3 4 3	1467.84 1651.87 2239.34 1512.02	3.398 1.373 -0.644 -1.474	0.587 0.191 0.091 0.205	AP1B1_MOUSE CATB_MOUSE SARNP_MOUSE RBM3_MOUSE	Q8CC13_MOUSE	AP-1 complex subunit beta-1; Cathepsin B; SAP domain-containing ribonucleoprotein; Putative RNA-binding protein 3;	Cathepsin B1; Nuclear protein Hcc-1; RNA-binding motif protein 3;	0.85 - 1.00 0.75 - 0.85 0.25 - 0.75 0.15 - 0.25

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
LYCKVCYAKN	FGPTGIGFGGLTQQVEKK	N-ter +28.03 Da, K +28.03 Da	21.0	55.8	3	2076.24	1.163	0.073	CSR3_MOUSE		Cysteine and glycine-rich protein 3;	Cysteine-rich protein 3; LIM domain protein, cardiac; Muscle LIM protein;	0.75 - 0.85
QYREVAFAAQ	FQSDLDAAATQQLLRS	N-ter +28.03 Da	40.4	61.1	3	1648.94	-0.34	0.047	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;		0.25 - 0.75
TQICPNNLVA	FHFSSDLENVPHLR	N-ter +28.03 Da	32.1	76.9	4	1840.03	2.511	0.396	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;	0.85 - 1.00
GVVPLEARRA	FHMTKMDLPGSYPR	N-ter +28.03 Da, K +28.03 Da	33.7	72.8	4	1734.99	0.098	0.003	NDUB8_MOUSE	Q3V406_MOUSE	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial;	Complex I-ASH1; NADH-ubiquinone oxidoreductase ASH1 subunit;	0.25 - 0.75
EVRTGTYRQL	FHPEQLITKEDAANNYAR	N-ter +28.03 Da, K +28.03 Da	32.1	78.2	4	2229.29	1.531	0.164	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1; Alpha-tubulin isotype M-alpha-1; Tubulin alpha-1 chain;	0.75 - 0.85
SMFDQIQIE	FKEAFTVIDQNR	N-ter +28.03 Da, K +28.03 Da	44.4	59.6	3	1522.91	-1.218	0.198	MLRS_MOUSE	F6ULR7_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2; MLC2F;	0.15 - 0.25
AVSFIFMTF	FKGFDLPEQECLDKDYR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	35.0	76.9	4	2256.30	0.546	0.116	Q61635_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;		0.25 - 0.75
PEGKTIKQ	FLEELLTQCDR	N-ter +34.06 Da, C +57.02 Da	26.4	58.2	3	1557.88	-0.761	0.064	MLRS_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2; MLC2F;	0.25 - 0.75
DAPPNARLFS	FLEPGAETGLVSR	N-ter +28.03 Da	48.7	50.6	3	1515.91	0.766	0.09	Q91XX1_MOUSE				0.25 - 0.75
EEDDARWVTV	FNKPDIDAWELR	N-ter +34.06 Da, K +34.06 Da	39.1	72.6	3	1570.99	-1.218	0.17	COX5A_MOUSE		Cytochrome c oxidase subunit 5A, mitochondrial;	Cytochrome c oxidase polypeptide Va;	0.15 - 0.25
GDKQDQGLAG	FPSPGKGEKGSAGTPGMPGSPGPR	N-ter +28.03 Da, K +28.03 Da	21.0	38.5	4	2522.36	1.753	0.208	CO4A1_MOUSE		Collagen alpha-1(I) chain;		0.75 - 0.85
EAASGALSMF	FQGEETENEENLSEKAGLDKR	N-ter +28.03 Da, K +28.03 Da	44.3	68.8	4	2593.43	1.848	0.334	AZAI1_MOUSE	E9QAT4_MOUSE			0.85 - 1.00
QASDSEHSD	FSEGAQAIVHR	N-ter +28.03 Da	30.7	60.1	3	1185.66	3.446	1.201	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.85 - 1.00
VLRPPGGSSD	FSLGFDEPAEQPVR	N-ter +28.03 Da	46.3	53.1	3	1618.88	0.496	0.049	HN1_MOUSE		Hematological and neurological expressed 1 protein;		0.25 - 0.75
QLQDMGIDL	FSPEKSQLPGIVAGGR	N-ter +28.03 Da, K +28.03 Da	28.0	63.8	3	1698.06	1.669	0.205	ANT3_MOUSE		Antithrombin-III;	Serpin C1;	0.75 - 0.85
MIASHMIACL	FTELNQNVQVKVDQYLHYMR	N-ter +28.03 Da, K +28.03 Da	34.3	80.5	4	2609.52	-0.059	0.003	HXX2_MOUSE		Hexokinase-2;	Hexokinase type II;	0.25 - 0.75
LSFMNTEALAA	FTKNKQDPGVLDLR	N-ter +34.06 Da, K +34.06 Da	23.2	71.5	4	1619.10	1.422	0.239	S10AB_MOUSE	F6S1J5_MOUSE	Protein S100-A11;		0.75 - 0.85
LLMTPCYTAN	FVAPEVLKR	N-ter +28.03 Da, K +28.03 Da	18.1	69.0	3	1113.77	0.401	0.039	K56A1_MOUSE	K56A2_MOUSE	Ribosomal protein S6 kinase alpha-1;	90 kDa ribosomal protein S6 kinase 1; MAP kinase-activated protein kinase 1a; Ribosomal S6 kinase 1;	0.25 - 0.75
ILLDLAVCKG	FVEDLNEFSKDNR	N-ter +28.03 Da, K +28.03 Da	29.8	69.7	3	1667.93	-0.396	0.031	TMX3_MOUSE		Protein disulfide-isomerase TMX3;	Thioredoxin domain-containing protein 10; Thioredoxin-related transmembrane protein 3;	0.25 - 0.75
LNVQNKSSY	FVEWIPNNVKTAVCDIPPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	39.1	60.0	4	2310.36	4.915	0.43	T8B5_MOUSE	T8B2A_MOUSE	Tubulin beta-5 chain;		0.85 - 1.00
RYLSPKVIKIM	FVLDEADEMLSR	N-ter +28.03 Da	41.1	42.4	2	1451.76	-0.252	0.048	IF4A1_MOUSE	IF4A2_MOUSE	Eukaryotic initiation factor 4A-I;	ATP-dependent RNA helicase eIF4A-1;	0.25 - 0.75
RTSTSAVPLN	FVPLATNPKEVQEMR	N-ter +34.06 Da, K +34.06 Da	24.3	59.2	3	1869.16	-0.713	0.094	ADDA_MOUSE	E9Q1K3_MOUSE	Alpha-adducin;	Erythrocyte adducin subunit alpha;	0.25 - 0.75
KKTDLCPIYI	FVQPPSLDVLQQR	N-ter +28.03 Da	34.3	34.7	3	1554.89	0.678	0.038	KGUA_MOUSE	Q564G0_MOUSE	Guanylate kinase;	GMP kinase;	0.25 - 0.75
PSGKLRWDGH	GAAQNIIPASTGAAKAVGK	N-ter +28.03 Da, K +28.03 Da	38.1	53.4	3	1808.15	0.163	0.015	G3P_MOUSE	F8W1L5_MOUSE	Glycerate kinase;	Peptidyl-cysteine S-nitrosylase GAPDH;	0.25 - 0.75
LLRGGPVAARA	GAGAVGAGPVVR	N-ter +34.06 Da	44.1	22.2	2	1043.65	-0.434	0.053	G6PE62_MOUSE				0.25 - 0.75
MSVFKLF	GAGGGKAGKGGPPTQEIQR	N-ter +28.03 Da, K +28.03 Da	33.7	84.9	4	1920.22	0.848	0.094	CHM4B_MOUSE		Charged multivesicular body protein 4b;	Chromatin-modifying protein 4b;	0.25 - 0.75
VLEVPALSLG	GAGSALHKEEASGELR	N-ter +34.06 Da, K +34.06 Da	27.4	70.0	4	1792.14	-1.943	0.149	SYNEM_MOUSE	F6VN34_MOUSE	Synemin;	Desmuslin;	0.00 - 0.15
SMVAQAMGVY	GALTKAPVPGAQNSQSR	N-ter +28.03 Da, K +28.03 Da	52.0	70.1	3	1824.11	-1.358	0.348	STM1L2_MOUSE		Stomatin-like protein 2;		0.15 - 0.25
STVTPGSSGK	GANLPCPGKVSAAALR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.5	64.3	3	1623.00	0.251	0.027	TCOF_MOUSE	Q05CS0_MOUSE	Treacle protein;	Treachers Collins syndrome protein homologue;	0.25 - 0.75
RVAGPQPAQT	GAPQGSGLGYLFER	N-ter +34.06 Da	38.4	65.0	3	1556.91	1.945	0.232	FRIL1_MOUSE	Q9CPX4_MOUSE	Ferritin light chain 1;	Ferritin L subunit 1;	0.85 - 1.00
ESEGIGDSNF	GAPSASVAAAPAPAR	N-ter +28.03 Da	25.2	36.4	3	1320.76	1.157	0.529	AP1B1_MOUSE	Q8CC13_MOUSE	AP-1 complex subunit beta-1;	Adapter-related protein complex 1 subunit beta-1; Adaptor protein complex AP-1 subunit beta-1; Beta-1-adaptin; Beta-adaptin 1; Clathrin assembly protein complex 1 beta large chain; Golgi adaptor HA1/AP1 adaptin beta subunit;	0.75 - 0.85
TISLQMGNTN	GASQAGMLAPGTR	N-ter +28.03 Da	61.8	36.9	2	1243.68	0.098	0.012	CNN3_MOUSE		Calponin-3;	Calponin, acidic isoform;	0.25 - 0.75
GKSQSGSAGK	GAVSAEQVIAGFNR	N-ter +28.03 Da	30.4	54.2	3	1445.84	-0.12	0.012	PF2D2_MOUSE	F8W1J0_MOUSE	Prefoldin subunit 2;		0.25 - 0.75
DYKSAHKFK	GAYDAQGLSLKIFLGGRR	N-ter +34.06 Da, K +34.06 Da	24.4	100.4	4	1983.40	-0.515	0.088	F7A0B0_MOUSE	F8RT34_MOUSE			0.25 - 0.75
TDLNPNLQGG	GDDLDPNVLSSR	N-ter +34.06 Da	29.5	47.5	3	1483.81	-1.322	0.066	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain; M-CK;	0.15 - 0.25
FTASAGIQVV	GDDLTVTNPKR	N-ter +34.06 Da, K +34.06 Da	31.7	51.3	3	1282.82	-3.644	0.456	ENOA_MOUSE	ENOB_MOUSE	Alpha-enolase;		0.00 - 0.15
QILGWGKMEN	GDFPDTIQCADVHLVPR	N-ter +28.03 Da, C +57.02 Da	53.7	65.5	3	1967.09	2.198	0.426	O88301_MOUSE	Q91Y82_MOUSE		Complex III subunit 6; Complex III subunit VIII; Cytochrome c1 non-heme 11 kDa protein; Mitochondrial hinge protein; Ubiquinol-cytochrome c reductase complex 11 kDa protein;	0.85 - 1.00
EDERKMLTGS	GDPKEEEEEELVDPLTVR	N-ter +34.06 Da, K +34.06 Da	53.1	59.6	3	2252.30	-0.269	0.039	QCR6_MOUSE		Cytochrome b-c1 complex subunit 6, mitochondrial;		0.25 - 0.75
VGAPPGAGAS	GDRGEAGAAGPSGAPGR	N-ter +34.06 Da	36.0	61.9	3	1612.91	-2.184	1.092	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
PGVPAGGAKN	GDRGETGPAGPAGPIGAGAR	N-ter +28.03 Da	58.5	69.9	3	1888.09	-2.837	0.608	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
GTPIWDWEQY	GDSGSDGGDGGSPCPSEAATLTKER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	53.0	67.0	4	2607.31	0.766	0.234	NIB1L1_MOUSE		Niban-like protein 1;	Protein FAM129B;	0.25 - 0.75
DNLKGGKVK	GDVDISGPKLEGDIKIVPR	N-ter +34.06 Da, K +34.06 Da	16.5	65.3	4	1996.34	-0.811	0.071	E9Q616_MOUSE				0.25 - 0.75
IRNWKPVQEQ	GDVLTLESER	N-ter +28.03 Da	41.5	35.7	2	1258.72	-1.889	0.35	RS28_MOUSE	D3YVD9_MOUSE	40S ribosomal protein S28;		0.00 - 0.15
SLTKYKXTLL	GDVPPVAVDPTVNVVTVTR	N-ter +28.03 Da	59.2	50.3	3	1863.10	0.367	0.111	GDIR2_MOUSE		Rho GDP-dissociation inhibitor 2;	D4; Rho-GDI beta;	0.25 - 0.75
VLGVSEPVALA	GDVSSCDNPGSPGTSGNR	N-ter +34.06 Da, C +57.02 Da	52.1	54.2	3	1969.96	0.956	0.33	Q90140_MOUSE				0.25 - 0.75

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
PETLFPQFSI GRPRHQGMVM	GMESAGIHETTYNSIMKCDIR GMGQKDSYVGEAQSQR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	34.2 47.3	74.5 69.1	4 4	2696.46 1957.18	4.469 0.227	1.736 0.056	ACTA_MOUSE ACTS_MOUSE	ACTC_MOUSE ACTA_MOUSE	Actin, aortic smooth muscle; Actin, alpha skeletal muscle;	Alpha-actin-2; Alpha-actin-1;	0.85 - 1.00 0.25 - 0.75
LAGLVFVSEA AGKHGNRGE PGLPEKGDH SMPDVLHLK	GPAGAGESKCLMVKVLDVAVR GPAGSVGVGAVGPR PGIPGGIPLGPPGPR GNPVKGEYDVTVPR	N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da, K +34.06 Da	26.7 48.8 20.6 20.1	76.5 25.4 59.2 59.6	4 2 3 3	2238.39 1304.75 1569.02 1598.01	0.163 0.111 -3.644 -0.152	0.001 0.009 0.456 0.01	THY_MOUSE CO1A2_MOUSE B1AVKS_MOUSE E9Q616_MOUSE	E9Q6U9_MOUSE E9Q511_MOUSE F7BRM2_MOUSE	Transthyretin; Collagen alpha-2(I) chain; Cold-inducible RNA-binding protein;	Prealbumin; Alpha-2 type I collagen;	0.25 - 0.75 0.25 - 0.75 0.00 - 0.15 0.25 - 0.75
QALEQVFSKY	GQSEVVVVKDR	N-ter +34.06 Da, K +34.06 Da	28.4	52.4	3	1395.94	0.367	0.054	CIRBP_MOUSE	D3YU80_MOUSE	Basement-membrane protein 40;Osteonectin;Secreted protein acidic and rich in cysteine;	A18 hnRNP;Glycine-rich RNA-binding protein	0.25 - 0.75
MYIFPVHWQF	QLDQHPIDIGVLSHTELAPlR	N-ter +34.06 Da	38.7	77.2	4	2393.44	-1.089	0.046	SPRC_MOUSE	Q5NCU4_MOUSE	SPARC;		0.15 - 0.25
FQLRSICYLL	GQPEPLAGTTLPAPDR	N-ter +28.03 Da	33.3	43.4	3	1743.99	0	0.001	RN123_MOUSE	Q05CH9_MOUSE	E3 ubiquitin-protein ligase RNF123;	Kip1 ubiquitination-promoting complex protein 1;RING finger protein 123;	0.25 - 0.75
VSKQPSRITN	GQPQQTGAASGGYIKR	N-ter +28.03 Da, K +28.03 Da	40.9	57.1	3	1775.03	0.163	0.032	SNP23_MOUSE	Q9D3L3_MOUSE	Synaptosomal-associated protein 23;	Syndet;Vesicle-membrane fusion protein SNAP-23;	0.25 - 0.75
HSLRTAAVLQ EGPVGLPGID YREVAFAAFQ DYSQQGHVSS EETLALVCDN HPTSPRRPG GGRPAMEPGN	GQVQFKLSDIGEGIR GRPGIGPAGPR GSDLAATQQLSR GSEVTQCQDILCNER GSLVKAGFAGDDAPR GSIIIVYKPEIR GSLDLGDAAAGR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	39.0 28.0 34.7 38.3 41.5 48.7 56.1	46.6 58.2 50.0 47.9 59.8 53.8 24.0	3 3 3 3 3 3 2	1813.16 1164.76 1501.85 1983.90 1572.92 1430.93 1121.62	0.202 -2.474 -0.535 5.35 -1.12 0.536 2.759	0.025 0.275 0.062 1.34 0.243 0.074 0.11	ODB2_MOUSE CO1A2_MOUSE ATPA_MOUSE LY6D_MOUSE ACTC_MOUSE MAR2B2_MOUSE HNRPU_MOUSE	E9Q6U9_MOUSE D3ZGF5_MOUSE ACTS_MOUSE	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial; Collagen alpha-2(I) chain; ATP synthase subunit alpha, mitochondrial; Lymphocyte antigen 6D; Actin, alpha cardiac muscle 1; Epididymis-specific alpha-mannosidase; Heterogeneous nuclear ribonucleoprotein U;	Branched-chain alpha-keto acid dehydrogenase complex component E2;Dihydropyridinyl acetyltransferase component of branched-chain alpha-keto acid dehydrogenase complex;Dihydropyridinyl branched chain transacylase;Dihydropyridinyllysine-residue (2-methylpropanoyl)transferase; Alpha-2 type I collagen;	0.25 - 0.75 0.00 - 0.15 0.25 - 0.75 0.85 - 1.00 0.15 - 0.25 0.25 - 0.75 0.85 - 1.00
M	GSSQVIEPGGTGEYHVLN	N-ter +28.03 Da	63.9	49.9	3	2057.12	0.757	0.108	GORS2_MOUSE	A2AT18_MOUSE	Golgi reassembly-stacking protein 2;	Golgi reassembly-stacking protein of 55 kDa; Heparin-binding protein 44;Low density lipoprotein receptor-related protein-associated protein 1;	0.25 - 0.75
RLRKVSHQGY	GSTTEFEPR	N-ter +34.06 Da	38.4	40.2	2	1185.62	-0.667	0.095	AMRP_MOUSE	F6WMD1_MOUSE	Alpha-2-macroglobulin receptor-associated protein;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipoprotein II;Placental anticoagulant protein IV;Protein I p36;	0.25 - 0.75
GDHSTPPSAY AFSLFDKDG SVCVHRLNL	GSKPYTNFDAER GTITTKELGTVMR GTLNPPSSLDATAYER	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	46.9 24.8 43.4	68.7 49.0 50.7	3 3 3	1538.88 1461.89 1800.95	-0.599 -3.837 0.138	0.118 0.548 0.021	ANXA2_MOUSE CALM_MOUSE FRDA_MOUSE	BOV2N7_MOUSE Q3UKW2_MOUSE E9Q2P9_MOUSE	Annexin A2; Calmodulin; Frataxin, mitochondrial;		0.25 - 0.75 0.00 - 0.15 0.25 - 0.75
RKNKMASNIF TIDCDVITLM QEFQHYPAMG	GTPEENPPSWAKSAGSASSGR GTSPGTAEPYDGTAKR GVAPQALAVAASGGPSFR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	22.3 42.6 61.1	72.8 64.8 50.8	4 3 3	2270.29 1662.93 1776.07	-0.184 2.011 -0.943	0.008 0.444 0.218	HN1_MOUSE BSDC1_MOUSE A2M_MOUSE	D3YW52_MOUSE	Hematological and neurological expressed 1 protein; BSD domain-containing protein 1; Alpha-2-macroglobulin;	Pregnancy zone protein;	0.25 - 0.75 0.85 - 1.00 0.15 - 0.25
KNKKSELWL	GVDALGLNIQEONDR	N-ter +34.06 Da	40.2	30.0	3	1709.93	1.333	0.074	MOES_MOUSE		Moesin;	Membrane-organizing extension spike protein; Annexin I;Annexin-1;Calpactin I;Calpactin-2;Chromobindin-9;Lipoprotein I;Phospholipase A2 inhibitory protein;p35;	0.75 - 0.85
ALHKAIMVK LDHGRTLREQ	GVDEATIDILTKR GVVEHETLLR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	56.8 30.7	68.9 71.1	3 3	1599.04 1328.85	0.911 -0.811	0.296 0.057	ANXA1_MOUSE TLN1_MOUSE	E9QA30_MOUSE A2AIM2_MOUSE	Annexin A1; Talin-1;		0.25 - 0.75 0.25 - 0.75
M	GVEIETISPGDGR	N-ter +28.03 Da	28.5	72.7	3	1356.79	0.251	0.013	FKB1B_MOUSE		Peptidyl-prolyl cis-trans isomerase FKB1B;	12.6 kDa FK506-binding protein;FK506-binding protein 1B;Immunophilin FKBP12.6;Rotamase;	0.25 - 0.75
SGNRLDGGKK	GVEPSPPIKPGDIKR	N-ter +28.03 Da, K +28.03 Da	21.2	66.9	4	1760.14	-0.286	0.014	UFD1_MOUSE		Ubiquitin fusion degradation protein 1 homolog;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.25 - 0.75
ADCAVLVA AVPVFDLIL PSIVGRPRHQ VIKKYTKIID	GVGFEAGISKNGQTR GVGPDGHTCSLFPDHPQLQER GVMVGMGQKDSYVGEAQSQR GVPVITEKQTR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	39.1 43.3 43.4 21.6	68.9 82.9 72.2 53.8	3 4 3 3	1717.06 2359.33 2325.31 1411.88	-1.396 2.163 0.111 -0.089	0.11 0.304 0.017 0.013	EF1A1_MOUSE 6PGL_MOUSE ACTA_MOUSE POSTN_MOUSE	EF1A2_MOUSE Q8CBG6_MOUSE ACTA_MOUSE F7C9H0_MOUSE	Elongation factor 1-alpha 1; 6-phosphogluconolactonase; Actin, cytoplasmic 1; Periostin;	Beta-actin; Osteoblast-specific factor 2; Low molecular mass dual specificity phosphatase 3;	0.15 - 0.25 0.85 - 1.00 0.25 - 0.75 0.25 - 0.75
M	GVQPPNFSWWLPGR AQKEAEKVAH	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	39.4 23.2	62.2 50.9	3 3	1586.98 1640.01	-0.152 -1.474	0.022 0.655	DUS23_MOUSE SBSN_MOUSE	E9QP82_MOUSE	Dual specificity protein phosphatase 23; Suprabasin;		0.25 - 0.75 0.15 - 0.25
M	GVQVETISPGDGR	N-ter +34.06 Da	48.3	37.6	2	1347.77	1.526	0.101	FKB1A_MOUSE	Q1JUQ8_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A; Histidine triad nucleotide-binding protein 2,	12 kDa FK506-binding protein;FK506-binding protein 1A;Immunophilin FKBP12;Rotamase;	0.75 - 0.85
ARGAQRVNGA WQEGDKVIRP GNFAAQYSDK	GVSOGSEVAKAQAAPGASPTIFSR GVSQAGEMEQFGQGR GVSSGGPMGLMGR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +34.06 Da	30.7 59.3 66.2	74.3 43.6 28.1	4 3 2	2589.65 1835.93 1432.78	-0.515 0.299 -2.322	0.125 0.036 0.232	HINT2_MOUSE SBSN_MOUSE CO1A2_MOUSE	E9QP82_MOUSE EOCX2_MOUSE	Suprabasin; Collagen alpha-2(I) chain;	HINT-3;	0.25 - 0.75 0.25 - 0.75 0.00 - 0.15

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
LLGPSVVLG	ISFHLPVNSR	N-ter +28.03 Da	27.6	65.3	3	1196.75	-0.184	0.029	TMEDA_MOUSE		Transmembrane emp24 domain-containing protein 10;	21 kDa transmembrane-trafficking protein;Transmembrane protein Tmp21;p24 family protein delta-1;	0.25 - 0.75
SNKEIFLREL	ISNASDALDKIR	N-ter +28.03 Da, K +28.03 Da	23.0	57.9	3	1357.84	2.189	0.346	H590B_MOUSE	ENPL_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;	0.85 - 1.00
LAHVAPRRS IALNDFVKL	ISSQQTIPSAKYGGR ISWYDNEYYSNR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da	37.4 33.3	62.8 52.2	3 3	1757.12 1693.83	-1.434 2.826	0.155 0.319	IDHG1_MOUSE G3P_MOUSE	F8WJL5_MOUSE	Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;	Isocitric dehydrogenase subunit gamma;NAD(+)-specific ICDH subunit gamma;	0.15 - 0.25
FKEYVRGHTA	ISYCHETMTGWVHVDLGR	N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.4 31.1	94.5 79.7	4 4	2188.23 2425.35	-2.556 1.202	0.451	CATC_MOUSE	D3Z220_MOUSE	Dipeptidyl peptidase 1;		0.00 - 0.15
RKRKEGENQR KKELSDIAHR DAVTRQVVRT LLWVPGSTGD	ITSGESSGGNPKAKDECAQYR IVAPGKILADESTGSIKR IVEEVQDGKVISSR IVLTQSPASLAVSLGQR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	39.7 28.6 54.2	56.0 55.8 43.4	4 3 3	2137.37 1613.99 1888.17	1.257 4.717 -2.252	0.512 0.116 0.906 0.965	Q148R4_MOUSE ALDOA_MOUSE K1C17_MOUSE KV3A1_MOUSE	A6Z144_MOUSE D3YXP7_MOUSE KV3A2_MOUSE	Fructose-bisphosphate aldolase A; Keratin, type I cytoskeletal 17; Ig kappa chain V-II region PC 2880/PC 1229;	Aldolase 1;Muscle-type aldolase; Cytokeratin-17;Keratin-17;	0.75 - 0.85 0.75 - 0.85 0.85 - 1.00 0.00 - 0.15
EANLLTWQGL	IVDPNPPYDKGAFR	N-ter +28.03 Da, K +28.03 Da	31.1	54.3	3	1643.96	1.82	0.134	UBZL3_MOUSE	D3Y253_MOUSE	Ubiquitin-conjugating enzyme E2 L3;	UbcM4;Ubiquitin carrier protein L3;Ubiquitin-protein ligase L3;	0.85 - 1.00
GSKGTOCEK GVNIGGAGSY GTSSLKRTRK QNAILVRYTQ KIREGEVEVL APPWKDSKFF	IVQKYGYTHLSTGDLR IYEKPQTEAPQVTGPVPPVVR KAPAPPSKTPLAQTDER KAPQVSTPLVEAAR KATEMVEVGPEDDEVGAEAR KDAPDGPTVLTVDGR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	20.6 40.7 23.8 37.3 57.1 42.2	63.9 55.3 75.3 48.9 48.8 54.5	4 4 4 3 3 3	2019.24 2505.52 1890.20 1635.08 2116.10 1695.01	0.623 -0.434 -0.535 0.251 -1.184 -6.644	0.069 0.029 0.054 0.027 0.108 0.001	KAD1_MOUSE CRIP2_MOUSE COBL1_MOUSE ALBU_MOUSE PTRF_MOUSE FA12_MOUSE		Adenylate kinase isoenzyme 1; Cysteine-rich protein 2; Cordon-bleu protein-like 1; Serum albumin; Polymerase I and transcript release factor; Coagulation factor XII;	ATP-AMP transphosphorylase 1;Myokinase; Heart LIM protein; Cobl-related protein 1;	0.25 - 0.75 0.25 - 0.75 0.25 - 0.75 0.15 - 0.25 0.00 - 0.15
YKNSFKHRVI FGQVIRAMIK	KDFMIQGGDFTR KDGKMNAAIKMLKEYASENDRH	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	33.5 20.1	70.8 24.8	3 4	1481.90 2831.72	-4.644 -4.059	1.161 0.677	PIIB_MOUSE TIE1_MOUSE		Peptidyl-prolyl cis-trans isomerase B; Tyrosine-protein kinase receptor Tie-1;	CYP-51;Cyclophilin B;Rotamase B;S-cyclophilin;	0.00 - 0.15 0.00 - 0.15
AGELHLEICL AGDEESYDFV AGDEESYTVF LPMMQAISNN	KDLEEDHACIPIKSDPVVSYR KDLFDPHIEER KDLFDPHIEER KDLFDPHIEER KDLFDPHIEER KDLFDPHIEER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	31.0 31.1 31.7 46.0	54.9 63.9 67.8 73.3	4 3 3 3	2710.59 1441.94 1426.94 1680.00	0.322 -0.578 -3.184 -2.059	0.059 0.026 0.289 0.601	EF2_MOUSE KCRB_MOUSE KCRM_MOUSE MYL1_MOUSE	E9PWG4_MOUSE	Elongation factor 2; Creatine kinase B-type; Creatine kinase M-type; Myosin light chain 1/3, skeletal muscle isoform;	B-Ck;Creatine kinase B chain; Creatine kinase M chain;M-CK; Myosin light chain alkali 1/2;	0.25 - 0.75 0.00 - 0.15 0.25 - 0.75 0.00 - 0.15
FLDTCCKAAD MAF MAF MSVSR	KDTCFSTEGPNLVTR KDTGKTPVEVAIHR KDWSSALSSLR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	47.2 35.4 21.9	78.3 66.8 65.8	3 4 3	1780.02 1860.17 1288.80	0.971 -0.218 0.506	0.203 0.03 0.071	ALBU_MOUSE RS20_MOUSE LAD1_MOUSE		Serum albumin; 40S ribosomal protein S20; Ladinin-1; Myosin regulatory light chain 2, skeletal muscle isoform;		0.25 - 0.75 0.25 - 0.75 0.25 - 0.75 0.25 - 0.75
MFDQQTQJEF	KEAFTVIDQNR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	38.1 29.5	53.0 84.0	3 4	1375.82 1932.98	-2.322 -0.184	0.348 0.052	MLRS_MOUSE ALBU_MOUSE	F6ULR7_MOUSE		Fast skeletal myosin light chain 2,MLC2F;	0.00 - 0.15
KLATDLTKVN QPSDPTQTI	KECCHGDLLCADDR KEEDIVEDGWTIVR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	29.5 46.0	84.0 67.3	4 3	1932.98 1756.09	-0.184 -1.322	0.052 0.198	ALBU_MOUSE TSR2_MOUSE		Serum albumin; Pre-rRNA-processing protein TSR2 homolog;		0.25 - 0.75 0.15 - 0.25
EKSKLDWESF SQQTLEWY	KEEGIGEELAIHR KEHISTTKVPEQPR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.4 23.6	80.6 73.2	4 4	1779.06 1751.21	-0.358 -1.434	0.032 0.426	CFDP1_MOUSE TITN_MOUSE	E9Q8M7_MOUSE	Craniofacial development protein 1; Titin;	27 kDa craniofacial protein;Bucentaur;Protein Cp27; Connectin;	0.25 - 0.75 0.15 - 0.25
SLARELSGTI DMEVKVQKSS QQMTSSYGVY	KEILGTAQSGVCNDVGR KELEDMNQKLFDR KEPAAPVSIQR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	51.4 32.3 21.4	64.2 66.4 65.2	3 4 3	1859.08 1880.22 1250.82	-1.089 -1.556 -0.168	0.185 0.137 0.205	RL12_MOUSE TNNT2_MOUSE LASP1_MOUSE	A2A6K0_MOUSE A2A6H0_MOUSE	60S ribosomal protein L12; Troponin I, fast skeletal muscle; LIM and SH3 domain protein 1;	Troponin I, fast-twitch isoform; Metastatic lymph node gene 50 protein;	0.15 - 0.25 0.15 - 0.25 0.25 - 0.75
VSSNFDDYV	KEVGVGFATR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.1 43.4	83.6 68.8	3 4	1118.74 2491.24	-0.074 2.658	0.008 0.552	FABP4_MOUSE		Fatty acid-binding protein, adipocyte;	3T3-L1 lipid-binding protein;Adipocyte lipid-binding protein;Adipocyte-type fatty acid-binding protein;Fatty acid-binding protein 4;Myelin P2 protein homolog;P15;P2 adipocyte protein;Protein 422;	0.25 - 0.75
LLTKLPGPV LEEVTKMCIQ M GSNSKRSTDY	KEVKCDMEVSCPEYTCRR KEVYENYPAIDLTR KFNPFVTSDR KGLLEEKGEGNKQLNR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	37.8 31.0 29.4	66.6 69.5 93.1	3 3 4	1957.14 1408.88 1913.16	-3.059 0.227 1.257	0.51 0.041 0.184	DEK_MOUSE L26_MOUSE E9Q019_MOUSE	Q3U9N4_MOUSE D3Z3Q9_MOUSE	Granulins; Protein DEK; 60S ribosomal protein L26;	PC cell-derived growth factor;Proepithelin;	0.85 - 1.00 0.00 - 0.15 0.25 - 0.75 0.75 - 0.85
MSMN	KGPTLGDGLPEQENVLQR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	50.3 28.8	80.8 74.8	4 3	2177.34 1281.70	0.993 -1.943	0.23 0.224	PLIN1_MOUSE HNRPK_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;	0.25 - 0.75
IPTLEEQHY RSAPPKLKL	KGSDFDCELR KGVVPEDAVETLAGSLGTR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	57.7	58.6	3	1954.19	-1.059	0.044	ICAL_MOUSE	Q921U7_MOUSE	Heterogeneous nuclear ribonucleoprotein K; Calpastatin;	Calpain inhibitor; Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.00 - 0.15 0.15 - 0.25
PLRLPLQDVS SLERQAGQIK	KIGGIGTVPVGR KLEVNAAELLR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	24.1 34.8	47.3 54.7	3 3	1220.88 1368.87	-0.69 0.084	0.156 0.007	EF1A1_MOUSE PTRF_MOUSE	EF1A2_MOUSE Q3U4N4_MOUSE	Elongation factor 1-alpha 1; Polymerase I and transcript release factor;	Cav-p60;Cavin-1; Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;	0.25 - 0.75 0.25 - 0.75
FASLSLHCD	KLHVDPENFR	N-ter +28.03 Da, K +28.03 Da	23.3	58.7	3	1309.79	1.88	0.24	HBB1_MOUSE	HBB2_MOUSE	Hemoglobin subunit beta-1;	Adipocyte protein P27;Lung carbonyl reductase;NADPH-dependent carbonyl reductase 2;	0.85 - 1.00
M	KLNFSGLR	N-ter +34.06 Da, K +34.06 Da	32.6	54.2	3	1132.77	0.227	0.021	CBR2_MOUSE		Carbonyl reductase [NADPH] 2;	Carbonyl reductase 2;	0.25 - 0.75

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QHRRWRLHCL	KLQPLSPVSDIEISR	N-ter +28.03 Da, K +28.03 Da	41.0	46.0	3	1834.14	-1.786	0.185	C1TM_MOUSE		Monofunctional C1-tetrahydrofolate synthase, mitochondrial;	Formyltetrahydrofolate synthetase;	0.00 - 0.15
MSTVHEILC M	KLSLEGHDHSTPPSAYGSKVPTNFDAER	N-ter +28.03 Da, K +28.03 Da	31.1	57.3	4	3149.75	-0.811	0.071	ANXA2_MOUSE	BOV2N7_MOUSE	Annexin A2;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.25 - 0.75
GPSAGDVEAI	KNAIANASTLAEVER	N-ter +28.03 Da, K +28.03 Da	25.2	72.5	3	1117.73	0.275	0.036	WDR82_MOUSE		WD repeat-containing protein 82;		0.25 - 0.75
		N-ter +34.06 Da, K +34.06 Da	41.1	59.0	3	1654.07	-1.286	0.125	RU2A_MOUSE		U2 small nuclear ribonucleoprotein A';		0.15 - 0.25
		N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	38.1	84.2	4	2445.59	-2.556	0.301	SYNC_MOUSE		Asparagine-tRNA ligase, cytoplasmic;	Asparaginyl-tRNA synthetase;	0.00 - 0.15
M	KPPAACAGDVDDAASPASTVNHLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	48.2	61.1	4	2459.41	0.807	0.078	THOP1_MOUSE		Thimet oligopeptidase;		0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.0	63.2	3	1711.93	1.96	0.262	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;	0.85 - 1.00
YELLCLDNT QLIDDHFLFD	KPVQDYEDCYLAR	N-ter +34.06 Da, K +34.06 Da	40.7	39.1	3	1507.02	-0.415	0.066	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.25 - 0.75
LSTFQQMVIS	KQEYDEAGPSIVHR	N-ter +28.03 Da, K +28.03 Da	55.4	80.7	4	1683.99	-0.737	0.074	ACTS_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	Alpha-actin-1;	0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	53.3	73.7	3	1836.08	-1.029	0.21	MLRS_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;	0.15 - 0.25
		N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	24.7	68.9	3	1680.94	-5.059	1.686	D3YU50_MOUSE	Q6P6L5_MOUSE			0.00 - 0.15
FVREPPIMVT DFHLLLEVN NLHASNTRLQ	KQLEDMMAYCGER KTDPGILKTEMR KTGTAEMSSLEER	N-ter +28.03 Da, K +28.03 Da	21.1	57.8	4	1568.02	-1.434	0.039	Q3UWK8_MOUSE				0.15 - 0.25
		N-ter +34.06 Da, K +34.06 Da	36.9	62.1	3	1618.99	-0.761	0.103	ATPA_MOUSE	D6RU16_MOUSE	ATP synthase subunit alpha, mitochondrial;		0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da	47.7	69.2	3	1445.85	0.766	0.036	ANXA1_MOUSE	E9QA30_MOUSE	Annexin A1;	Annexin I;Annexin-1;Calpactin II;Calpactin-2;Chromobindin-9;Lipocortin I;Phospholipase A2 inhibitory protein;p35;	0.25 - 0.75
SASPQYQAVI VVSSVNTVAN	KTQSKPEDEADEWAR KTVEEAENIVTTGVVR	N-ter +34.06 Da, K +34.06 Da	30.3	72.0	4	1891.15	-3.322	0.664	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;	0.00 - 0.15
		N-ter +34.06 Da, K +34.06 Da	39.6	49.8	3	1911.23	0.566	0.073	SYUG_MOUSE		Gamma-synuclein;	Persyn;	0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	51.6	66.5	3	1775.02	0.766	0.203	IF4B_MOUSE	Q3TDD8_MOUSE	Eukaryotic translation initiation factor 4B;		0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da	24.1	56.9	4	1983.22	-0.029	0.002	DC1L1_MOUSE		Cytoplasmic dynein 1 light intermediate chain 1;	Dynein light chain A;Dynein light intermediate chain 1, cytosolic;	0.25 - 0.75
QFVWDWPTGF LSPMSVNAVAM	KVGINYQPPTVPGDLAKVQR KVIDPATATVDLIR	N-ter +28.03 Da, K +28.03 Da	29.5	79.9	4	2419.59	-2.556	0.451	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;	0.00 - 0.15
		N-ter +28.03 Da, K +28.03 Da	33.4	23.4	3	1540.92	2.036	0.447	TCPD_MOUSE		T-complex protein 1 subunit delta;	A5;CCT-delta;	0.85 - 1.00
		N-ter +28.03 Da, K +28.03 Da	23.9	61.7	4	1782.13	-0.168	0.026	HAP28_MOUSE		28 kDa heat- and acid-stable phosphoprotein;	PDGF-associated protein;PDGFA-associated protein 1;	0.25 - 0.75
NPNRVAQTK NV	KVTQLDLDGPKELSR LASEPEIKGIR	N-ter +28.03 Da, K +28.03 Da	27.5	61.3	3	1364.89	2.021	0.304	KAD2_MOUSE	F7BP55_MOUSE	Adenylate kinase 2, mitochondrial;	ATP-AMP transphosphorylase 2;	0.85 - 1.00
DALKRGLRE DQAGRFHVLN	LCEQQAELDYLCGR LCGEEQGADAAALHFNPR	N-ter +34.06 Da, K +57.02 Da	26.1	81.8	3	1787.99	-5.059	1.686	FA65C_MOUSE		Protein FAM65C;		0.00 - 0.15
HGCLNTLGSF ELGVKSVQKL	LCSCPMLVGLDGR LDAVDITYVPVTR	N-ter +28.03 Da, C +57.02 Da	70.6	69.9	3	1912.02	1.208	0.329	Q9CRB1_MOUSE	LEG7_MOUSE			0.75 - 0.85
KTNKPRLPF PSPGEALHL	LDIAPLDIGGADQEFR LDLPCPTPPPAPIPVSR	N-ter +34.06 Da	33.6	80.2	3	1727.05	-3.644	0.456	EGFL8_MOUSE	E9QA36_MOUSE	Epidermal growth factor-like protein 8;		0.00 - 0.15
		N-ter +28.03 Da	20.1	48.3	3	1486.87	0.604	0.159	EFTU_MOUSE	D3YVN7_MOUSE	Elongation factor Tu, mitochondrial;		0.25 - 0.75
		N-ter +34.06 Da	60.8	45.7	3	1763.01	-2.837	1.013	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
		N-ter +28.03 Da, C +57.02 Da	49.7	43.5	3	1854.09	1.903	0.122	AP1G2_MOUSE		AP-1 complex subunit gamma-like 2;	Gamma2-adaptin;	0.85 - 1.00
		N-ter +28.03 Da, K +28.03 Da	35.3	55.5	3	1655.02	1.064	0.209	MA2B1_MOUSE		Lysosomal alpha-mannosidase;	Lysoosomal acid alpha-mannosidase;Mannosidase alpha class 2B member 1;Mannosidase alpha-B;	0.25 - 0.75
GPTSYPESP KLKGSAPSDM	LDPTSVLTKMEIR LDSLTIPELKDHLR	N-ter +28.03 Da, K +28.03 Da	12.6	75.8	4	1818.23	0.057	0.004	URP2_MOUSE		Fermitin family homolog 3;	Kindlin-3;Unc-112-related protein 2;	0.25 - 0.75
SPSAKDIKI TGTGTLVLL	LDSVGEIADDOR LDVNDNAPIPEPR	N-ter +28.03 Da	51.5	41.5	2	1331.68	-1.184	0.135	RLA2_MOUSE		60S acidic ribosomal protein P2;		0.15 - 0.25
		N-ter +28.03 Da	30.2	51.8	3	1476.83	3.581	0.293	CADH1_MOUSE		Cadherin-1;	ARC-1;Epithelial cadherin;Uvomorulin;	0.85 - 1.00
		N-ter +34.06 Da	30.4	52.9	3	1550.90	-1.434	0.116	DPTOR_MOUSE	B2ZRS5_MOUSE	DEP domain-containing mTOR-interacting protein;	DEP domain-containing protein 6;	0.15 - 0.25
KDGSASGTTL	LEALDCLIPTRPTDKPLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	38.9	83.6	4	2260.45	-2.644	0.165	EF1A1_MOUSE	D3Y268_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.00 - 0.15
		N-ter +34.06 Da, K +34.06 Da	27.7	58.0	4	2213.47	-2.556	0.301	EF1A2_MOUSE	B7ZBW3_MOUSE	Elongation factor 1-alpha 2;	Eukaryotic elongation factor 1 A-2;Statin-S1;	0.00 - 0.15
KEGNASGVL VVLDPMYSTY	LEALDILPTRPTDKPLR LEALGIEGKTIPEYR	N-ter +28.03 Da, K +28.03 Da	26.5	54.2	3	1841.13	-0.556	0.049	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;	0.25 - 0.75
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	56.8	80.5	4	2237.15	2.233	0.565	LYPD3_MOUSE		Ly6/PLAUR domain-containing protein 3;	GPI-anchored metastasis-associated protein C4.4A homolog;	0.85 - 1.00
PLLCEGAQA RTLTAVHDAI	LECYSCVQKADDDGCSPHR LEDLVFSPVIVGKR	N-ter +28.03 Da, K +28.03 Da	43.7	56.5	3	1657.04	-0.889	0.115	R57_MOUSE	F6SVV1_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;		0.25 - 0.75
		N-ter +34.06 Da, C +57.02 Da	41.2	23.5	2	1410.76	-3.059	0.255	MLRS_MOUSE			Fast skeletal myosin light chain 2;MLC2F;	0.00 - 0.15
		N-ter +34.06 Da, K +34.06 Da	28.4	53.8	3	1699.09	-1.358	0.139	ECHA_MOUSE		Trifunctional enzyme subunit alpha, mitochondrial;	TP-alpha;	0.15 - 0.25
KSPEERTIEY NDAYGPPSNF	LEEVAVNAFKGLADR LEIDVSNPQTGVGR	N-ter +34.06 Da	34.7	49.7	3	1616.98	-2	0.64	SNX3_MOUSE	Q78ZM0_MOUSE	Sorting nexin-3;	SDP3 protein;	0.00 - 0.15
YRIWRDANW PRKIQTVP	LEINPETGAIFTR LEPHLDPEAAEQIR	N-ter +28.03 Da	40.9	55.1	3	1487.88	-2.556	0.301	CADH1_MOUSE		Cadherin-1;	ARC-1;Epithelial cadherin;Uvomorulin;	0.00 - 0.15
		N-ter +34.06 Da	39.7	58.5	3	1650.98	-1.889	0.14	PPR1A_MOUSE		Protein phosphatase 1 regulatory subunit 1A;	Protein phosphatase inhibitor 1;	0.00 - 0.15
		N-ter +34.06 Da, C +57.02 Da	30.8	38.7	3	1877.97	-3.322	0.664	DLGP4_MOUSE	B7ZNS2_MOUSE	Disks large-associated protein 4;	PSD-95/SAP90-binding protein 4;SAP90/PSD-95-associated protein 4;	0.00 - 0.15
ASSLPPDPW AANDCKSLHT	LETSSSSPAEPAPQACGR LFGDKLCAINLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	17.0	61.6	3	1571.99	-0.269	0.032	ALBU_MOUSE		Serum albumin;		0.25 - 0.75

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
SPASHEIATN	LGDFAI5LYR	N-ter +34.06 Da	19.9	36.3	2	1187.72	0.705	0.138	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	Alpha-1 protease inhibitor 1;Alpha-1-antiproteinase;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;	0.25 - 0.75
TVKTFVFCN	LGEKFDETTADGR	N-ter +28.03 Da, K +28.03 Da	24.0	69.5	3	1493.84	-6.644	0.001	FABP5_MOUSE	E9Q964_MOUSE	Fatty acid-binding protein, epidermal;	Epidermal-type fatty acid-binding protein;Fatty acid-binding protein 5;Keratinocyte lipid-binding protein;Psoriasis-associated fatty acid-binding protein homolog;	0.00 - 0.15
Q5VCVHLRN	LGTLNPS5LDETAER	N-ter +34.06 Da	41.6	44.2	3	1914.03	-1.396	0.331	FRDA_MOUSE	E9Q2P9_MOUSE	Frataxin, mitochondrial;	0.15 - 0.25	
IMSLKRMLEK	LGVPKTHLEKRLIR	N-ter +34.06 Da, K +34.06 Da	8.0	80.9	4	1874.46	-2.252	0.107	AIF1_MOUSE	Q9EQW9_MOUSE	Allograft inflammatory factor 1;	Ionized calcium-binding adapter molecule 1; Lysosomal pepstatin-insensitive protease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase I;	0.00 - 0.15
PEPQGVTVS	LHLGVTPSVLR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.8	65.5	3	1218.82	0.993	0.1	TPP1_MOUSE		Tripeptidyl-peptidase 1;		0.25 - 0.75
DESAANCCKS	LHTLFGDKLCIPNLR		20.6	93.9	4	1923.26	-0.168	0.011	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
RALGVRDWR	LHTVYQSVELPETHQMLR	N-ter +34.06 Da	37.4	66.0	4	2214.31	0.275	0.03	ACADS_MOUSE		Short-chain specific acyl-CoA dehydrogenase, mitochondrial;	Butyryl-CoA dehydrogenase;	0.25 - 0.75
KHKTDLNHEN	LKGGDDLDPNVVLSSR	N-ter +34.06 Da, K +34.06 Da	57.2	65.4	3	1816.12	-1.943	0.299	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.00 - 0.15
GCLVLPGYEA	LKGPKEISGFEGDVTSLR	N-ter +28.03 Da, K +28.03 Da	41.4	71.9	4	2016.27	-0.667	0.074	CLM9_MOUSE		CMRF35-like molecule 9;	CD300 antigen-like family member G;Nepmucin;	0.25 - 0.75
PRLSISGEYN	LKTLMSPLGITR	N-ter +28.03 Da, K +28.03 Da	34.4	59.7	3	1384.93	-0.34	0.056	A1AT4_MOUSE	A1AT1_MOUSE	Alpha-1-antitrypsin 1-4;	Alpha-1 protease inhibitor 4;Serine protease inhibitor 1-4;Serine protease inhibitor A1d;	0.25 - 0.75
PDQAGRHFVN	LLCGEEQGADAAALHFNPR	N-ter +28.03 Da, C +57.02 Da	53.0	50.2	3	2025.08	0.516	0.076	LEG7_MOUSE	Q9CRB1_MOUSE	Galectin-7;		0.25 - 0.75
IKKLELRSM	LMEQDDPVAVTVR	N-ter +28.03 Da	9.4	113.6	4	1499.94	5.681	0.243	NOC3_MOUSE		Nucleolar complex protein 3 homolog;	Nucleolar complex-associated protein 3-like protein;	0.85 - 1.00
KKILAERRKP	LNIDHLSDDKLR	N-ter +34.06 Da, K +34.06 Da	18.0	46.4	4	1505.95	-3.184	0.289	TNNT3_MOUSE	A2A6J0_MOUSE	Troponin T, fast skeletal muscle;	Troponin I, fast-twitch isoform; Fast skeletal muscle troponin T;	0.00 - 0.15
QVLVQSSSN	LPDTSIPGGSTPTVQVTPQLETR	N-ter +28.03 Da	28.9	61.1	4	2421.42	1.766	0.301	PGBM_MOUSE	B1B0C7_MOUSE	Basement membrane-specific heparan sulfate proteoglycan core protein;		0.75 - 0.85
PRKIISLSQL	LQEDSLNVDLSSLR	N-ter +28.03 Da	49.3	70.0	3	1687.00	1.444	0.143	PSME2_MOUSE	E0C290_MOUSE	Proteasome activator complex subunit 2;	11S regulator complex subunit beta;Activator of multicatalytic protease subunit 2;Proteasome activator 28 subunit beta;	0.75 - 0.85
SRDGKALEQF	LQEYFDGNLKR	N-ter +34.06 Da, K +34.06 Da	21.7	74.5	3	1449.93	-1.12	0.195	PDI3_MOUSE		Protein disulfide-isomerase A3;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER-60;Endoplasmic reticulum resident protein 57;Endoplasmic reticulum resident protein 60;	0.15 - 0.25
ARRQHLK5VM	LQIAATELEKEESR	N-ter +28.03 Da, K +28.03 Da	25.8	57.6	3	1672.00	0.84	0.066	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;	0.25 - 0.75
DESTG5IAKR	LQSIGTENTEENNR	N-ter +28.03 Da	29.5	67.1	3	1673.95	1.77	0.317	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase; Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;	0.85 - 1.00
NTFYSNKEIF	LRELSNASDALKIR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	42.1	64.9	4	1869.19	0.465	0.064	H590B_MOUSE	ENPL_MOUSE	Heat shock protein HSP 90-beta;		0.25 - 0.75
FGDKLCAIPN	LRENGELADCTKQEPER		45.7	70.6	4	2435.36	-0.105	0.023	ALBU_MOUSE		Serum albumin;	Carbonate dehydratase III;Carbonic anhydrase III;	0.25 - 0.75
VFDDTYDRSM	LRGGPLSGPYR	N-ter +28.03 Da	33.7	58.7	3	1199.75	-0.599	0.018	CAH3_MOUSE		Carbonic anhydrase 3;		0.25 - 0.75
ALSVLPSDRA	LRPDCCEVICSYLGR	N-ter +28.03 Da, C +57.02 Da	51.1	70.0	3	1822.01	0.014	0.003	MANF_MOUSE	Q3TMX5_MOUSE	Mesencephalic astrocyte-derived neurotrophic factor;	Arginine-rich protein;Protein ARMET;	0.25 - 0.75
KTVRGC5KVL	LRPQTSEEVQILR	N-ter +34.06 Da	34.6	36.2	3	1689.03	-0.168	0.077	D2HDH_MOUSE	E9QN44_MOUSE	D-2-hydroxyglutarate dehydrogenase, mitochondrial;		0.25 - 0.75
MERQVIL	LSEPQEAALYR	N-ter +28.03 Da	34.2	55.7	3	1374.79	0.575	0.023	APEH_MOUSE		Acylamino-acid-releasing enzyme;	Acyl-peptide hydrolase;Acylaminoacyl-peptidase;	0.25 - 0.75
GPAPAAQAPD	LSGTLESIPDKLKEFGNTLEDKAR	N-ter +28.03 Da, K +28.03 Da	19.8	86.6	4	2772.77	-2.837	0.405	APOC1_MOUSE		Apolipoprotein C-1;	Apolipoprotein C1;	0.00 - 0.15
FQLIGIQDGY	LSLLQDSGEVR	N-ter +34.06 Da	29.1	26.7	2	1249.74	-2.252	0.107	IF5A1_MOUSE		Eukaryotic translation initiation factor 5A-1;	Eukaryotic initiation factor 5A isoform 1;eIF-4D;	0.00 - 0.15
QKVLSLKQIL	LSTEEEDSGAGPPR	N-ter +28.03 Da	47.2	51.0	3	1342.71	-1.286	0.251	ARHG1_MOUSE	E9PUF7_MOUSE	Rho guanine nucleotide exchange factor 1;	Lbc's second cousin;Lymphoid blast crisis-like 2;	0.15 - 0.25
PERSTSIHM	LTDGDANTGESRPEKIQENVR	N-ter +28.03 Da, K +28.03 Da	25.8	77.8	4	2384.38	1.367	0.265	ITH3_MOUSE	E9PV51_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;		0.75 - 0.85
LLIATGPPTA	LTEDEKQTMVDLHNQYR	N-ter +28.03 Da, K +28.03 Da	31.7	69.5	4	2175.21	0.949	0.207	PI16_MOUSE	D3Z6T6_MOUSE	Peptidase inhibitor 16;	Cysteine-rich protease inhibitor;	0.25 - 0.75
GDYIERLWAY	LTIIEQLLEKR	N-ter +28.03 Da, K +28.03 Da	19.5	79.3	3	1297.90	2.322	0.738	ITH3_MOUSE	F6ZKJ7_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;		0.85 - 1.00
MEVNRD5VIF	LVDGSSSLGSPNFAIR	N-ter +28.03 Da	42.0	55.1	3	1761.00	0.111	0.005	E9PWQ3_MOUSE	D3YWD1_MOUSE			0.25 - 0.75
TALVCNDGSG	LVKAGFAGDDAPR	N-ter +34.06 Da, K +34.06 Da	30.3	56.1	3	1383.89	-0.644	0.05	ACTC_MOUSE	ACTS_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin; ATP-dependent helicase RENT1;Nonsense mRNA reducing factor 1;Up-frameshift suppressor 1 homolog;	0.25 - 0.75
LIQDRCLFSW	LVKIPSEQELR	N-ter +28.03 Da, K +28.03 Da	23.8	41.1	3	1494.94	0.714	0.017	RENT1_MOUSE		Regulator of nonsense transcripts 1;		0.25 - 0.75
GIWHNDN5KF	LWVNEEDHLR	N-ter +28.03 Da	39.7	76.3	3	1436.85	-1.889	0.14	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.00 - 0.15
KG5VAGGAVY	LVDQQLLGP5DK5EALR	N-ter +34.06 Da, K +34.06 Da	26.4	54.9	3	2171.33	-1.396	0.147	QIL1_MOUSE		Protein QIL1;		0.15 - 0.25
VLGKPLSLAF	LYMEKNQLEEVP5ALPR	N-ter +28.03 Da, K +28.03 Da	33.6	55.9	3	2072.21	-2.322	0.348	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;	0.00 - 0.15
SCTFFLAVSG	LYSSDDVIELT5PNFNR	N-ter +34.06 Da	64.0	51.8	3	2090.15	0.585	0.105	PDI6_MOUSE	Q3TML0_MOUSE	Protein disulfide-isomerase A6;	Thioredoxin domain-containing protein 7;	0.25 - 0.75

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
TARGAAVTRS	MASGGGVPTDEEQATGLER	N-ter +28.03 Da	50.4	48.6	3	1931.98	-0.234	0.055	COX5B_MOUSE	Q9D881_MOUSE	Cytochrome c oxidase subunit 5B, mitochondrial;	Cytochrome c oxidase polypeptide Vb;	0.25 - 0.75
GCKNEKIAFI	MDESNDVDSGFLER	N-ter +28.03 Da	35.4	73.6	3	1638.88	2.956	0.518	DYHCL_MOUSE		Cytoplasmic dynein 1 heavy chain 1;	Cytoplasmic dynein heavy chain 1; Dynein heavy chain, cytosolic;	0.85 - 1.00
SKMFEELKNR	MDVLAQEVALLKEK	N-ter +28.03 Da, K +28.03 Da	37.1	67.8	3	1670.08	-0.029	0.003	TETN_MOUSE	Q8CFZ6_MOUSE	Tetranectin;	C-type lectin domain family 3 member B; Plasminogen kringle 4-binding protein;	0.25 - 0.75
GKPLSLAFLY	MEKNQLLEVPASALPR	N-ter +34.06 Da, K +34.06 Da	38.0	46.0	3	1808.10	-0.184	0.019	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;	0.25 - 0.75
DTPKKQALYL	MFDTPQESPVKSPVPR	N-ter +28.03 Da, K +28.03 Da	39.0	51.7	3	1870.06	0.516	0.061	TACC2_MOUSE	E9Q8T1_MOUSE	Transforming acidic coiled-coil-containing protein 2;		0.25 - 0.75
VAIVDDPRYL	MFSNQVCTLEIR	N-ter +28.03 Da, C +57.02 Da	35.1	51.4	3	1581.85	-0.515	0.037	D3YU50_MOUSE	Q6P6L5_MOUSE			0.25 - 0.75
RPRHGQVMVG	MGQKDCYVGEAQSKR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	23.0	85.3	4	1973.19	0.506	0.167	ACTBL_MOUSE		Beta-actin-like protein 2;	Kappa-actin;	0.25 - 0.75
RPRHGQVMVG	MGQKDSYVGEAQSKR	N-ter +28.03 Da, K +28.03 Da	16.4	75.4	4	1882.07	0.07	0.017	ACTB_MOUSE	ACTA_MOUSE	Actin, cytoplasmic 1;	Beta-actin;	0.25 - 0.75
TQMVFSLSGF	MIECVLGVMAYDR	N-ter +34.06 Da, C +57.02 Da	28.3	56.1	3	1702.96	-5.059	1.686	AZASV3_MOUSE				0.00 - 0.15
KALVSSVRQR	MKCSSMQKFGER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	20.0	78.7	4	1571.89	0.918	0.112	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
	MKVFTVGTPLPAEGR	N-ter +34.06 Da, K +34.06 Da	33.1	63.0	3	1569.04	-0.152	0.025	GRHPR_MOUSE	D6REG4_MOUSE	Glyoxylate reductase/hydroxyypyruvate reductase;		0.25 - 0.75
AAQTLTGAK	MLQQEKGHPAQLR	N-ter +28.03 Da, K +28.03 Da	21.1	85.6	4	1591.00	-3.322	0.997	P5CR3_MOUSE		Pyrroline-5-carboxylate reductase 3;	Pyrroline-5-carboxylate reductase-like protein; Calgizzarin; Endothelial monocyte-activating polypeptide; Protein S100-C; S100 calcium-binding protein A11;	0.00 - 0.15
QLSKTEFLSF	MNTELAFTKNQKDPGVLDLR	N-ter +34.06 Da, K +34.06 Da	27.6	66.4	4	2349.48	1.091	0.149	S10AB_MOUSE	F6S35_MOUSE	Protein S100-A11;	Protein cypher; Protein oracle; Z-band alternatively spliced PDZ-motif protein;	0.75 - 0.85
ILAQMTGTEY	MQDPDEEALRR	N-ter +34.06 Da	28.0	68.3	3	1392.78	-2.252	0.429	LDB3_MOUSE	E9PY9_MOUSE	LIM domain-binding protein 3;		0.00 - 0.15
ILAHLTGTEF	MQDPDEEFMKSR	N-ter +34.06 Da, K +34.06 Da	20.5	65.7	4	1742.04	-3.322	0.332	Q8BVI7_MOUSE				0.00 - 0.15
TTMYPGIADR	MQKEITALAPSTMKIAPP	N-ter +28.03 Da, K +28.03 Da	32.7	52.0	4	2677.70	-0.837	0.09	ACTB_MOUSE	ACTA_MOUSE	Actin, cytoplasmic 1;	Beta-actin;	0.25 - 0.75
TTMYPGIADR	MQKEITALAPSTMKIK	N-ter +28.03 Da, K +28.03 Da	26.9	66.1	4	1901.24	2.895	0.358	ACTA_MOUSE	ACTB_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;	0.85 - 1.00
TTMYPGIADR	MQKEITALAPSTMK	N-ter +28.03 Da, K +28.03 Da	41.7	45.1	3	1631.97	1.157	0.099	ACTC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;	0.75 - 0.85
	MQQVEASLQPETLR	N-ter +28.03 Da	22.2	46.7	3	1656.93	1.104	0.128	SPA3G_MOUSE	SPA3C_MOUSE	Serine protease inhibitor A3G;	Serine protease inhibitor 2A;	0.00 - 0.15
PGLGNGFASQ	MSYGYDEKASGVSPGPMGSPGR	N-ter +34.06 Da, K +34.06 Da	68.5	50.9	3	2493.36	-2.837	1.621	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
SPNKGVLSDF	MTDVPVDPGVVHR	N-ter +28.03 Da	32.4	49.6	3	1448.82	0.566	0.084	TPD54_MOUSE	Q3TUJ_MOUSE	Tumor protein D54;	Tumor protein D52-like 2;	0.25 - 0.75
QSRFRILAQ	MTGTEYMQDPDEEALRR	N-ter +34.06 Da	28.6	47.9	3	2075.05	-1.837	0.394	LDB3_MOUSE	E9PY9_MOUSE	LIM domain-binding protein 3;	Protein cypher; Protein oracle; Z-band alternatively spliced PDZ-motif protein;	0.00 - 0.15
ISKEWGFTKF	NADEFDMVAEKR	N-ter +34.06 Da, K +34.06 Da	25.0	65.7	3	1620.92	-1.786	0.493	RLI1_MOUSE		60S ribosomal protein L10;	Protein QM homolog;	0.00 - 0.15
TIKKRLETTY	NATEPVSIFYDKR	N-ter +34.06 Da, K +34.06 Da	28.3	58.6	3	1606.99	-0.837	0.075	KAD1_MOUSE		Adenylyl kinase isoenzyme 1;	ATP-AMP transphosphorylase 1; Myokinase;	0.25 - 0.75
TGGRTTWART	NATLSVEPEGR	N-ter +28.03 Da	46.3	36.7	2	1199.66	0.356	0.031	ACOT2_MOUSE		Acyl-coenzyme A thioesterase 2, mitochondrial;	Acyl coenzyme A thioesterase; MTE-1; Very-long-chain acyl-CoA thioesterase;	0.25 - 0.75
ELYKCVKYAC	NFGPTGIGFGLTQQVEK	N-ter +34.06 Da, K +34.06 Da	34.7	48.1	3	2208.37	-1.515	0.13	CSR3_MOUSE		Cysteine and glycine-rich protein 3;	cardiac; Muscle LIM protein;	0.15 - 0.25
NTLVANTSNS	NLGKADQAEPEKLR	N-ter +28.03 Da, K +28.03 Da	23.9	69.2	3	1652.04	1.623	0.248	ZNT1_MOUSE		Zinc transporter 1;	Solute carrier family 30 member 1;	0.75 - 0.85
ILLWLYGADG	NIVMTQSPKSMMSVGER	N-ter +34.06 Da, K +34.06 Da	32.2	50.8	3	2049.17	-1.12	0.17	KV5A2_MOUSE		Ig kappa chain V-V region MOPC 21;		0.15 - 0.25
FLPMMAISIN	NKDGQGYEDFVEGLR	N-ter +28.03 Da, K +28.03 Da	42.3	76.3	3	1782.00	-2.252	0.858	MVY1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;	0.00 - 0.15
CIGPLKCAPN	NKEEYNGYTAFR	N-ter +28.03 Da, K +28.03 Da	29.7	62.7	3	1603.86	0.227	0.025	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin; Siderophilin;	0.25 - 0.75
SSVERYPDRS	NKWYVAALTPR	N-ter +28.03 Da, K +28.03 Da	26.7	60.6	3	1589.95	2.147	0.233	KLHL8_MOUSE	A2AH60_MOUSE	Kelch-like protein 8;		0.85 - 1.00
NYQFFIGENM	NPDGMAVLLDYL	N-ter +28.03 Da	28.4	75.2	3	1390.80	3.681	0.468	TCTP_MOUSE	D3YU75_MOUSE	Translationaly-controlled tumor protein;	21 kDa polypeptide; p21; p23;	0.85 - 1.00
LAACGSVTVMS	NPGESSFDLADR	N-ter +28.03 Da	46.3	40.5	2	1334.66	-4.322	0.864	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];		0.00 - 0.15
KLTGMFAFRVP	NPNVSDVLTCLR	N-ter +28.03 Da, C +57.02 Da	22.2	97.5	3	1414.86	2.501	0.941	D320Z9_MOUSE		Glyceraldehyde-3-phosphate dehydrogenase;		0.85 - 1.00
GALGCAICHG	NPVDDICIAKPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.8	61.6	3	1452.87	0.057	0.003	ANT3_MOUSE		Antithrombin-III;	Serpin C1;	0.25 - 0.75
SMQHDITGYE	NQSSYEESVPRR	N-ter +34.06 Da	20.9	88.6	3	1484.87	-1.737	0.232	B1AW18_MOUSE				0.00 - 0.15
IPRHEVTEIS	NTDVTQPGKTVIR	N-ter +28.03 Da, K +28.03 Da	26.7	55.6	3	1612.97	-0.377	0.093	E9Q616_MOUSE				0.25 - 0.75
GVPLKATMRF	NTEITAENLTNLKESVTTDAGR	N-ter +34.06 Da, K +34.06 Da	20.7	42.5	4	2557.50	-5.644	0.001	TITIN_MOUSE	E9Q8M7_MOUSE	Titin;	Connectin;	0.00 - 0.15
DKIREYKSKR	QASGGPVGIPPEVQQDLDR	N-ter +34.06 Da	33.8	12.0	3	2078.04	-2.396	0.504	ATP5J_MOUSE	E9QAD6_MOUSE	ATP synthase-coupling factor 6, mitochondrial;		0.00 - 0.15
GRKTEVCTF	QDGALVHQHQWDGKESTITR	N-ter +28.03 Da, K +28.03 Da	26.5	76.9	4	2352.36	0.506	0.075	FABP5_MOUSE		Fatty acid-binding protein, epidermal;	Epidermal-type fatty acid-binding protein; Fatty acid-binding protein 5; Keratinocyte lipid-binding protein; Psoriasis-associated fatty acid-binding protein homolog;	0.25 - 0.75
LAQMTGTEYM	QDPDEEALRR	N-ter +34.06 Da	26.3	66.2	3	1261.73	-1.434	0.31	LDB3_MOUSE	E9PY9_MOUSE	LIM domain-binding protein 3;	Protein cypher; Protein oracle; Z-band alternatively spliced PDZ-motif protein;	0.15 - 0.25
VFSMFQDTQI	QEFKFAFTVDQNR	N-ter +28.03 Da, K +28.03 Da	41.8	63.7	3	1780.03	-3.644	0.911	MLR5_MOUSE	F6ULR7_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2; MLC2F;	0.00 - 0.15
RLSLESEGAN	QELDLAALNSKLSGCPVQKPGGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.2	69.3	4	2521.54	3.05	0.497	F6S185_MOUSE				0.85 - 1.00
STFQMMWLK	QEYDEAGPVSVHR	N-ter +34.06 Da	44.0	71.9	3	1533.87	-0.269	0.019	ACTC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;	0.25 - 0.75
RQFYRYITD	QEYYSIHTR	N-ter +28.03 Da	35.0	68.6	3	1336.77	-0.234	0.008	MA2B2_MOUSE	F6TMZ3_MOUSE	Epididymis-specific alpha-mannosidase;	Mannosidase alpha class 2B member 2;	0.25 - 0.75
RQHLKSLVML	QJAATELEKEESR	N-ter +28.03 Da, K +28.03 Da	30.7	55.3	3	1558.91	-0.34	0.043	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;	0.25 - 0.75
FQNAILVRVT	QKAPQVSTPLVEAAR	N-ter +28.03 Da, K +28.03 Da	50.7	48.2	3	1751.08	0.669	0.063	ALBU_MOUSE		Serum albumin;		0.25 - 0.75

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
LYKPVTDLFL	QLVDSGKVDKDEAR	N-ter +28.03 Da, K +28.03 Da	26.2	69.2	3	1371.83	-1.218	0.113	LPPRC_MOUSE		Leucine-rich PPR motif-containing protein, mitochondrial;	130 kDa leucine-rich protein;	0.15 - 0.25
FDSLFPVIVT	QMMNPGLPFESVLDINECLR	N-ter +28.03 Da, C +57.02 Da	18.9	94.5	4	2243.29	-4.644	1.161	GPC3_MOUSE	B1ATRS_MOUSE	Glypican-3;		0.00 - 0.15
QSLPSSHGSPS	QPGLPAVLSSPSPPLSPR	N-ter +28.03 Da	23.4	69.8	4	1827.15	4.326	0.574	CB071_MOUSE		Uncharacterized protein C2orf71 homolog;		0.85 - 1.00
LQPQNLQPPS	QPHLSVSSAANGHLGR	N-ter +34.06 Da	23.6	64.5	3	1664.00	-3.837	1.644	NOTC1_MOUSE	Q7TQ50_MOUSE	Neurogenic locus notch homolog protein 1;	Notch A;mt14;p300;	0.00 - 0.15
FTFLRPLSVQ	QPSALALEPEALR	N-ter +34.06 Da	23.5	64.6	3	1427.91	-2.556	0.301	Q8K4A2_MOUSE	Q91XW9_MOUSE			0.00 - 0.15
LLHPTLILAQ	QSNVDELGCSHLGQSYESR	N-ter +34.06 Da, C +57.02 Da	63.5	64.3	3	2199.15	-3.644	0.911	CO3A1_MOUSE	Q5DTG2_MOUSE	Collagen alpha-1(III) chain;		0.00 - 0.15
LGRFAVRDMR	QTVAVGVKAVDKK	N-ter +28.03 Da, K +28.03 Da	33.6	61.4	4	1567.10	1.757	0.239	EF1A1_MOUSE		Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.75 - 0.85
LGRFAVRDMR	QTVAVGVKAVDK	N-ter +34.06 Da, K +34.06 Da	27.0	48.4	3	1429.05	1.915	0.488	EF1A1_MOUSE		Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;	0.85 - 1.00
PPGLTGNFAA	QYSDKGVSSGPGMGLMGRP	N-ter +34.06 Da, K +34.06 Da	31.1	57.5	3	2088.20	-2.252	0.214	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
EKIVPNMEF	RAADEEAFEDNSEEYR	N-ter +28.03 Da	51.8	67.7	3	2071.05	4.011	1.117	XPO2_MOUSE	E9QAX7_MOUSE	Exportin-2;		0.85 - 1.00
RRGQSSANR	RAGSSSGVQGSAGLAADASR	N-ter +28.03 Da	82.7	63.2	3	2104.16	-0.234	0.074	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;	Chromosome segregation 1-like protein;Importin-alpha re-exporter;	0.25 - 0.75
MRAAPR	RAPAAQPAAAAPSVAAGSAPAAAPR	N-ter +28.03 Da	58.2	68.4	4	2180.33	2.077	0.443	CHCH2_MOUSE	B2RPV8_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;		0.85 - 1.00
EPQVLNYLSL	RATEQEKDVMDSAR	N-ter +28.03 Da, K +28.03 Da	32.5	79.5	4	1690.97	-1.322	0.264	ECM29_MOUSE	A2ALV7_MOUSE	Proteasome-associated protein ECM29 homolog;		0.15 - 0.25
RRASHALAQL	RCILDSLEGIR	N-ter +28.03 Da, C +57.02 Da	39.3	88.9	3	1487.91	0.595	0.039	KBL_MOUSE	E9PWY6_MOUSE	2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial;	Aminoacetone synthase;Glycine acetyltransferase;	0.25 - 0.75
AKAVLSAEKL	RDEEVHTGLGELLR	N-ter +34.06 Da	24.5	43.4	3	1656.97	-0.515	0.044	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;	0.25 - 0.75
LSLMEPESEF	RDIDNPSAEAR	N-ter +28.03 Da	35.3	64.7	3	1399.76	0.379	0.108	PLIN1_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;	0.25 - 0.75
DIKSKTQYVM	RDYEQAGSAAPSVFSR	N-ter +34.06 Da	54.8	68.4	3	1774.01	-2.059	0.343	MSTN1_MOUSE		Musculoskeletal embryonic nuclear protein 1;		0.00 - 0.15
SHIRNVKGPV	REGDVLTLLESEK	N-ter +34.06 Da	37.4	69.3	3	1549.96	-0.943	0.109	RS28_MOUSE		40S ribosomal protein S28;		0.15 - 0.25
QAQPNANEDY	REGPCAVNLVLR	N-ter +28.03 Da, C +57.02 Da	42.6	63.0	3	1410.87	-1.218	0.085	STK39_MOUSE		STE20/SPS1-related proline-alanine-rich protein kinase;	Serine/threonine-protein kinase 39;	0.15 - 0.25
KQIQKLEXR	RELEGEVEENEQKR	N-ter +34.06 Da, K +34.06 Da	33.5	80.6	4	1683.06	-1.69	0.327	MYH1_MOUSE	MYH8_MOUSE	Myosin-1;	Myosin heavy chain 1;Myosin heavy chain 2x;Myosin heavy chain, skeletal muscle, adult 1;	0.00 - 0.15
	RELENEVEENEQKR	N-ter +34.06 Da, K +34.06 Da	32.9	79.2	4	1740.08	-5.059	1.686	MYH4_MOUSE		Myosin-4;	Myosin heavy chain 2b;Myosin heavy chain 4;	0.00 - 0.15
TFYSNKEIFL	RELISNASDALDKIR	N-ter +28.03 Da, K +28.03 Da	40.8	70.4	4	1756.11	3.433	0.569	HS90B_MOUSE	ENPL_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;	0.85 - 1.00
											Coactivator of activating protein 1 and estrogen receptors;RNA-binding motif protein 39;RNA-binding region-containing protein 2;Transcription coactivator CAPER;		0.25 - 0.75
SPFRKDKSPV	REPIDNLTPEER	N-ter +28.03 Da	31.7	64.8	3	1495.86	-0.667	0.042	RBM39_MOUSE	Q3U313_MOUSE	RNA-binding protein 39;		0.25 - 0.75
PLPTFSSLNL	RETNLESPLVDTHSKR	N-ter +28.03 Da, K +28.03 Da	26.4	65.9	4	2050.25	1.632	0.158	VIME_MOUSE	E9PZV5_MOUSE	Vimentin;		0.75 - 0.85
GKAFRLQLPF	RGDDGIFDDNFIEER	N-ter +34.06 Da	46.9	71.9	3	1830.99	-0.943	0.199	SNX3_MOUSE	Q78ZM0_MOUSE	Sorting nexin-3;	SDP3 protein;	0.15 - 0.25
GKALKRQLPF	RGDEGIFEEFIEER	N-ter +34.06 Da	51.1	69.8	3	1846.02	-0.494	0.097	SNX12_MOUSE	Q6ZWQ5_MOUSE	Sorting nexin-12;	SDP8 protein;	0.25 - 0.75
PVGPAGKNGD	RGETGPAAGPAGIPAGAR	N-ter +34.06 Da	68.8	66.1	3	1722.05	-2.252	0.322	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
GGGSGGGGRG	RGGKNVGGPGLSKSR	N-ter +28.03 Da, K +28.03 Da	26.7	48.8	3	1552.99	2.599	0.416	PURG_MOUSE		Purine-rich element-binding protein gamma;		0.85 - 1.00
M	RGQVGLSPQQQEALAR	N-ter +34.06 Da	49.1	55.2	3	2017.17	2.406	0.522	S14L4_MOUSE		SEC14-like protein 4;		0.85 - 1.00
EEGSFKERLA	RIRPQFIGDIHGR	N-ter +28.03 Da	22.1	46.2	4	1591.98	1.163	0.192	TCAL1_MOUSE		Transcription elongation factor A protein-like 1;	Transcription elongation factor S-II protein-like 1;	0.75 - 0.85
TFKNIYKRNW	RIVDEPNKICEADR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.8	78.4	4	1899.10	1.281	0.2	XPO2_MOUSE	E9QAX7_MOUSE	Exportin-2;	Chromosome segregation 1-like protein;Importin-alpha re-exporter;	0.75 - 0.85
											GAIP C-terminus-interacting protein;RGS-GAIP-interacting protein;RGS19-interacting protein 1;SemaF cytoplasmic domain-associated protein 1;Synectin;		0.85 - 1.00
MPLGLGR	RKKAPPLVENEAEPSR	N-ter +28.03 Da, K +28.03 Da	37.6	61.9	4	2033.25	1.903	0.351	GIPC1_MOUSE		PDZ domain-containing protein GIPC1;		0.85 - 1.00
LKQSLPSHDL	RKVMAAIKQR	N-ter +34.06 Da, K +34.06 Da	11.1	35.9	3	1301.96	-2	0.16	F179A_MOUSE	F6YU21_MOUSE	Protein FAM179A;		0.00 - 0.15
LAYVTPTPR	RLASTSDIEKENR	N-ter +28.03 Da, K +28.03 Da	25.8	69.7	4	1703.00	0.084	0.009	MYPT1_MOUSE		Protein phosphatase 1 regulatory subunit 12A;	Myosin phosphatase-targeting subunit 1;	0.25 - 0.75
LLALAGLLQA	RLLLPQAQGFGECDR	N-ter +28.03 Da, C +57.02 Da	42.8	60.9	3	1787.02	-2.059	0.343	ENDD1_MOUSE	Q69ZY2_MOUSE	Endonuclease domain-containing 1 protein;		0.00 - 0.15
VETQPKQTVI	RLPSGSGPASPTTGSADVIR	N-ter +34.06 Da	61.7	64.6	3	1959.19	-1.69	0.382	E9Q616_MOUSE				0.00 - 0.15
DRRKEEPPSL	RPAPPPISGGGYR	N-ter +28.03 Da	22.5	71.2	3	1351.83	-0.322	0.016	FIBB_MOUSE		Fibrinogen beta chain;		0.25 - 0.75
MN	RPAPVEISYENMR	N-ter +28.03 Da	34.0	76.7	3	1588.92	0.057	0.003	TP4A2_MOUSE		Protein tyrosine phosphatase type IVA 2;	Protein-tyrosine phosphatase 4a2;Protein-tyrosine phosphatase of regenerating liver 2;	0.25 - 0.75
KAHDVCLLGP	RPLPPSPVPR	N-ter +28.03 Da	24.0	64.4	3	1142.77	2.483	0.089	GILT_MOUSE	F6YSI1_MOUSE	Gamma-interferon-inducible lysosomal thiol reductase;	Gamma-interferon-inducible protein IP-30;Lysosomal thiol reductase IP30;	0.85 - 1.00
PNSRNSRVL	RPPGGGSNFSLGFDEPAEQPVR	N-ter +28.03 Da	51.0	83.4	4	2341.34	1.642	0.342	HNI1_MOUSE		Hematological and neurological expressed 1 protein;		0.75 - 0.85
LINEHRILNG	RPPLGFLNPR	N-ter +28.03 Da	48.2	57.2	3	1193.77	0.642	0.025	TPP1_MOUSE		Tripeptidyl-peptidase 1;	Lysosomal pepstatin-insensitive protease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase I;	0.25 - 0.75
LIWDNGMVLG	RPPSPPPPPR	N-ter +28.03 Da	36.7	62.1	3	1221.77	1.176	0.026	E9Q217_MOUSE				0.75 - 0.85
QDIAKMLPLL	RQEELESVEAGVQGFAGETR	N-ter +28.03 Da	64.0	62.9	3	2276.25	3.394	0.962	EHD2_MOUSE	Q8R2X0_MOUSE	EH domain-containing protein 2;		0.85 - 1.00

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Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
LQAQRAFTR	RQISEDVDGPDNR	N-ter +34.06 Da	41.9	70.8	3	1533.87	-0.152	0.019	NEDD4_MOUSE	E3 ubiquitin-protein ligase NEDD4;	Neural precursor cell expressed developmentally down-regulated protein 4;		0.25 - 0.75
AAPAFSRALN	RQLSSGVSEIR	N-ter +28.03 Da	26.7	68.9	3	1258.79	0.163	0.013	HSPB1_MOUSE	D3Y206_MOUSE	Heat shock protein beta-1;	Growth-related 25 kDa protein;Heat shock 25 kDa protein;Heat shock 27 kDa protein;p25;	0.25 - 0.75
GRSSNRDRP	RQPSQSQSDSVQHSVQVQVEGR	N-ter +28.03 Da	48.4	77.4	4	2379.34	2.639	0.479	E9Q019_MOUSE	F7BVV1_MOUSE			0.85 - 1.00
SQSGSGRSP	RSPVHPESSEGEHSHVVPQR	N-ter +34.06 Da	35.2	71.1	4	2276.30	0.401	0.058	FILA2_MOUSE	FILA2_MOUSE	Filaggrin-2;	Intermediate filament-associated protein;	0.25 - 0.75
MKLFQ	RSTPAITLENPDKIKYPLR	N-ter +28.03 Da, K +28.03 Da	41.1	56.0	4	2139.32	-0.837	0.06	NBSR3_MOUSE	F2Z3V0_MOUSE	NADH-cytochrome b5 reductase 3;	Diaphorase-1;	0.25 - 0.75
GHKTEPVPR	RTEITIVKQESVLR	N-ter +28.03 Da, K +28.03 Da	24.6	53.6	4	1824.18	2.147	0.334	SEPT9_MOUSE	A2A6U3_MOUSE	Septin-9;	SL3-3 integration site 1 protein;	0.85 - 1.00
PAQSAATLPA	RTLETAAQMEGLFNR	N-ter +28.03 Da	63.2	73.5	3	1861.09	-1	0.22	SPTB2_MOUSE		Spectrin beta chain, brain 1;	Beta-II spectrin;Embryonic liver fodrin;Fodrin beta chain;Spectrin, non-erythroid beta chain 1;	0.15 - 0.25
IWHHSFYNEL	RVAPPEHPTLLTEAPLNPKANR	N-ter +28.03 Da, K +28.03 Da	56.4	66.3	4	2508.55	3.065	0.154	ACT5_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	Alpha-actin-1;	0.85 - 1.00
IWHHTFYNEL	RVAPPEHPVLLTEAPLNPKANR	N-ter +28.03 Da, K +28.03 Da	60.3	62.5	4	2506.56	5.235	0.627	ACTB_MOUSE	ACTG_MOUSE	Actin, cytoplasmic 1;	Beta-actin;	0.85 - 1.00
VVKISGFPVG	RVIGSGCNDLSAR	N-ter +34.06 Da, C +57.02 Da	37.3	68.2	3	1437.85	-0.971	0.114	LDHA_MOUSE	LDHB_MOUSE	L-lactate dehydrogenase A chain;	LDH muscle subunit;	0.15 - 0.25
NVVGARSSWG	RVISSIQKTER	N-ter +34.06 Da, K +34.06 Da	27.3	39.9	4	1512.99	0.604	0.095	1433B_MOUSE	A2A5N1_MOUSE	14-3-3 protein beta/alpha;	Protein kinase C inhibitor protein 1;	0.25 - 0.75
LNGLKTGMFAF	RVPTPNVSVDLTCR	N-ter +34.06 Da, C +57.02 Da	45.3	69.6	3	1746.09	0.31	0.013	G3P_MOUSE	G3PT_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;	0.25 - 0.75
KEALLGRVAV	SADPNVPNVIVTR	N-ter +34.06 Da	31.2	45.6	3	1414.86	-1.12	0.073	GDIR1_MOUSE		Rho GDP-dissociation inhibitor 1;	GDI-1;Rho-GDI alpha;	0.15 - 0.25
LKAKLRSRNR	SAEEGVEVTEKSSQKSSVQR	N-ter +28.03 Da, K +28.03 Da	32.6	81.6	4	2365.35	0.39	0.161	TB182_MOUSE		182 kDa tankyrase-1-binding protein;		0.25 - 0.75
QDEGAEPMGY	SAELSSGILLDRNEEKR	N-ter +28.03 Da, K +28.03 Da	43.7	67.6	4	2103.19	-0.322	0.022	EZRI_MOUSE		Ezrin;	Cytovillin;Villin-2;p81;	0.25 - 0.75
QDEGAEPMGY	SAELSSGILLDR	N-ter +28.03 Da	56.3	43.1	2	1418.75	-0.494	0.104	EZRI_MOUSE		Ezrin;	Cytovillin;Villin-2;p81;	0.25 - 0.75
ESQDAKKAKA	SAGPQVQPSTSASSANLDAAR	N-ter +34.06 Da	44.7	35.7	3	2048.11	-1.737	0.579	ZN830_MOUSE		Zinc finger protein 830;		0.00 - 0.15
MATRSCVSRG	SAGSAAAGPVEAIR	N-ter +28.03 Da	60.4	26.4	2	1354.76	-0.014	0.001	BOLA1_MOUSE		Bola-like protein 1;		0.25 - 0.75
SQMSYGYDEK	SAGVSVPGMPGSGPR	N-ter +34.06 Da	37.4	38.9	3	1485.84	-3.322	0.332	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
PSPTLDRKAK	SALPAQSAATLPAR	N-ter +28.03 Da	29.9	37.4	3	1380.82	1.949	0.49	SPTB2_MOUSE		Spectrin beta chain, brain 1;	Beta-II spectrin;Embryonic liver fodrin;Fodrin beta chain;Spectrin, non-erythroid beta chain 1;	0.85 - 1.00
VLHIGSAHNR	SAMPFTASAPSTR	N-ter +28.03 Da	48.7	27.9	2	1447.75	1.895	0.214	PDL1_MOUSE		PDZ and LIM domain protein 1;	C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36;	0.85 - 1.00
QEPKRRSARL	SAMPVPTPELKPKR	N-ter +28.03 Da, K +28.03 Da	20.5	62.1	4	1781.14	-0.014	0.001	HMGNS_MOUSE		High mobility group nucleosome-binding domain-containing protein 5;	Nucleosome-binding protein 1;Nucleosome-binding protein 45;Protein GARP45;	0.25 - 0.75
VTLINFWVPD	SAPASSQLSHDDTHSR	N-ter +28.03 Da	48.2	86.2	4	1820.00	-0.837	0.359	DMD_MOUSE	A2A922_MOUSE	Dystrophin;		0.25 - 0.75
KSMWKEGSVF	SAPSASGTPNKETAGLKVGVSSR	N-ter +34.06 Da, K +34.06 Da	33.7	74.4	4	2302.51	0.189	0.045	Q8VCQ8_MOUSE	E9Q0M9_MOUSE			0.25 - 0.75
MRLMAAMEIF	SAQQQEDIKDFEDER	N-ter +28.03 Da, K +28.03 Da	23.8	59.9	3	1745.91	3.979	1.378	FAF1_MOUSE		FAS-associated factor 1;		0.85 - 1.00
TKKRPAPRAP	SASPLAIHASR	N-ter +28.03 Da	45.3	61.4	3	1136.70	-3.644	0.456	MILK1_MOUSE		MICAL-like protein 1;	Molecule interacting with Rab13;	0.00 - 0.15
SCLVLAARHA	SASSTNLKDVLSNLPKEQAR	N-ter +28.03 Da, K +28.03 Da	27.0	81.5	4	2354.51	-0.415	0.116	CISY_MOUSE		Citrate synthase, mitochondrial;		0.25 - 0.75
IKHDPSLQPW	SASYDPGSAKTLNNGKTCR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	20.3	73.6	4	2223.30	-0.621	0.067	CAH3_MOUSE		Carbonic anhydrase 3;	Carbonate dehydratase III;Carbonic anhydrase III;	0.25 - 0.75
M	SATHHKTSLPQGV	N-ter +34.06 Da, K +34.06 Da	33.0	18.9	3	1585.96	-2.396	0.126	LEG7_MOUSE		Galectin-7;		0.00 - 0.15
SLPAVVVETF	SATVNGAVEGSAGTGR	N-ter +34.06 Da	56.9	45.7	3	1466.82	-1.322	0.099	BIN1_MOUSE	Q6P189_MOUSE	Myc box-dependent-interacting protein 1;	Amphiphysin II;Amphiphysin-like protein;Bridging integrator 1;SH3 domain-containing protein 9;	0.15 - 0.25
RYEDMAAFMK	SAVEKGEELSCCEER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	29.9	75.2	3	1677.91	1.021	0.131	1433S_MOUSE		14-3-3 protein sigma;	Stratifin;	0.25 - 0.75
GEADRDTYRR	SAVPPGADKAAEAGAGSATEFQFR	N-ter +28.03 Da, K +28.03 Da	31.9	76.7	4	2475.47	0.516	0.043	RS10_MOUSE		40S ribosomal protein S10;		0.25 - 0.75
EADPSNFANR	SAYPSIEDMIEWAKR	N-ter +28.03 Da, K +28.03 Da	28.2	66.8	3	1867.01	0.299	0.044	EPS15_MOUSE		Epidermal growth factor receptor substrate 15;	Protein AF-1p;	0.25 - 0.75
GTRKPVKDF	SCHLAQAPNHVVVSR	N-ter +28.03 Da, C +57.02 Da	36.9	76.1	4	1702.00	-0.322	0.048	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;	0.25 - 0.75
TQCCAEADKE	SCLTPKLDGVKEKALVSSVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	20.0	57.2	4	2298.47	-0.434	0.023	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
TESTVKTTVF	SCNLGKFDDETTADGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.7	61.3	3	1854.96	2.824	0.351	FABP5_MOUSE	E9Q964_MOUSE	Fatty acid-binding protein, epidermal;	Epidermal-type fatty acid-binding protein;Fatty acid-binding protein 5;Keratinocyte lipid-binding protein;Psoriasis-associated fatty acid-binding protein homolog;	0.85 - 1.00
LWALLTPAEA	SCQGIQCAPGQR	N-ter +28.03 Da, C +57.02 Da	24.6	49.7	3	1388.70	0.585	0.058	E9PVG8_MOUSE				0.25 - 0.75
GTVTLHCRQY	SDAPPLTLGDIKDR	N-ter +28.03 Da, K +28.03 Da	57.8	43.8	3	1552.91	0.496	0.032	ACPM_MOUSE	F8WJ64_MOUSE	Acyl carrier protein, mitochondrial;	Ci-SDAP;NADH-ubiquinone oxidoreductase 9.6 kDa subunit;	0.25 - 0.75
QIGAKFWEVI	SDEHGIDPTGYHGDSDLQLDR	N-ter +28.03 Da	33.1	86.6	4	2455.30	3.432	1.008	TBBS_MOUSE		Tubulin beta-5 chain;		0.85 - 1.00
ESQASDSEGH	SDFSEGAQVGAHR	N-ter +28.03 Da	42.6	70.0	3	1387.74	-0.201	0.016	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.25 - 0.75
DSPGPPVAPL	SDISEDQPQPPR	N-ter +28.03 Da	30.8	45.0	3	1524.77	-0.218	0.03	PKHO2_MOUSE		Plectstrin homology domain-containing family O member 2;	Plectstrin homology domain-containing family O member 1;	0.25 - 0.75
GLTGNFAAQY	SDKGVSGSPGMLMGPR	N-ter +28.03 Da, K +28.03 Da	70.2	56.8	3	1784.99	-2.322	0.232	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
QKEEAQKKK	SDLEIELLKR	N-ter +28.03 Da, K +28.03 Da	26.0	58.7	3	1270.82	1.195	0.391	F107B_MOUSE		Protein FAM107B;		0.75 - 0.85
AVALHSVSA	SDLELHPPSPVWSHR	N-ter +28.03 Da	30.1	70.8	4	1848.03	-0.152	0.007	CY1_MOUSE		Cytochrome c1, heme protein, mitochondrial;	Complex III subunit 4;Complex III subunit IV;Cytochrome b-c1 complex subunit 4;Ubiquinol-cytochrome-c reductase complex cytochrome c1 subunit;	0.25 - 0.75
KKSKENPRNF	SDNQLQEGKNVIGLQMGNTNR	N-ter +34.06 Da, K +34.06 Da	38.6	56.8	4	2269.34	0.227	0.031	TAGL2_MOUSE		Transgelin-2;	SM22-beta;	0.25 - 0.75
TKQTQFTTY	SDNQPGVLIQVYEGER	N-ter +28.03 Da	36.9	46.9	3	1831.00	-0.152	0.01	H571A_MOUSE	HS71B_MOUSE	Heat shock 70 kDa protein 1A;	Heat shock 70 kDa protein 3;Hsp68;	0.25 - 0.75

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Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
PSQPPTVEVA	SDPQPPAPEASASASAPPLR	N-ter +34.06 Da	36.6	44.3	3	2076.16	5.652	1.251	VAT1_MOUSE		Synaptic vesicle membrane protein VAT-1 homolog;		0.85 - 1.00
SGGGLLVDF	SDSASAVAPLAPGSEDNFAR	N-ter +34.06 Da	63.6	41.2	3	1995.06	-0.415	0.083	AP2A2_MOUSE		AP-2 complex subunit alpha-2;	100 kDa coated vesicle protein C;Adapter-related protein complex 2 alpha-2 subunit;Adaptor protein complex AP-2 subunit alpha-2;Alpha-adaptin C;Alpha2-adaptin;Clathrin assembly protein complex 2 alpha-C large chain;Plasma membrane adaptor HAZ/AP2 adaptin alpha C subunit;	0.25 - 0.75
GPGPRTEEKI	SDSEGFKANLSLLR	N-ter +34.06 Da, K +34.06 Da	21.3	52.3	3	1604.00	-0.515	0.118	SFPQ_MOUSE		Splicing factor, proline- and glutamine-rich;		0.25 - 0.75
LQTRGFVSDS	SDSMDTGAGSIR	N-ter +28.03 Da	33.7	40.0	2	1223.59	-0.761	0.064	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;		0.25 - 0.75
RPRQPSPSQS	SDSQVHSGVQVEAQR	N-ter +28.03 Da	51.9	66.6	3	1653.92	-1	0.24	FILA_MOUSE	F6TLQ2_MOUSE	Filaggrin;		0.15 - 0.25
RPRQPSPSQS	SDSQVHSGVQVEGR	N-ter +28.03 Da	54.4	68.7	3	1511.84	1.536	0.477	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.75 - 0.85
MKVLQTRGFV	SDSDSMDTGAGSIR	N-ter +28.03 Da	38.5	62.2	3	1512.73	-1.286	0.125	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase;	0.15 - 0.25
QLQFEDIRGQ	SDTAITKMFEEALR	N-ter +28.03 Da, K +28.03 Da	9.2	67.6	3	1782.01	10.766	1.627	MCM4_MOUSE	F6Z957_MOUSE	DNA replication licensing factor MCM4;		0.85 - 1.00
A	SDVLELTDFENFESR	N-ter +28.03 Da	58.0	50.0	2	1680.87	1.952	0.318	PDIA3_MOUSE	F6Q404_MOUSE	Protein disulfide-isomerase A3;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER-60;Endoplasmic reticulum resident protein 57;Endoplasmic reticulum resident protein 60;	0.85 - 1.00
RILGGVISAI	SEAAAQYNPEPPPPR	N-ter +28.03 Da	36.6	65.4	3	1650.91	0.856	0.08	CPNS1_MOUSE	D3YW48_MOUSE	Calpain small subunit 1;		0.25 - 0.75
FCPEEYVSPN	SEDFVGVGPKGDPGPOGPR	N-ter +34.06 Da, K +34.06 Da	26.8	58.4	3	1945.13	-1.515	0.476	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;		0.15 - 0.25
LLWENGLLR	SEETKQNEAFSLTAKGGR	N-ter +34.06 Da, K +34.06 Da	25.9	66.5	4	2216.46	0.496	0.088	CO3_MOUSE		Complement C3;	HSE-MSF;	0.25 - 0.75
RPANPNWGVF	SEFGDSSSPATR	N-ter +28.03 Da	52.4	38.4	2	1267.62	-1.358	0.139	Q99K47_MOUSE	E9PV24_MOUSE			0.15 - 0.25
RGVSEQASD	SEGHDFSEGGQAVGAHR	N-ter +28.03 Da	38.7	80.4	4	1797.95	1.937	0.445	E9Q019_MOUSE	FILA_MOUSE			0.85 - 1.00
VCLLHEKTPV	SEHVTKCCSGSLVER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	29.2	64.8	4	1816.04	-0.556	0.098	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
YGEAKRQFL	SELAQLEENVHLAR	N-ter +34.06 Da	50.5	75.8	3	1642.01	-2.12	0.277	Q148I5_MOUSE				0.00 - 0.15
RDHVLGLAR	SELEEDIPEEDIISR	N-ter +34.06 Da	44.2	51.7	3	1920.08	1.74	0.422	CO3_MOUSE		Complement C3;	HSE-MSF;	0.75 - 0.85
AFVGTWKLVS	SENFDDYMKVEVGVGFATR	N-ter +28.03 Da, K +28.03 Da	34.0	65.4	3	2120.13	-0.667	0.307	FABP4_MOUSE		Fatty acid-binding protein, adipocyte;		0.25 - 0.75
NVLA	SEPEIPKGR	N-ter +34.06 Da, K +34.06 Da	19.8	54.7	3	1192.81	2.227	0.062	KAD2_MOUSE	F7BP55_MOUSE	Adenylate kinase 2, mitochondrial;		0.85 - 1.00
KQYAPRCVVC	SEPIIMPEPGRDETIVR	N-ter +28.03 Da	34.5	52.7	3	1739.94	0.714	0.078	ZYX_MOUSE	Q7TQE2_MOUSE	Zyxin;		0.25 - 0.75
KRHPYKMNLA	SEPQEVLIHGSANHR	N-ter +28.03 Da	23.0	99.1	4	1701.03	-0.377	0.029	PDL1_MOUSE		PDZ and LIM domain protein 1;		0.25 - 0.75
DSPERELIS	SEPSPAVTPVPTTLIAPR	N-ter +28.03 Da	51.4	45.5	3	1661.17	0.614	0.108	SNX2_MOUSE		Sorting nexin-2;		0.25 - 0.75
SSQPNLSTSY	SEQEYKAGGSPASVYHGSTSPR	N-ter +28.03 Da, K +28.03 Da	47.1	76.7	4	2308.25	-0.377	0.098	EPN2_MOUSE	Q5NCM6_MOUSE	Epsin-2;		0.25 - 0.75
PRQPTVTSVC	SESAQELAEQQR	N-ter +28.03 Da	33.7	50.5	3	1331.70	0.029	0.003	PDL1_MOUSE	E9Q8P5_MOUSE	PDZ and LIM domain protein 5;		0.25 - 0.75
SPLRSPLLG	SESPYEDFLSADSKVLGR	N-ter +28.03 Da, K +28.03 Da	34.1	67.1	3	2055.15	-1.152	0.179	MAP1B_MOUSE		Microtubule-associated protein 1B;		0.15 - 0.25
SADROGRRGV	SESQASDSEGHDFSEGGQAVGAHR	N-ter +28.03 Da	50.2	80.4	4	2502.27	1.618	0.49	E9Q019_MOUSE	F7BVV1_MOUSE			0.75 - 0.85
MTTLFCINVL	SEVCGQDITTKHMLPTVLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	48.1	97.3	4	2240.38	1.637	0.174	2AAA_MOUSE		Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform;	PP2A subunit A isoform PR65-alpha;PP2A subunit A isoform R1-alpha;	0.75 - 0.85
WTHEVFSRS	SEVVLSDGDEYDQR	N-ter +28.03 Da	43.8	66.6	3	1638.85	-0.434	0.053	E9Q616_MOUSE				0.25 - 0.75
VEIPATVTF	SEFEDDSAPLSPLKFMAR	N-ter +34.06 Da, K +34.06 Da	33.5	63.5	3	2106.24	-5.644	0.001	ADDG_MOUSE		Gamma-adducin;	Adducin-like protein 70;	0.00 - 0.15
ERDRITALKR	SFEVEIEPPNTPPR	N-ter +28.03 Da	43.7	62.2	3	1855.02	1.214	0.089	SEPT9_MOUSE	A2A6U3_MOUSE	Septin-9;	SL3-3 integration site 1 protein;	0.75 - 0.85
DEQALEDHFS	SFGPISVVVVKDR	N-ter +28.03 Da, K +28.03 Da	39.0	61.1	3	1587.00	-0.218	0.028	RBM3_MOUSE	Q8BG13_MOUSE	Putative RNA-binding protein 3;	RNA-binding motif protein 3;	0.25 - 0.75
ANEVEAVKVH	SFPTLKFPPASADR	N-ter +28.03 Da, K +28.03 Da	26.5	72.9	3	1639.00	-0.12	0.005	PDIA1_MOUSE	E9Q8G8_MOUSE	Protein disulfide-isomerase;	Cellular thyroid hormone-binding protein;Endoplasmic reticulum resident protein 59;Prolyl 4-hydroxylase subunit beta;p55;	0.25 - 0.75
ETPSQRATR	SGAQSASTPLSPTR	N-ter +28.03 Da	52.4	35.1	2	1386.76	0.766	0.149	LMNA_MOUSE	D3YUF7_MOUSE	Prelamin-A/C;		0.25 - 0.75
GPEANVPGY	SGDSAPLQEAMAVLQHHDAVSGTAR	N-ter +34.06 Da	57.7	70.7	4	2581.46	-0.474	0.118	MA2B1_MOUSE		Lysosomal alpha-mannosidase;		0.25 - 0.75
NIDIRSAFKR	SEGEQEDAGELDFSGLLKR	N-ter +34.06 Da, K +34.06 Da	54.8	65.2	3	2075.22	-2.474	0.412	D3YU50_MOUSE	Q6P6L5_MOUSE		member 1;Mannosidase alpha-B;	0.00 - 0.15
ESTECRTRV	SEGHMDLTTCPAAGGQOEKLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	54.5	63.3	4	2454.36	2.529	0.184	Q9D1B1_MOUSE				0.85 - 1.00
IEMGGNPLEN	SGFEPGAFDGLKLNLYR	N-ter +28.03 Da, K +28.03 Da	30.2	67.9	3	1938.15	-2.184	0.298	PGS1_MOUSE		Biglycan;	Bone/cartilage proteoglycan I;PG-S1;	0.00 - 0.15
VTLHIVERPY	SGFFDASSEGPEPTQGEAR	N-ter +34.06 Da	40.1	34.5	3	1951.96	-0.644	0.111	PTRF_MOUSE	Q3U4N4_MOUSE	Polymerase I and transcript release factor;	Cav-p60;Cavin-1;	0.25 - 0.75

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
GRTTVMVTPR	SGGSKDNLSPLGQCLTER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	27.6	47.4	3	2083.20	0.872	0.11	THRB_MOUSE		Prothrombin;	Coagulation factor II;	0.25 - 0.75
RKDLVANTVL	SGGTTMPYGIADR	N-ter +34.06 Da	48.5	34.7	2	1358.72	-0.556	0.025	ACTA_MOUSE	ACTB_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;	0.25 - 0.75
AIMARIAQFL	SGIPETVPLSTVNR	N-ter +28.03 Da	30.9	43.3	3	1496.88	0.949	0.098	THIKA_MOUSE	THIKB_MOUSE	3-ketoacyl-CoA thiolase A, peroxisomal;	Acetyl-CoA acyltransferase A;Beta-ketothiolase A;Peroxisomal 3-oxoacyl-CoA thiolase A;	0.25 - 0.75
GLSDPNLTL	SGKDGQCLPLVEQVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	36.2	81.9	3	1727.05	0.345	0.071	LRC47_MOUSE	F6YT33_MOUSE	Leucine-rich repeat-containing protein 47;		0.25 - 0.75
VSVERALADE	SGLDLYSLGGGGVPLVLR	N-ter +28.03 Da	54.1	42.0	3	1861.07	-0.184	0.038	A2BFA6_MOUSE				0.25 - 0.75
ETTALVCDNG	SGLVKAGFAGDDAPR	N-ter +34.06 Da, K +34.06 Da	30.2	56.0	3	1527.95	-0.889	0.099	ACTC_MOUSE	ACTS_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;	0.25 - 0.75
ELLPNGPVL	SGNPPALPGVGPPIR	N-ter +28.03 Da, K +28.03 Da	34.3	15.7	3	1822.11	-0.434	0.029	MBNL3_MOUSE	Q8BYC7_MOUSE	Muscleblind-like protein 3;	Cys3His CCG1-required protein;Muscleblind-like X-linked protein;Protein MCHCR;	0.25 - 0.75
MLSVAAR	SGPFAPVLSATS	N-ter +34.06 Da	48.3	23.9	2	1322.77	-1.644	0.103	UCRI_MOUSE		Cytochrome b-c1 complex subunit Rieske, mitochondrial;	Complex III subunit 5;Cytochrome b-c1 complex subunit 5;Cytochrome b-c1 complex subunit 5;Rieske iron-sulfur protein;Ubiquinol-cytochrome c reductase iron-sulfur subunit;	0.00 - 0.15
AAQYSDKGV	SGPGMGLMGPR	N-ter +34.06 Da	34.9	40.0	2	1189.66	-1.837	0.197	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
PSGVPKDGDR	SGQPGVGPAGVR	N-ter +34.06 Da	43.4	37.7	2	1211.73	-2.396	0.378	CO1A2_MOUSE	E9QG69_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
SDYSQQGHVS	SGSEVTCQCCDLCNER	N-ter +28.03 Da, C +57.02 Da	33.4	50.4	3	2070.95	1.632	0.284	LY6D_MOUSE		Lymphocyte antigen 6D;	Thymocyte B-cell antigen;	0.75 - 0.85
ASSREGSPAR	SGTPVHCPSPIR	N-ter +28.03 Da, C +57.02 Da	36.2	63.6	3	1334.76	0.585	0.031	BAG3_MOUSE		BAG family molecular chaperone regulator 3;	Bcl-2-associated athanogene 3;Bcl-2-binding protein Bis;	0.25 - 0.75
ERHVAHGPKL	SGVGPSQPTTVGTECGFVSR	N-ter +28.03 Da, C +57.02 Da	20.0	47.8	3	2050.08	-1.286	0.22	F7CK47_MOUSE		Microtubule-associated protein;		0.15 - 0.25
GLNVASVRF	SHTDVKVPDFDYR	N-ter +34.06 Da, K +34.06 Da	27.8	75.7	4	1733.04	-0.761	0.052	UCRI_MOUSE		Cytochrome b-c1 complex subunit Rieske, mitochondrial;	Complex III subunit 5;Cytochrome b-c1 complex subunit 5;Rieske iron-sulfur protein;Ubiquinol-cytochrome c reductase iron-sulfur subunit;	0.25 - 0.75
KITKFENAF	SHVISQHQSLGNIR	N-ter +28.03 Da	20.8	68.3	4	1716.06	1.989	0.23	ATPA_MOUSE	D3ZGF5_MOUSE	ATP synthase subunit alpha, mitochondrial;		0.85 - 1.00
RSTCHNQNSM	SICEEFSQADDKGCFR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	60.0	56.6	3	2132.05	1.459	0.446	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;	0.75 - 0.85
NQQEGVCEP	SIDNSPVKWCALSHLER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	27.5	67.5	4	2079.26	-0.269	0.029	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;	0.25 - 0.75
ASTSQSRAA	SIFGAKPVDTAAR	N-ter +34.06 Da, K +34.06 Da	30.8	59.8	3	1456.95	-0.811	0.128	IF4B_MOUSE	Q3TDD8_MOUSE	Eukaryotic translation initiation factor 4B;		0.25 - 0.75
GLILPGILAK	SIGTLDSPCKDPTDR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.5	55.4	3	1601.90	1.996	0.61	CDSN_MOUSE		Corneodesmosin;		0.85 - 1.00
QLPNQVLESI	SIDTPGILGAKQR	N-ter +28.03 Da, K +28.03 Da	48.8	58.7	3	1611.03	0.651	0.062	EHD2_MOUSE	Q8R2X0_MOUSE	EH domain-containing protein 2;		0.25 - 0.75
SAGIHETTYN	SIMKCDIDIR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	30.4	71.4	3	1305.77	0.098	0.016	ACTA_MOUSE	ACTC_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;	0.25 - 0.75
LSEKISSVQ	SIVPALEIANAHR	N-ter +28.03 Da	43.2	70.4	3	1417.90	1	0.065	CH60_MOUSE		60 kDa heat shock protein, mitochondrial;	60 kDa chaperonin;Chaperonin 60;HSP-65;Heat shock protein 60;Mitochondrial matrix protein P1;	0.25 - 0.75
RTSPVPRQKR	SIVVSPILPENQR	N-ter +28.03 Da	36.8	56.9	3	1592.02	1	0.16	CAD13_MOUSE		Cadherin-13;	Heart cadherin;Truncated cadherin;	0.25 - 0.75
IHQVQYQEMD	SKADDLLKSSGVQIR	N-ter +28.03 Da, K +28.03 Da	33.2	70.7	4	1928.23	-1	0.06	C163A_MOUSE		Scavenger receptor cysteine-rich type 1 protein M130;		0.15 - 0.25
AAVSTAQPIL	SKLEPQIATASEYADR	N-ter +28.03 Da, K +28.03 Da	40.3	69.9	4	1856.11	-0.943	0.073	PLIN3_MOUSE		Perilipin-3;	Cargo selection protein TIP47;Mannose-6-phosphate receptor-binding protein 1;	0.15 - 0.25
GKKGVKRPNR	SKLQDMLANLR	N-ter +28.03 Da, K +28.03 Da	36.7	79.4	3	1343.87	0.678	0.136	STRN_MOUSE	F8WH41_MOUSE	Striatin;		0.25 - 0.75
LWSLVATLLG	SKWPEPVFGR	N-ter +28.03 Da, K +28.03 Da	31.2	75.1	3	1257.78	0.782	0.068	MASP2_MOUSE		Mannan-binding lectin serine protease 2;	MBL-associated serine protease 2;Mannose-binding protein-associated serine protease 2;	0.25 - 0.75
VRLQDSVDF	SLADAINTEFKNTR	N-ter +28.03 Da, K +28.03 Da	39.8	70.5	3	1634.98	-0.184	0.04	VIME_MOUSE	A2AKI2_MOUSE	Vimentin;		0.25 - 0.75
ISRRLVSDG	SLAEVPEAKPVGILGSGDFAR	N-ter +34.06 Da, K +34.06 Da	26.5	79.1	4	2342.59	0.322	0.07	STEA3_MOUSE	E9QN92_MOUSE	Metalloendopeptidase STEAP3;	Dudulin-2;Protein nm1054;Six-transmembrane epithelial antigen of prostate 3;Tumor suppressor-activated pathway protein 6;	0.25 - 0.75
STVHEILCKL	SLEGDHSTPPSAYSGVKPYTNFDAER	N-ter +34.06 Da, K +34.06 Da	37.7	74.7	4	2892.64	2.646	0.693	ANXA2_MOUSE	BOV2N7_MOUSE	Annexin A2;	Annexin I;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.85 - 1.00
NEMATAASSS	SLEKSYELPDGQVITIGNER	N-ter +34.06 Da, K +34.06 Da	38.4	60.2	4	2315.40	0.163	0.017	ACTC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;	0.25 - 0.75
LRPPGGGSNF	SLGFDEPAEQPVR	N-ter +28.03 Da	43.3	44.9	3	1471.80	0.202	0.032	HN1_MOUSE		Hematological and neurological expressed 1 protein;		0.25 - 0.75
DCLQGFQLTH	SLGGGTGSGMGTLISKIR	N-ter +28.03 Da, K +28.03 Da	27.9	49.0	3	1860.14	-0.474	0.053	TBB5_MOUSE	TBB2A_MOUSE	Tubulin beta-5 chain;		0.25 - 0.75
LVVASSLGLV	SLGGKATTASQAKVALSAEKL	N-ter +28.03 Da, K +28.03 Da	26.4	65.9	4	2298.52	0.401	0.064	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;	0.25 - 0.75
RPEPQQVGTV	SLHLGVTSPVLR	N-ter +28.03 Da	32.5	63.8	3	1305.86	1.74	0.266	TPP1_MOUSE		Tripeptidyl-peptidase 1;	Lysosomal pepstatin-insensitive protease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase I;	0.75 - 0.85

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
SCRNDPCALC	SLHSIGKIGGAQNR	N-ter +28.03 Da, K +28.03 Da	23.5	75.8	4	1492.96	-0.916	0.086	MIF_MOUSE		Macrophage migration inhibitory factor;	Delayed early response protein 6;Glycosylation-inhibiting factor;L-dopachrome isomerase;L-dopachrome tautomerase;Phenylpyruvate tautomerase;	0.25 - 0.75
ADESAANCDK	SLHTLFGDKLCAIPNLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	38.9	87.3	4	2010.28	0.345	0.024	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
SIRSAPPKLA	SLKGVVPEDAVETLAGSLGTR	N-ter +28.03 Da, K +28.03 Da	56.2	62.2	3	2154.32	0.84	0.258	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;	0.25 - 0.75
AMKANTMSNY	SLLPASLLDHR	N-ter +28.03 Da	47.1	70.2	3	1248.81	2.727	0.692	STZB1_MOUSE	E9QKC1_MOUSE	Sulfotransferase family cytosolic 2B member 1;	Alcohol sulfotransferase;Hydroxysteroid sulfotransferase 2;	0.85 - 1.00
RSPLQLLQGR	SLPEGVVDGIEVYSTKISKCVTSR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	25.9	62.7	4	2725.71	-3.059	0.51	ITIH3_MOUSE	E9PVS1_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;		0.00 - 0.15
SGSLVVEEFM	SLPELQQNPLVQR	N-ter +28.03 Da	41.8	43.3	3	1548.93	1.384	0.048	CANB1_MOUSE		Calcineurin subunit B type 1;	Protein phosphatase 2B regulatory subunit 1;Protein phosphatase 3 regulatory subunit B alpha isoform 1;	0.75 - 0.85
RSLLSGETTG	SLPGNYLVPIYSGR	N-ter +34.06 Da	51.0	26.6	2	1568.92	-2.12	0.369	MYOM1_MOUSE		Myomesin-1;	Myomesin family member 1;Skelemin;	0.00 - 0.15
LLGSPRRSY	SLPPHQKVPPLSPPTMOAGTIAR	N-ter +34.06 Da, K +34.06 Da	48.8	44.5	4	2593.62	-0.201	0.005	ODP2_MOUSE		Dihydropolyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial;	Dihydropolamide acetyltransferase component of pyruvate dehydrogenase complex;Pyruvate dehydrogenase complex component E2;	0.25 - 0.75
TVTSAAGLQR	SLPSSSTAAKTPPGSSSAGTQSSTSNR	N-ter +28.03 Da, K +28.03 Da	23.3	67.1	4	2707.51	2.982	0.491	MYPT1_MOUSE		Protein phosphatase 1 regulatory subunit 12A;	Myosin phosphatase-targeting subunit 1;	0.85 - 1.00
DPAKVEAFQA	SLSKLGDVVVNDAFGTAHR	N-ter +28.03 Da, K +28.03 Da	37.1	87.6	4	2105.28	-1.059	0.088	PGK1_MOUSE	PGK2_MOUSE	Phosphoglycerate kinase 1;		0.15 - 0.25
ACFATIKDGK	SLTKDLGGNAKCSDFTEEICR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.5	68.6	4	2484.37	1.58	0.28	IDH3A_MOUSE		Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial;	Isocitric dehydrogenase subunit alpha;NAD(+)-specific ICDH subunit alpha;	0.75 - 0.85
ASGPENFCVQ	SMPPAQQTSGQMHR	N-ter +28.03 Da	51.8	66.7	3	1824.00	1.475	0.207	TLN1_MOUSE	F8WGT0_MOUSE	Talin-1;		0.75 - 0.85
STAASRATTL	SNAYVSLASTGLSLTKVDER	N-ter +28.03 Da, K +28.03 Da	57.1	56.6	3	2090.24	-0.234	0.033	PICA_MOUSE		Phosphatidylinositol-binding clathrin assembly protein;	Clathrin assembly lymphoid myeloid leukemia; Aldolase 1;Muscle-type aldolase;	0.25 - 0.75
TPGHACTQKF	SNEEIAMATVTALR	N-ter +28.03 Da	41.6	50.9	3	1532.86	-1.69	0.109	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Beta-tubulin cofactor D;Tubulin-folding cofactor D;	0.00 - 0.15
MVL	SNEPAASAAEEVEDDALVR	N-ter +28.03 Da	69.4	54.1	3	2129.09	2.556	0.556	TBCD_MOUSE		Tubulin-specific chaperone D;		0.85 - 1.00
PEPPRRSHY	SNIEANESEVVR	N-ter +28.03 Da	49.0	38.0	2	1403.71	0.422	0.063	CPNS1_MOUSE	D3YW48_MOUSE	Calpain small subunit 1;	Calcium-activated neutral proteinase small subunit;Calcium-dependent protease small subunit;Calcium-dependent protease small subunit 1;Calpain regulatory subunit;	0.25 - 0.75
DRDKPAQIRF	SNISAAKAVADAIR	N-ter +28.03 Da, K +28.03 Da	44.0	59.6	3	1441.91	1.31	0.111	TCPD_MOUSE		T-complex protein 1 subunit delta;	A45;CCT-delta;	0.75 - 0.85
DNAROSAERN	SNLVGAAHEELQQR	N-ter +34.06 Da	53.3	54.7	3	1671.97	0.39	0.036	LMNA_MOUSE		Prelamin-A/C;		0.25 - 0.75
EQFLPMMQAI	SNNKDQGGYEDFVGLR	N-ter +34.06 Da, K +34.06 Da	53.1	66.2	3	1995.13	-2.396	0.631	MYL1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;	0.00 - 0.15
LLAACGSVTM	SNPGESSFADLRDLDPVEKIDR	N-ter +34.06 Da, K +34.06 Da	38.3	80.3	4	2527.52	-0.014	0.002	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];		0.25 - 0.75
LLAACGSVTM	SNPGESSFADLR	N-ter +28.03 Da	63.5	36.8	2	1421.70	0.475	0.079	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];		0.25 - 0.75
SLAQRLEALK	SNPTLNEYHTR	N-ter +28.03 Da	42.0	62.2	3	1358.74	-0.34	0.06	APOA1_MOUSE	Q8BPD5_MOUSE	Apolipoprotein A-I;	Apolipoprotein A1;	0.25 - 0.75
GGEVPRKRYL	SNQERPYEHSVVVGR	N-ter +34.06 Da	24.7	85.2	4	1918.15	3.228	0.699	S14L4_MOUSE		SEC14-like protein 4;		0.85 - 1.00
TSGDSLTVAS	SNTDFAFSLYR	N-ter +28.03 Da	41.6	37.3	2	1347.70	2.856	0.335	SPA3G_MOUSE	D3Z450_MOUSE	Serine protease inhibitor A3G;	Serine protease inhibitor 2A;	0.85 - 1.00
KIPRHEVTEI	SNTDVEIQPGKTVIR	N-ter +34.06 Da, K +34.06 Da	44.5	52.5	3	1712.06	-1	0.26	E9Q616_MOUSE				0.15 - 0.25
LHPTLLAQQ	SNVDELGCSHLGQSYESR	N-ter +34.06 Da, C +57.02 Da	53.8	68.1	3	2071.09	-2.474	0.55	CO3A1_MOUSE	Q5DTG2_MOUSE	Collagen alpha-1(III) chain;		0.00 - 0.15
QETDTSQKDC	SPASHEIATNLGDFALR	N-ter +28.03 Da	55.6	68.1	3	1826.06	0.454	0.07	A1AT4_MOUSE		Alpha-1-antitrypsin 1-4;	Alpha-1 protease inhibitor 4;Serine protease inhibitor 1-4;Serine protease inhibitor A1d;	0.25 - 0.75
NSTHPMHSRC	SPDPGLTALLSDHR	N-ter +28.03 Da	54.3	56.2	3	1505.87	0.993	0.06	HEMO_MOUSE		Hemopexin;		0.25 - 0.75
VESASGETLH	SPKVGQPGAAGPVSPMCPGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	71.5	58.2	3	2005.14	0.911	0.174	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertryptin;Fetuin-A;	0.25 - 0.75
SNRRDRPQRP	SPSQSSDSQVHSGVQVEGR	N-ter +28.03 Da	26.9	60.9	3	1998.06	0.832	0.234	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.25 - 0.75
QSGSGRSPRR	SPVHPESSEGEHSVVPQR	N-ter +28.03 Da	36.8	80.2	4	2114.17	-0.304	0.049	FILA2_MOUSE	FILA2_MOUSE	Filaggrin-2;	Intermediate filament-associated protein;	0.25 - 0.75
DDGHLNLSLG	SPVQADVFFPR	N-ter +28.03 Da	33.5	50.6	3	1305.74	0.043	0.004	LEGLA_MOUSE	E9QAC6_MOUSE	Galectin-related protein A;	Lectin galactoside-binding-like protein A;	0.25 - 0.75
PVRNRKVVYD	SQFQESDDADEDYGR	N-ter +28.03 Da	54.7	53.4	3	1788.80	0.367	0.083	NUCKS_MOUSE		Nuclear ubiquituous casein and cyclin-dependent kinases substrate;	JC7;	0.25 - 0.75
TALLDWLKNP	SQLGIQTVKR	N-ter +28.03 Da, K +28.03 Da	23.1	65.2	3	1184.80	0.379	0.067	CFAL_MOUSE		Complement factor I;	C3B/C4B inactivator;	0.25 - 0.75
QAVRINKEQV	SQLLPEKFAEQILR	N-ter +34.06 Da, K +34.06 Da	30.0	54.3	3	1739.16	-1	0.06	SAMH1_MOUSE	Q6ZQM3_MOUSE	SAM domain and HD domain-containing protein 1;	Interferon-gamma-inducible protein Mg11;	0.15 - 0.25
TFLPRKIISL	SQLLQEDSLNVADLSSLR	N-ter +28.03 Da	57.0	47.4	3	2015.15	1.07	0.321	PSME2_MOUSE	E0CZ90_MOUSE	Proteasome activator complex subunit 2;	11S regulator complex subunit beta;Activator of multicatalytic protease subunit 2;Proteasome activator 2B subunit beta;	0.25 - 0.75
WKLVPRGRGL	SQNAAAKASATAPEVR	N-ter +28.03 Da, K +28.03 Da	51.5	39.2	3	1626.93	1.17	0.229	RT30_MOUSE		28S ribosomal protein S30, mitochondrial;		0.75 - 0.85
AVVRVAGRRL	SQQSASGAPVLLR	N-ter +28.03 Da	33.8	44.1	3	1340.80	0.782	0.032	ETHE1_MOUSE		Protein ETHE1, mitochondrial;	Ethylmalonic encephalopathy protein 1 homolog;Hepatoma subtracted clone one protein;	0.25 - 0.75
RRDRPQPSPP	SQSSDSQVHSGVQVEGR	N-ter +34.06 Da	58.2	62.3	3	1820.00	2.128	0.726	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;		0.85 - 1.00
ISKVRVHIQG	SRGESQEVALPSR	N-ter +34.06 Da	35.4	56.4	3	1448.86	-0.494	0.035	Q3UR26_MOUSE	F7DBB3_MOUSE			0.25 - 0.75
RASGPWGRSH	SSAAAEASAALKVRPER	N-ter +34.06 Da, K +34.06 Da	17.9	52.8	4	1781.14	-0.667	0.032	ALAT2_MOUSE	D6RFQ8_MOUSE	Alanine aminotransferase 2;	Glutamate pyruvate transaminase 2;Glutamic--alanine transaminase 2;Glutamic--pyruvic transaminase 2;	0.25 - 0.75
GLRLLGVRRS	SSAPVASPNVR	N-ter +28.03 Da	54.2	31.2	2	1111.63	0.546	0.056	PYC_MOUSE	E9QPD7_MOUSE	Pyruvate carboxylase, mitochondrial;	Pyruvic carboxylase;	0.25 - 0.75

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Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
ETRSQTAHEY	SSCPDDAIFQSLAR	N-ter +28.03 Da, C +57.02 Da	32.0	66.4	3	1593.85	-1.69	0.218	CBPE_MOUSE		Carboxypeptidase E;	Carboxypeptidase H;Enkephalin convertase;Prohormone-processing carboxypeptidase;	0.00 - 0.15
QFLVLLVAGR	SSDAVAGPASSLQKR	N-ter +28.03 Da, K +28.03 Da	33.9	52.8	3	1528.90	1.163	0.062	E9PWQ3_MOUSE	D3YWD1_MOUSE			0.75 - 0.85
VLQTRGFVSD	SSDSMDTGAGSIR	N-ter +34.06 Da	47.7	40.6	2	1316.66	-0.415	0.044	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase;	0.25 - 0.75
DRPRQPSFSQ	SSDSQVHSGVQVEGR	N-ter +28.03 Da	55.5	63.2	3	1598.87	0.941	0.279	FILA_MOUSE	F78VV1_MOUSE	Filaggrin;		0.25 - 0.75
GALAPTGPSA	SSEAPPLVNEVKR	N-ter +28.03 Da, K +28.03 Da	48.8	60.0	3	1595.95	-0.494	0.077	RPN1_MOUSE		Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 67 kDa subunit;	Ribophorin I;Ribophorin-1;	0.25 - 0.75
SPRRSPVHPE	SSGEEHVVVPQR	N-ter +28.03 Da	56.6	59.7	3	1467.78	0.824	0.084	E9QPZ3_MOUSE	FILA2_MOUSE			0.25 - 0.75
TDEQALEDHF	SSFGPISEVVVKDR	N-ter +34.06 Da, K +34.06 Da	53.3	55.5	3	1686.09	-0.889	0.082	RBM3_MOUSE	Q8BG13_MOUSE	Putative RNA-binding protein 3;	RNA-binding motif protein 3;	0.25 - 0.75
SDVQTAVKTN	SSFIQGFVDHVKEDCDR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	31.4	88.0	4	2094.17	1.993	0.451	SAP_MOUSE	Q8BFQ1_MOUSE	Sulfated glycoprotein 1;	Prosaposin;	0.85 - 1.00
IIRKVVVRQVD	SSGAIDTQHQEEVELR	N-ter +34.06 Da	53.3	56.3	3	1832.02	-2.12	0.369	ANK1_MOUSE	D3YTV8_MOUSE	Ankyrin-1;	Erythrocyte ankyrin;	0.00 - 0.15
VVLLFETALL	SSGFSLEDPQTHSNR	N-ter +28.03 Da	62.2	54.8	3	1688.87	4.776	0.382	H590B_MOUSE	Q71X8_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;	0.85 - 1.00
CGLSDPNLTL	SSGKDGQCLVVEQVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	45.7	68.6	3	1814.06	-0.074	0.008	LRC47_MOUSE	F6YT33_MOUSE	Leucine-rich repeat-containing protein 47;		0.25 - 0.75
EGVPQFLVLI	SSGKSDDEVDSAVELKQFGVAPLTIAR	N-ter +28.03 Da, K +28.03 Da	91.1	83.4	4	3017.81	1.491	0.488	E9PWQ3_MOUSE	D3YWD1_MOUSE			0.75 - 0.85
IEDLEKVEQL	SSGLEHDNLEAHSPEQPPR	N-ter +34.06 Da	20.6	77.5	4	2133.20	-0.786	0.068	PDXD1_MOUSE	E9Q8P7_MOUSE	Pyridoxal-dependent decarboxylase domain-containing protein 1;		0.25 - 0.75
DDGLADLLFV	SSGPTNASAFTEK	N-ter +28.03 Da	53.0	36.9	2	1351.69	5.863	1.07	MAP4_MOUSE	E9QPW8_MOUSE	Microtubule-associated protein 4;		0.85 - 1.00
STGRISNNAR	SSGTGASVGGPPSQDQTLVQR	N-ter +28.03 Da	56.0	46.7	3	2211.18	2.965	0.797	PDLI5_MOUSE		PDZ and LIM domain protein 5;	Enigma homolog;Enigma-like PDZ and LIM domains protein;	0.85 - 1.00
DLKTGESVTL	SSIPLPSDDFKSTGIKIVYEDR	N-ter +28.03 Da, K +28.03 Da	43.9	84.1	4	2437.48	2.539	0.424	PALMD_MOUSE	Q3UV77_MOUSE	Palmdelphin;		0.85 - 1.00
SSVATQQTLL	SSIPSPSTAGKIFR	N-ter +34.06 Da, K +34.06 Da	21.7	66.4	4	1652.08	-0.515	0.081	A2AQ82_MOUSE	A2AQ89_MOUSE			0.25 - 0.75
KYDMEVKVQK	SSKELEDMNQKLFDR	N-ter +28.03 Da, K +28.03 Da	26.9	80.7	4	2036.23	-1.515	0.26	TNNI2_MOUSE	A2AGK0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;	0.15 - 0.25
SRATLNSNAV	SSLASTGLSLTKVDER	N-ter +34.06 Da, K +34.06 Da	33.1	55.4	3	1731.10	-3.322	0.332	PICA_MOUSE			Clastrin assembly lymphoid myeloid leukemia;	0.00 - 0.15
ENEMATAASV	SSLEKSYELPDGQVITIGNER	N-ter +28.03 Da, K +28.03 Da	39.3	53.1	3	2390.36	0.934	0.073	ADXC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;	0.25 - 0.75
WAVTPSWKST	SSLSLETTSSVLVGR	N-ter +28.03 Da	17.0	59.5	4	1634.97	-0.644	0.081	A2APQ4_MOUSE				0.25 - 0.75
SPQVEAEAFI	SSLETIEGADAEADGHSPEQQRK	N-ter +34.06 Da, K +34.06 Da	56.6	70.0	4	2609.47	-5.644	0.001	CFAB_MOUSE	B8JMS_MOUSE	Complement factor B;	C3/C5 convertase;	0.00 - 0.15
ITSGDSDLTVA	SSNTDFAFSLYR	N-ter +28.03 Da	48.1	42.2	2	1434.74	2.609	0.441	SPA3G_MOUSE	D3Z450_MOUSE	Serine protease inhibitor A3G;	Serine protease inhibitor 2A;	0.85 - 1.00
PNHQKASSGK	SSPFKVSPLSFRG	N-ter +28.03 Da, K +28.03 Da	24.2	64.6	3	1463.91	0.299	0.012	SDPR_MOUSE		Serum deprivation-response protein;	Cavin-2;Phosphatidylserine-binding protein;	0.25 - 0.75
SQSGRSRSPR	SSPVHPESSGEEHVVPPQR	N-ter +28.03 Da	40.2	82.1	4	2201.22	0.475	0.065	FILA2_MOUSE	E9QPZ3_MOUSE	Filaggrin-2;	Intermediate filament-associated protein;	0.25 - 0.75
AAHVAPRSI	SSQQTIPPSAKYGGK	N-ter +28.03 Da, K +28.03 Da	27.8	48.3	3	1631.94	-0.943	0.018	IDHG1_MOUSE		Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;	Isocitrate dehydrogenase subunit gamma;NAD(+)-specific IDH subunit gamma;	0.15 - 0.25
GGRLRLGVR	SSAPVAPSNVR	N-ter +34.06 Da	52.0	27.0	2	1204.70	-0.34	0.065	PYC_MOUSE	E9QPD7_MOUSE	Pyruvate carboxylase, mitochondrial;	Pyruvic carboxylase;	0.25 - 0.75
RPLSVYARAR	SSSEDKITVHFKNR	N-ter +28.03 Da, K +28.03 Da	13.8	77.8	4	1731.07	-0.252	0.027	ADX_MOUSE	E9Q8L1_MOUSE	Adrenodoxin, mitochondrial;	Adrenal ferredoxin;Ferredoxin-1;	0.25 - 0.75
RSRGRGQFV	SSSLPDIQYR	N-ter +34.06 Da, C +57.02 Da	27.1	46.0	2	1230.67	1.922	0.254	CNBP_MOUSE	D3YFF6_MOUSE	Cellular nucleic acid-binding protein;	Zinc finger protein 9;	0.85 - 1.00
EVREAKPAL	SSVETQPAEEVR	N-ter +28.03 Da	57.3	31.2	2	1358.71	0.333	0.056	E41L_MOUSE	Q811B2_MOUSE	Band 4.1-like protein 2;	Generally expressed protein 4.1;	0.25 - 0.75
YQCLVRSALK	SSVEYEPKEKTFDKILIANR	N-ter +28.03 Da, K +28.03 Da	22.7	64.6	4	2478.53	0.604	0.083	PCCA_MOUSE	D3Y2C0_MOUSE	Propionyl-CoA carboxylase alpha chain, mitochondrial;	Propanoyl-CoA:carbon dioxide ligase subunit alpha;	0.25 - 0.75
SPSGSKSQRY	SSVYGASVSDDELKR	N-ter +34.06 Da, K +34.06 Da	53.3	62.6	3	1680.01	-1.737	0.174	CHCH3_MOUSE	Q9D9P1_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial;		0.00 - 0.15
KLLRFQSSH	STDITSLDQYVER	N-ter +28.03 Da	29.7	48.0	3	1553.83	-0.218	0.015	ENPL_MOUSE	F7C312_MOUSE	Endoplasmic reticulum resident protein 99;Heat shock protein 90 kDa beta member 1;Polymorphic tumor rejection antigen 1;Tumor rejection antigen gp96;		0.25 - 0.75
QELDKWLVTN	STEALISHTLER	N-ter +28.03 Da	28.9	68.9	3	1383.83	-0.396	0.036	SAPL1_MOUSE		Proactivator polypeptide-like 1;		0.25 - 0.75
LDKVKSATLS	STESTASGMQDEVR	N-ter +34.06 Da	33.9	50.2	3	1530.78	-0.322	0.048	AKA12_MOUSE	F8W121_MOUSE	A-kinase anchor protein 12;	Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;	0.25 - 0.75
IHRAAAVAAM	STGTFFVVSQPLNYR	N-ter +28.03 Da	39.2	46.4	3	1726.95	-1.396	0.11	AL9A1_MOUSE	Q3U367_MOUSE	4-trimethylaminobutyraldehyde dehydrogenase;	Aldehyde dehydrogenase family 9 member A1;	0.15 - 0.25
NKSVQKSGVR	STHQAAVVKIDSR	N-ter +28.03 Da, K +28.03 Da	31.9	77.0	4	1553.97	1.257	0.221	Q8VCQ8_MOUSE	E9Q0M9_MOUSE			0.75 - 0.85
LLLLAALTEA	STIIHYEILEER	N-ter +28.03 Da	40.4	64.6	3	1529.91	0.454	0.056	Q91XX1_MOUSE			Protein kinase C-like 1;Protein kinase C-like PKN;Protein-kinase C-related kinase 1;Serine-threonine protein kinase N;	0.25 - 0.75
LPGPPPATHY	STLSKPAPLTGTLEVR	N-ter +28.03 Da, K +28.03 Da	50.1	54.0	3	1725.10	-1.943	0.224	PKN1_MOUSE	D6RH37_MOUSE	Serine/threonine-protein kinase N1;		0.00 - 0.15
LCKLSLEGDH	STPPSAYGSVKPYTNFDAER	N-ter +28.03 Da, K +28.03 Da	29.6	55.7	3	2242.22	0.454	0.07	ANXA2_MOUSE	B0V2N7_MOUSE	Annexin A2;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.25 - 0.75
QTSVAIGRSF	STPOSQFQESSPVWKLGR	N-ter +28.03 Da, K +28.03 Da	39.7	62.7	3	2117.22	0.084	0.016	MCEE_MOUSE		Methylmalonyl-CoA epimerase, mitochondrial;	DL-methylmalonyl-CoA racemase;	0.25 - 0.75
ASGISAGQLY	STQAAEDKEEESLHSIISNTEAVR	N-ter +28.03 Da, K +28.03 Da	37.3	80.3	4	2699.54	0.623	0.142	TRAP1_MOUSE	F6YP65_MOUSE	Heat shock protein 75 kDa, mitochondrial;	TNFR-associated protein 1;Tumor necrosis factor type 1 receptor-associated protein;	0.25 - 0.75
ASYNPIGLY	STSNIQDALHGQLR	N-ter +34.06 Da	38.8	61.6	3	1572.94	0.356	0.103	PDLI3_MOUSE		PDZ and LIM domain protein 3;	Actinin-associated LIM protein;Alpha-actinin-2-associated LIM protein;	0.25 - 0.75

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
LVGLTSLRAV	STSSMGTLPKQKQKIVEVGR	N-ter +28.03 Da, K +28.03 Da	26.7	74.6	4	2197.42	0.714	0.091	HMGCL_MOUSE		Hydroxymethylglutaryl-CoA lyase, mitochondrial; Microtubule-associated protein RP/EB family member 1;	3-hydroxy-3-methylglutarate-CoA lyase;	0.25 - 0.75
MAVNVY	STSVTSDNLSR	N-ter +34.06 Da	29.7	33.9	2	1199.66	0.911	0.145	MARE1_MOUSE		APC-binding protein EB1;End-binding protein 1;	0.25 - 0.75	
GVHTSVASAT	SVATKKTEQGPSSSEYIFER	N-ter +28.03 Da, K +28.03 Da	46.9	66.7	4	2337.38	0.333	0.024	OAT_MOUSE		Ornithine aminotransferase, mitochondrial;	Ornithine-oxo-acid aminotransferase;	0.25 - 0.75
GESGNKGEFG	SVGAQGGPPGPSGEEGKR	N-ter +34.06 Da, K +34.06 Da	33.6	54.8	3	1677.00	-1.837	0.328	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
LAKGRRAEAG	SVIDYELIDQDAR	N-ter +34.06 Da	38.9	56.1	3	1569.90	0.098	0.01	ANXA2_MOUSE	BOV2N7_MOUSE	Annexin A2;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.25 - 0.75
LESKSNKIVQ	SVIQAVTDQFAR	N-ter +34.06 Da	43.5	23.1	2	1367.79	-2.252	0.214	AKA12_MOUSE		A-kinase anchor protein 12;	Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;	0.00 - 0.15
FRVLRALKAI	SVISGLKVIIVGALLR	N-ter +34.06 Da, K +34.06 Da	17.2	63.6	4	1592.20	-2.556	0.15	SCNBA_MOUSE		Sodium channel protein type 11 subunit alpha;	NaN;Sensory neuron sodium channel 2;Sodium channel protein type XI subunit alpha;Voltage-gated sodium channel subunit alpha Nav1.9;	0.00 - 0.15
AITARRRQHLK	SVMLQIAATELEKEESR	N-ter +34.06 Da, K +34.06 Da	60.0	63.4	3	2001.24	0.014	0.001	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;	0.25 - 0.75
LQETKRLFER	SVPAASGGDKAEAVAR	N-ter +34.06 Da, K +34.06 Da	33.2	55.7	3	1481.93	-1.218	0.227	NEB2_MOUSE		Neurabin-2;	Neurabin-II;Protein phosphatase 1 regulatory subunit 9B;Spinophilin;	0.15 - 0.25
TKIFTASNVS	SVPLPAENVTTTAGQR	N-ter +28.03 Da	51.8	48.5	3	1680.00	-3.322	0.664	UBP2L_MOUSE	E9Q9Q3_MOUSE	Ubiquitin-associated protein 2-like;		0.00 - 0.15
VEPDTYCRYD	SVSVFNGAVSDDSKR	N-ter +28.03 Da, K +28.03 Da	46.3	69.2	3	1622.94	-4.059	0.001	PCOC1_MOUSE	D3YZE3_MOUSE	Procollagen C-endopeptidase enhancer 1;	P14;Procollagen COOH-terminal proteinase enhancer 1;Type 1 procollagen C-proteinase enhancer protein;Type I procollagen COOH-terminal proteinase enhancer;	0.00 - 0.15
RYDDMAACMK	SVTEQGAELSNEER	N-ter +28.03 Da	42.1	58.6	3	1575.83	0.07	0.007	1433Z_MOUSE	D3YXF4_MOUSE	14-3-3 protein zeta/delta;	Protein kinase C inhibitor protein 1;SEZ2;	0.25 - 0.75
FQHVGTSVFL	SVTGEQGNPIR	N-ter +28.03 Da	26.4	64.4	3	1347.77	-1.059	0.088	SDF2L_MOUSE		Stromal cell-derived factor 2-like protein 1;		0.15 - 0.25
SQEHLNHSK	SVTPASTLTKSGPGR	N-ter +28.03 Da, K +28.03 Da	33.9	51.6	3	1513.92	1.799	0.289	AFAD_MOUSE	E9PYX7_MOUSE	Afadin;	Protein Af-6;	0.85 - 1.00
VYSPLAHRY	SVVAGGPEVTLTPER	N-ter +34.06 Da	45.6	46.1	3	1544.93	0.422	0.063	D2HDH_MOUSE	E9QN44_MOUSE	D-2-hydroxyglutarate dehydrogenase, mitochondrial;		0.25 - 0.75
ALNDNFVKLI	SVWYDNEYGSNR	N-ter +28.03 Da	30.0	50.9	3	1580.73	4.652	0.879	G3P_MOUSE	F8WJL5_MOUSE	Glycerinaldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH; Carbonate dehydratase III;Carbonic anhydrase III;	0.85 - 1.00
HDPQLPWSA	SYDPSAKTILNNGKTCR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	15.5	69.7	4	2065.21	-0.943	0.127	CAH3_MOUSE		Carbonic anhydrase 3;		0.15 - 0.25
TAASSSLEK	SVELPDGQVITIGNER	N-ter +28.03 Da	49.7	66.6	3	1818.04	0.189	0.017	ACTS_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	Alpha-actin-1;	0.25 - 0.75
QOPQQQMTS	SYGGYKEPAAPVSIQR	N-ter +28.03 Da, K +28.03 Da	48.9	60.5	3	1778.04	-0.889	0.132	LASP1_MOUSE	A2AGH0_MOUSE	LIM and SH3 domain protein 1;	Metastatic lymph node gene 50 protein;	0.25 - 0.75
GLGNGFASQM	SYGVDEKSAVSVPGMPGSPGR	N-ter +34.06 Da, K +34.06 Da	53.2	47.2	3	2362.30	-2.252	0.429	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;	0.00 - 0.15
KKSPGPKGA	TAAASHKGEVPPNIR	N-ter +28.03 Da, K +28.03 Da	24.9	87.8	3	1604.97	1.58	0.122	B1AVP0_MOUSE				0.75 - 0.85
KLHDDLCEKR	TAATIATHDLOAVR	N-ter +28.03 Da	30.0	71.6	3	1494.92	1.163	0.109	LR47_MOUSE	E9PV22_MOUSE	Leucine-rich repeat-containing protein 47;		0.75 - 0.85
LQKRGTGGVD	TAAVGAVFDSNADR	N-ter +28.03 Da	47.0	51.9	3	1533.86	-1.322	0.033	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.15 - 0.25
VISIMCYGIY	TADTDGGYIEER	N-ter +28.03 Da	63.7	35.4	2	1353.65	1.084	0.138	TMX3_MOUSE		Protein disulfide-isomerase TMX3;	Thioredoxin domain-containing protein 10;Thioredoxin-related transmembrane protein 3;	0.75 - 0.85
GSWEFFASGK	TAESGELHGLTTDEKFEVGVYR	N-ter +28.03 Da, K +28.03 Da	32.9	75.9	4	2493.43	-0.862	0.282	THY_MOUSE		Transthyretin;	Prealbumin;	0.25 - 0.75
EQLAELAEY	TAKIALLEEAR	N-ter +34.06 Da, K +34.06 Da	23.1	47.9	3	1281.89	-1.556	0.046	EZRIN_MOUSE		Ezrin;	Cytovillin;Villin-2;p81;	0.15 - 0.25
GAQRMFPMNR	TAKPFLGSMNQPAAPFSPTR	N-ter +28.03 Da, K +28.03 Da	39.4	63.9	4	2173.27	0.138	0.014	SYNP2_MOUSE	D3YVV9_MOUSE	Synaptopodin-2;	Myopodin;	0.25 - 0.75
GPLVEQGRQR	TANLGAGAAQPLR	N-ter +28.03 Da	51.0	38.7	3	1266.75	-1.358	0.07	APOE_MOUSE		Apolipoprotein E;		0.15 - 0.25
QDDWAGWQKF	TASAGIQVGGDDLTVPKRR	N-ter +28.03 Da, K +28.03 Da	57.3	52.5	4	2097.25	0.176	0.025	ENOA_MOUSE	Q6PHC1_MOUSE	Alpha-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;	0.25 - 0.75
ATPQISNLTK	TASESINLSEAGSVKKGRR	N-ter +28.03 Da, K +28.03 Da	36.2	73.0	4	2133.28	0.098	0.008	CLIP1_MOUSE	Q8C0S5_MOUSE	CAP-Gly domain-containing linker protein 1;	Restin;	0.25 - 0.75
EPVWAIKTKG	TATPQQAQEVHEKLR	N-ter +34.06 Da, K +34.06 Da	27.5	65.8	4	1803.15	0.356	0.067	TPIS_MOUSE	E0CXH5_MOUSE	Triosephosphate isomerase;	Triose-phosphate isomerase;	0.25 - 0.75
AAAMNLSAPR	TAVAPSAVNLADPR	N-ter +28.03 Da	36.6	40.9	3	1408.83	-1.12	0.073	SRRM2_MOUSE	E9QMJ6_MOUSE	Serine/arginine repetitive matrix protein 2;		0.15 - 0.25
SQEALHTQML	TAVQEISHLIEPLASAR	N-ter +28.03 Da	48.1	55.3	3	1933.17	1.66	0.121	TLN1_MOUSE	F8WGT0_MOUSE	Talin-1;		0.75 - 0.85
VMDDFQAQFLD	TCKKAADKDTFCSTEGPNLVTR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	50.3	63.3	4	2632.48	0.189	0.036	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
DTCKAADKDK	TCFSTEGPNLVTR	N-ter +28.03 Da, C +57.02 Da	44.9	40.9	3	1508.79	0.227	0.031	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
RVSGEHMDLT	TCPLAAGGQKEKLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	33.8	57.6	3	1583.94	1.345	0.159	Q9D1B1_MOUSE				0.75 - 0.85
MVHL	TDAEKSAVSLWAKVNPDEVGGEALGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	53.2	73.1	4	2960.79	-2.184	1.092	HBB2_MOUSE		Hemoglobin subunit beta-2;	Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain;	0.00 - 0.15
TYGTAALKAY	TDDLGAAGVACLEDEASALR	N-ter +34.06 Da, C +57.02 Da	36.0	110.5	3	2053.21	-0.786	0.285	WIPI2_MOUSE	D3YWK1_MOUSE	WD repeat domain phosphoinositide-interacting protein 2;		0.25 - 0.75
RELPSFLGER	TDEAAFQKVMNSLDSNR	N-ter +28.03 Da, K +28.03 Da	19.8	59.6	3	1981.08	1.714	0.319	S10A4_MOUSE	D3YUT9_MOUSE	Protein S100-A4;	Metastasin;Metastatic cell protein;PEL98;Placental calcium-binding protein;Protein 18A2;Protein Mts1;S100 calcium-binding protein A4;	0.75 - 0.85
ALRKAMKGGI	TDEATIDIVTHR	N-ter +28.03 Da	34.4	51.1	3	1510.88	1	0.14	ANXA6_MOUSE	F8WITZ_MOUSE	Annexin A6;	Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;	0.25 - 0.75

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
VLKAMKGLG	TDEDSLNLTLTSR	N-ter +28.03 Da	41.9	58.1	3	1503.87	0.151	0.041	ANXA5_MOUSE		Annexin A5;	Anchoring CII;Annexin V;Annexin-5;Calphobindin I;Endonexin II;Lipocortin V;Placental anticoagulant protein 4;Placental anticoagulant protein I;Thromboplastin inhibitor;Vascular anticoagulant-alpha;	0.25 - 0.75
KISNAVQGLG	TDEDSLIEICSR	N-ter +34.06 Da, C +57.02 Da	36.2	51.7	3	1583.87	0.444	0.091	ANXA2_MOUSE	B0VZN7_MOUSE	Annexin A2;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.25 - 0.75
LFQAGELKWG	TDEEFKIFITGTR	N-ter +28.03 Da, K +28.03 Da	34.3	78.6	3	1611.98	0.202	0.026	ANXA5_MOUSE		Annexin A5;	Anchoring CII;Annexin V;Annexin-5;Calphobindin I;Endonexin II;Lipocortin V;Placental anticoagulant protein 4;Placental anticoagulant protein I;Thromboplastin inhibitor;Vascular anticoagulant-alpha;	0.25 - 0.75
ERRGFCFITY	TDEEPVKKLLESR	N-ter +34.06 Da, K +34.06 Da	18.3	57.8	4	1645.11	-2.252	0.214	HNRDL_MOUSE	F6VQH5_MOUSE	Heterogeneous nuclear ribonucleoprotein D-like;	JKT41-binding protein; 67 kDa calelectrin;Annexin VI;Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;	0.00 - 0.15
EIKDAISGVG	TDEKCLIEILASR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	34.0	67.4	3	1602.97	0.475	0.068	ANXA6_MOUSE	F8WIT2_MOUSE	Annexin A6;	67 kDa calelectrin;Annexin VI;Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;	0.25 - 0.75
AESGELHGLT	TDEKFEVGVYR	N-ter +28.03 Da, K +28.03 Da	26.5	73.2	3	1397.82	-0.201	0.016	THY_MOUSE		Transthyretin;	Prealbumin;	0.25 - 0.75
QLKAMEGAG	TDEKTLIEILATR	N-ter +28.03 Da, K +28.03 Da	41.9	69.9	3	1558.01	0.516	0.051	ANXA6_MOUSE	F8WIT2_MOUSE	Annexin A6;	67 kDa calelectrin;Annexin VI;Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;	0.25 - 0.75
ELKHALKGAG	TDEKVLTEIASR	N-ter +28.03 Da, K +28.03 Da	50.6	54.1	3	1529.95	-0.578	0.104	ANXA5_MOUSE		Annexin A5;	Anchoring CII;Annexin V;Annexin-5;Calphobindin I;Endonexin II;Lipocortin V;Placental anticoagulant protein 4;Placental anticoagulant protein I;Thromboplastin inhibitor;Vascular anticoagulant-alpha;	0.25 - 0.75
PGEQVTEEQF	TDEQGNIVTKIIR	N-ter +34.06 Da, K +34.06 Da	15.3	63.1	4	1716.21	-2.474	0.137	ANK1_MOUSE	Q0VGY9_MOUSE	Ankyrin-1;	Erythrocyte ankyrin;	0.00 - 0.15
EWKRSIGYDD	TDESHCVIEHSR	N-ter +28.03 Da, C +57.02 Da	20.6	80.2	4	1625.84	1.245	0.404	PLIN2_MOUSE		Perilipin-2;	Adipophilin;Adipose differentiation-related protein;	0.75 - 0.85
SVSMASRKP	TDGASSNCVTDISHLVR	N-ter +28.03 Da, C +57.02 Da	51.9	58.0	3	1946.03	1.683	0.315	NASP_MOUSE	B1AU75_MOUSE	Nuclear autoantigenic sperm protein;		0.75 - 0.85
ERSTSIHML	TODGANTGESRPEKIENVR	N-ter +28.03 Da, K +28.03 Da	20.9	77.3	4	2271.28	2.93	0.335	ITH3_MOUSE	E9PVS1_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;		0.85 - 1.00
KTAHSFEQVL	TDITDAIKLDGSGVVKR	N-ter +28.03 Da, K +28.03 Da	27.4	71.4	4	1814.18	-1.644	0.257	DCLK1_MOUSE	Q8BRN4_MOUSE	Serine/threonine-protein kinase DCLK1;	Doublecortin-like and CAM kinase-like 1;Doublecortin-like kinase 1; 94 kDa glucose-regulated protein;Endoplasmic reticulum resident protein 99;Heat shock protein 90 kDa beta member 1;Polymorphic tumor rejection antigen 1;Tumor rejection antigen gp96;	0.00 - 0.15
LLRFQSSHHS	TDITSLDQYVER	N-ter +28.03 Da	32.7	57.1	3	1466.81	-0.837	0.06	ENPL_MOUSE	F7C312_MOUSE	Endoplasmic;		0.25 - 0.75
INRVYKEMYK	TDLEKDIISDTSGDFR	N-ter +28.03 Da, K +28.03 Da	42.9	65.9	3	1867.04	-0.578	0.086	ANXA2_MOUSE	B0VZN7_MOUSE	Annexin A2;	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV;Protein I;p36;	0.25 - 0.75
GGYKPTDKHK	TDLNHNENLKGDDLPNVLSSR	N-ter +28.03 Da, K +28.03 Da	40.0	59.1	4	2627.44	-0.535	0.101	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.25 - 0.75
TRRSTQGVTL	TDLQEAETFSR	N-ter +34.06 Da, K +34.06 Da	24.0	55.3	3	1491.90	-1.556	0.092	MYPT2_MOUSE	A6H644_MOUSE	Protein phosphatase 1 regulatory subunit 12B;	Myosin phosphatase-targeting subunit 2;	0.15 - 0.25
ADFAEITKLA	TDLTQVKNKCCGDLLLECAADR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	44.7	57.6	4	2732.41	0.595	0.15	ALBU_MOUSE		Serum albumin;		0.25 - 0.75
AHVDHGKSTL	TDLSLVCKAGIISAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	21.6	46.9	3	1629.03	0.098	0.013	EF2_MOUSE		Elongation factor 2;		0.25 - 0.75
ILSVASTVWT	TDTEDKGFLSEGGVVR	N-ter +28.03 Da, K +28.03 Da	36.5	57.8	3	1851.99	-1.12	0.292	Q99K47_MOUSE	E9PV24_MOUSE			0.15 - 0.25
NASAEAIIG	TDVLQDHNALDFEHR	N-ter +28.03 Da	47.3	66.1	4	1936.07	1.367	0.201	APRV1_MOUSE		Retroviral-like aspartic protease 1;	Skin-specific retroviral-like aspartic protease;TPA-inducible aspartic protease-like protein;	0.75 - 0.85
KAVLDVAETG	TEAAAATGVIGGIR	N-ter +34.06 Da	60.4	27.6	2	1319.80	-0.089	0.016	SPA3K_MOUSE		Serine protease inhibitor A3K;	Contrapsin;SP1-2;	0.25 - 0.75
AGSYIYKPKQ	TEAPQVTGPIEVVVR	N-ter +28.03 Da	40.8	56.4	3	1719.05	0.926	0.195	CRIP2_MOUSE		Cysteine-rich protein 2;	Heart LIM protein;	0.25 - 0.75
RRGAISAQVY	TEEDAASYVR	N-ter +34.06 Da	28.6	41.2	2	1173.62	-0.044	0.004	KAP0_MOUSE	A2AI69_MOUSE	cAMP-dependent protein kinase type I-alpha regulatory subunit;		0.25 - 0.75
LFVRNLANTV	TEEILEKSFQFGKLER	N-ter +34.06 Da, K +34.06 Da	23.1	83.6	4	2142.42	-3.474	0.386	HNRPQ_MOUSE		Heterogeneous nuclear ribonucleoprotein Q;	Glycine- and tyrosine-rich RNA-binding protein;NS1-associated protein 1;Synaptotagmin-binding, cytoplasmic RNA-interacting protein;pp68;	0.00 - 0.15
VIRFQPGETL	TEILETPATNEQEAHQSR	N-ter +28.03 Da	48.4	44.3	3	2123.11	-0.761	0.129	IQGA1_MOUSE	F6ZIB0_MOUSE	Ras GTPase-activating-like protein IQGAP1;		0.25 - 0.75
NVNLQIQRFT	TEMDSHEEKVFR	N-ter +34.06 Da, K +34.06 Da	19.2	76.1	4	1574.92	-0.943	0.181	COPD_MOUSE		Coatomer subunit delta;	Archain;Delta-coat protein;	0.15 - 0.25
REGEVEVLKA	TEMVEVGPEDVEGAER	N-ter +28.03 Da	55.4	43.9	3	1888.92	-0.889	0.263	PTFR_MOUSE		Polymerase I and transcript release factor;	Cav-p60;Cavin-1;	0.25 - 0.75
KKRELETYYNA	TEPVISFYDKR	N-ter +34.06 Da, K +34.06 Da	27.2	65.1	3	1421.91	-0.943	0.073	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;	0.15 - 0.25
QLEKEKLLA	TEQEDAIVAKSKLR	N-ter +28.03 Da, K +28.03 Da	23.5	71.7	4	1629.03	-1.029	0.168	RRB1_MOUSE	A2AVJ7_MOUSE	Ribosome-binding protein 1;	Ribosome receptor protein;	0.15 - 0.25

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AAPCIWVLP	TESIVQKEAEQAE	N-ter +28.03 Da, K +28.03 Da	32.1	63.1	3	1801.04	-0.943	0.272	ACINU_MOUSE	B8J93_MOUSE	Apoptotic chromatin condensation inducer in the nucleus;		0.15 - 0.25
ESVRSRSGSS	TEVLVTPAGVASKR	N-ter +34.06 Da, K +34.06 Da	45.5	36.2	3	1494.99	2.281	0.282	LAD1_MOUSE		Ladinin-1;	Linear IgA disease antigen homolog;	0.85 - 1.00
TLNAAVNPAG	TEVVCAPPTAYDFAR	N-ter +34.06 Da, C +57.02 Da	36.2	49.3	3	1843.03	-0.667	0.085	TPIS_MOUSE		Triosephosphate isomerase;	Triose-phosphate isomerase;	0.25 - 0.75
SFRILAQMTG	TEYMQDPDEEALRR	N-ter +34.06 Da	32.6	79.3	3	1785.98	-0.599	0.1	LDB3_MOUSE	E9PY9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;	0.25 - 0.75
SFRILAQMTG	TEYMQDPDEEALR	N-ter +34.06 Da	41.7	68.2	3	1629.85	-1.12	0.243	E9PY9_MOUSE	LDB3_MOUSE			0.15 - 0.25
GLKNDLNLKG	TFASLSELHCDKLHVDPENFR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	30.2	75.3	4	2570.45	-0.515	0.059	HBB1_MOUSE	HBB2_MOUSE	Hemoglobin subunit beta-1;	Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;	0.25 - 0.75
AFGQGRDMAE	TFDQGAHHAFGQGGGR	N-ter +28.03 Da	25.6	100.5	4	1612.91	0.766	0.194	SBSN_MOUSE	E9QPB2_MOUSE	Suprabasin;		0.25 - 0.75
LLKAKSQELV	TFEDVAVYFIWR	N-ter +28.03 Da	12.2	90.2	3	1572.94	0.993	0.125	Q8C689_MOUSE	E9Q7V7_MOUSE			0.25 - 0.75
KWKISFPDQD	TFESEFYLDEKR	N-ter +28.03 Da, K +28.03 Da	47.6	62.5	3	1618.89	-1.358	0.279	SPA3K_MOUSE	SPA3M_MOUSE	Serine protease inhibitor A3K;	Contrapsin;SPI-2;	0.15 - 0.25
IAPSNQVIML	TFGKFDVEPDTYCR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	36.2	65.6	3	1789.95	1.501	0.387	PCOC1_MOUSE	D3YZE3_MOUSE	Procollagen C-endopeptidase enhancer 1;	P14;Procollagen COOH-terminal proteinase enhancer 1;Type 1 procollagen C-proteinase enhancer protein;Type I procollagen COOH-terminal proteinase enhancer;	0.75 - 0.85
MANSER	TFIAIKPDGVQR	N-ter +28.03 Da, K +28.03 Da	30.8	50.5	3	1399.89	0.014	0.002	NDKA_MOUSE	NDKB_MOUSE	Nucleoside diphosphate kinase A;	Metastasis inhibition factor NM23;NDPK-A;Tumor metastatic process-associated protein;nm23-M1;	0.25 - 0.75
ADGRKTETVC	TFQDGLVQHQQWDGKESTITR	N-ter +28.03 Da, K +28.03 Da	39.4	63.0	4	2600.46	3.252	0.399	FABP5_MOUSE		Fatty acid-binding protein, epidermal;	Epidermal-type fatty acid-binding protein;Fatty acid-binding protein 5;Keratinocyte lipid-binding protein;Psoriasis-associated fatty acid-binding protein homolog;	0.85 - 1.00
VTTLDIVRAN	TFVAELKGLDPAR	N-ter +34.06 Da, K +34.06 Da	28.8	61.8	3	1484.00	0	0.001	MDHM_MOUSE		Malate dehydrogenase, mitochondrial;		0.25 - 0.75
LIKEGDVVRK	TGAIVDVPVGEELGR	N-ter +28.03 Da	36.2	38.7	3	1651.98	0.422	0.06	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;		0.25 - 0.75
RRVAGPQPAQ	TGAPQGSLEGYLFR	N-ter +34.06 Da	28.4	76.0	3	1657.98	-0.713	0.094	FRIL1_MOUSE	Q9CPX4_MOUSE	Ferritin light chain 1;	Ferritin L subunit 1;	0.25 - 0.75
ETRIEKRIVI	TGDAALDHDQALAAQAIR	N-ter +28.03 Da	50.3	53.9	3	1793.00	0.151	0.01	E41L2_MOUSE	Q811B2_MOUSE	Band 4.1-like protein 2;	Generally expressed protein 4.1;	0.25 - 0.75
FKEAFLFDR	TGCEKITLSVQGDVLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	49.8	46.5	3	1831.07	-0.535	0.078	MY1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;	0.25 - 0.75
KETQKSIYI	TGESKEQVANSAFVER	N-ter +28.03 Da, K +28.03 Da	42.0	53.6	3	1807.01	-4.059	0.677	H590B_MOUSE	Q71LX8_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;	0.00 - 0.15
SFSQFTGSDG	TGGDAAAPGAAGTQAEPLHR	N-ter +28.03 Da	60.1	56.3	3	1875.03	-0.434	0.059	LMAN1_MOUSE		Protein ERGIC-53;	Protein;Lectin mannose-binding 1,p58;	0.25 - 0.75
LTRLRLQKRG	TGGVDTAAVGAVDISNADR	N-ter +28.03 Da	54.3	54.3	3	1963.07	0.978	0.179	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.25 - 0.75
KVCYAKNFGP	TGIGFGLTQQVEKK	N-ter +28.03 Da, K +28.03 Da	30.3	50.3	3	1775.07	-1.184	0.161	CSR3_MOUSE		Cysteine and glycine-rich protein 3;	Cysteine-rich protein 3;LIM domain protein, cardiac;Muscle LIM protein;	0.15 - 0.25
PRISVREPMQ	TGIIKAVDSLVPIGR	N-ter +28.03 Da, K +28.03 Da	30.7	51.0	3	1480.97	0.696	0.086	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;		0.25 - 0.75
FRAAVPSGAS	TGIYEALER	N-ter +28.03 Da	39.4	42.6	2	1191.70	-0.12	0.007	ENOA_MOUSE	ENO8_MOUSE	Alpha-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;	0.25 - 0.75
LAYEPVWAIG	TGKTATPQQAQEVHEKLR	N-ter +28.03 Da, K +28.03 Da	37.0	71.1	4	2105.31	0.516	0.061	TPIS_MOUSE	E0CXH5_MOUSE	Triosephosphate isomerase;	Triose-phosphate isomerase;	0.25 - 0.75
HTVEKGGKHK	TGPNLHGLFGR	N-ter +28.03 Da	23.5	66.5	3	1195.73	0.251	0.017	CYC_MOUSE		Cytochrome c, somatic;		0.25 - 0.75
RGTGGVDTAA	TGSVFDISLDR	N-ter +28.03 Da	43.4	35.6	2	1350.73	2.091	0.201	KCRU_MOUSE		Creatine kinase U-type, mitochondrial;	Acidic-type mitochondrial creatine kinase;Ubiquitous mitochondrial creatine kinase;	0.85 - 1.00
VHKAVLDVAE	TGTEAAAATGVIGGIR	N-ter +34.06 Da	37.1	36.7	3	1477.89	-3.474	0.386	SPA3K_MOUSE		Serine protease inhibitor A3K;	Contrapsin;SPI-2;	0.00 - 0.15
QSQAKAYFEK	THEQLTPLVR	N-ter +28.03 Da	30.0	56.1	3	1220.76	-0.434	0.023	APOA2_MOUSE	Q3UKX6_MOUSE	Apolipoprotein A-II;	Apolipoprotein A2;	0.25 - 0.75
IKTKGKEAFP	THFDPSCLFPACR	N-ter +28.03 Da, C +57.02 Da	36.5	71.5	3	1634.85	-0.074	0.005	CAH3_MOUSE		Carbonic anhydrase 3;	Carbonate dehydratase III;Carbonic anhydrase III;	0.25 - 0.75
IFEVKSTAGD	THLGGEDFDNR	N-ter +28.03 Da	36.3	66.7	3	1287.67	-0.535	0.062	HS71A_MOUSE	HS71B_MOUSE	Heat shock 70 kDa protein 1A;	Heat shock 70 kDa protein 3;Hsp68;	0.25 - 0.75
SFRHPGYSTK	THVNDIMLVR	N-ter +28.03 Da	24.7	60.8	3	1224.74	1.138	0.078	KLK7_MOUSE		Kallikrein-7;	Serine protease 6;Stratum corneum chymotryptic enzyme;Thymosin;	0.75 - 0.85
NIPISDPKR	TIADQYGLVKADEGISFR	N-ter +28.03 Da, K +28.03 Da	41.3	58.0	3	2038.19	-0.34	0.065	PRDX1_MOUSE	B1AXW6_MOUSE	Peroxiredoxin-1;	Macrophage 23 kDa stress protein;Osteoblast-specific factor 3;Thioredoxin peroxidase 2;Thioredoxin-dependent peroxide reductase 2;	0.25 - 0.75
GGDVAFVKHTM	TIFEVLPEKADR	N-ter +34.06 Da, K +34.06 Da	40.2	58.2	3	1484.97	0.39	0.051	TRFE_MOUSE	D3YXR8_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;	0.25 - 0.75
	TIGSMENVEFTSEGKGR	N-ter +34.06 Da, K +34.06 Da	56.1	44.9	3	2008.15	-1.252	0.149	SMVD1_MOUSE		SET and MYND domain-containing protein 1;	CD8b-opposite;Zinc finger protein BOP;	0.15 - 0.25
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.9	84.3	4	2206.39	-0.811	0.028	MLRS_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;		0.25 - 0.75
		N-ter +34.06 Da, K +34.06 Da	24.3	59.7	3	1312.88	1.949	0.343	Q99K47_MOUSE	E9PV24_MOUSE		Fast skeletal myosin light chain 2;MLC2F;	0.85 - 1.00
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	36.1	71.3	4	2059.13	0.251	0.025	LEG1_MOUSE		Galectin-1;	14 kDa lectin;Beta-galactoside-binding lectin L-14-I;Galactin;Lactose-binding lectin 1;Lectin galactoside-binding soluble 1;S-Lac lectin 1;	0.25 - 0.75
PRFNAHGDMAN	TIVCNTKEDGTWGTEHR	N-ter +28.03 Da, K +28.03 Da	45.9	57.0	3	1715.04	5.053	1.008	K1C17_MOUSE	D3YXP7_MOUSE	Keratin, type I cytoskeletal 17;	Cytokeratin-17;Keratin-17;	0.85 - 1.00
RDAYVTRQVR	TIVEVQDGKVISSR	N-ter +28.03 Da, K +28.03 Da	27.4	47.2	3	1496.01	-1	0.16	HSP7C_MOUSE	Q504P4_MOUSE	Heat shock cognate 71 kDa protein;	Heat shock 70 kDa protein 8;	0.15 - 0.25
EIAEAYLGKA	TKDAGTIAGLNVLR	N-ter +34.06 Da, K +34.06 Da	46.9	69.9	4	1797.10	-0.044	0.004	ACTS_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;	0.25 - 0.75
SLSTFQQMWI	TKQYDEAGPSIVHR	N-ter +34.06 Da, K +34.06 Da	46.9	69.9	4	1797.10	-0.044	0.004	ACTS_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;	0.25 - 0.75
VFEWEAFARG	TKSLMDEVVKATSR	N-ter +28.03 Da, K +28.03 Da	26.4	68.2	4	1648.04	-0.34	0.022	PGK1_MOUSE		Phosphoglycerate kinase 1;		0.25 - 0.75
AEITKLATDL	TKVNKECCHGDLLECAADR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	37.0	73.0	4	2421.37	-0.396	0.094	ALBU_MOUSE		Serum albumin;		0.25 - 0.75

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
GGGDVAFVKH LYANTVLSGG	TTIFEVLPEKADR TTMYPGIADR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	48.8 29.1	57.0 39.1	3 2	1586.03 1157.64	1.531 0.322	0.222 0.049	TRFE_MOUSE ACTA_MOUSE	D3YR8_MOUSE ACTB_MOUSE	Serotransferrin; Actin, aortic smooth muscle;	Beta-1 metal-binding globulin;Siderophilin; Alpha-actin-2;	0.75 - 0.85 0.25 - 0.75
TKCFVKLPEG VPLAGTNGET	TTEPKYLGAEMQSVGNMR TTQGLDGLSER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	31.9 29.6	54.3 30.5	3 2	2230.20 1209.68	0.872 -1.089	0.1 0.093	TRFE_MOUSE ALDOA_MOUSE	E9Q035_MOUSE Q9CPQ9_MOUSE	Serotransferrin; Fructose-bisphosphate aldolase A;	Beta-1 metal-binding globulin;Siderophilin; Aldolase 1;Muscle-type aldolase; XP-C repair-complementing complex 58 kDa protein;	0.25 - 0.75 0.15 - 0.25
AAATTTATT	TTSGGHPLEFLR	N-ter +28.03 Da	27.3	76.9	3	1341.81	0.227	0.008	RD23B_MOUSE	Q3TJ52_MOUSE	UV excision repair protein RAD23 homolog B;	XP-C repair-complementing complex 58 kDa protein;	0.25 - 0.75
AAAATTTATT ISAVEQTAQR	TTTSGGHPLEFLR TTTTAVHIQPAQEQR	N-ter +28.03 Da N-ter +34.06 Da	40.9 45.8	65.4 60.5	3 3	1442.85 1785.07	0.275 0.575	0.03 0.151	RD23B_MOUSE TITIN_MOUSE	Q3TJ52_MOUSE Q8BU16_MOUSE	UV excision repair protein RAD23 homolog B; Titin;	Connectin;	0.25 - 0.75 0.25 - 0.75
ITVKTESTVK	TTVFSCNLGEKDETTADGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	46.0	51.0	3	2303.19	2.414	0.53	FABP5_MOUSE	E9Q964_MOUSE	Fatty acid-binding protein, epidermal;	Epidermal-type fatty acid-binding protein;Fatty acid-binding protein 5;Keratinocyte lipid-binding protein;Psoriasis-associated fatty acid-binding protein homolog;	0.85 - 1.00
QRPRQLQKPR	TVATPLNQVANPNFAIFGGARPR	N-ter +28.03 Da	50.8	65.1	4	2378.44	1.971	0.297	IF4H_MOUSE	Q80U88_MOUSE	Eukaryotic translation initiation factor 4H;	Williams-Beuren syndrome chromosomal region 1 protein homolog;	0.85 - 1.00
QRPRQLQKPR EKAKREVCSW GCVAGDEESY M	TVATPLNQVANPNFAIFGGAR TVEGDVNTDPWAGYR TVFKDLFDPIQDR TVHNLFLFDR	N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	57.0 38.5 44.0 27.8	44.7 49.9 66.0 69.3	3 3 3 3	2125.22 1706.88 1774.15 1310.81	2.671 -0.786 -2.059 -0.044	0.625 0.068 0.944 0.006	IF4H_MOUSE AMP1_MOUSE KCRM_MOUSE TPPC1_MOUSE	Q80U88_MOUSE	Eukaryotic translation initiation factor 4H; Methionine aminopeptidase 1; Creatine kinase M-type; Trafficking protein particle complex subunit 1;	Williams-Beuren syndrome chromosomal region 1 protein homolog; Peptidase M 1; Creatine kinase M chain;M-CK;	0.85 - 1.00 0.25 - 0.75 0.00 - 0.15 0.25 - 0.75
KDVVDYIFG	TVIQEVKTSNVAR	N-ter +28.03 Da, K +28.03 Da	35.4	60.1	3	1499.96	0.963	0.207	ECHB_MOUSE	D3YXU1_MOUSE	Trifunctional enzyme subunit beta, mitochondrial;	TP-beta;	0.25 - 0.75
GNNITVKTES VETELRGVCD NMKGNDISG VDIRKDLAN VVQVPSAYQK VMDSDGQVTH	TVKTTVFSCNLGEKDETTADGR TVLGLDLSHLIKAGDAESR TVLSDYVSGSPPSGTGLHR TVLSGGTTMYPGIADR TVPIEAVTSKTSNIR TVPIYEGYALPHALR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da	51.0 28.5 43.6 47.8 30.2 27.9	80.8 73.5 54.6 42.5 44.0 56.1	4 3 3 3 3 3	2659.53 2107.32 1927.09 1665.91 1683.09 1840.13	2.759 2.886 0.411 0.84 1.007 2.687	0.66 0.215 0.04 0.206 0.06 0.117	FABP5_MOUSE 1433S_MOUSE PEBP1_MOUSE ACTB_MOUSE SRC8_MOUSE ACTB_MOUSE	E9Q964_MOUSE	Fatty acid-binding protein, epidermal; 14-3-3 protein sigma; Phosphatidylethanolamine-binding protein 1; Actin, cytoplasmic 1; Src substrate cortactin; Actin, cytoplasmic 1;	Epidermal-type fatty acid-binding protein;Fatty acid-binding protein 5;Keratinocyte lipid-binding protein;Psoriasis-associated fatty acid-binding protein homolog; Stratifin; HCNPPP; Beta-actin;	0.85 - 1.00 0.85 - 1.00 0.25 - 0.75 0.25 - 0.75 0.25 - 0.75 0.85 - 1.00
MATRG SPGMKDLGA SDEHGIDPTG TSTVKKQVTK VSGRQQVEL SQVVKAVLD TFTVITMVLG	TVTDFPGFDR TWVVLGHSER TYHGDSDLQDR TYKMADEAGSEHR VAEQADLEQAFSPSPDPCVDR VAETGTEAAATGVIGIR VAEVFEIFRR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da N-ter +34.06 Da	41.9 36.3 25.4 27.4 52.1 61.4 17.2	36.4 71.6 104.4 79.3 44.1 45.9 69.8	2 3 3 4 3 3 3	1238.64 1210.73 1446.83 1632.95 2376.16 1771.03 1411.94	0.138 -0.667 2.359 -1.184 5.737 -0.415 -3.184	0.013 0.053 0.704 0.215 2.147 0.05 0.289	ANXA5_MOUSE TPIS_MOUSE TBB5_MOUSE O99K47_MOUSE APIS_MOUSE SPA3K_MOUSE CXE1_MOUSE	E0CXH5_MOUSE E9PV24_MOUSE	Annexin A5; Triosephosphate isomerase; Tubulin beta-5 chain; Apoptosis inhibitor 5; Serine protease inhibitor A3K; Gap junction epsilon-1 protein;	Annexin CII;Annexin V;Annexin-5;Calphobindin I;Endonexin II;Lipocortin V;Placental anticoagulant protein 4;Placental anticoagulant protein I;Thromboplastin inhibitor;Vascular anticoagulant-alpha; Triose-phosphate isomerase;	0.25 - 0.75 0.25 - 0.75 0.85 - 1.00 0.15 - 0.25 0.85 - 1.00 0.25 - 0.75 0.00 - 0.15
LIGTFNIVRL VNOAQKEAEK KNCGRHRFVL PLPVPHQVK WHHSFYNELR WHHTFYNELR EERSVNCGTM	VAGEMGQNEPDQGGOR VAHGVTQGVNQAGKETQR VANQDFVENLVR VANSPANADYQER VAPEEHPTLLTEAPLNKANR VAPEEHPTLLTEAPLNKANR VAQPKNLEGVYGFANLPNQVYR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	40.7 47.3 47.9 44.4 46.8 40.8 52.0	43.6 77.6 54.9 48.1 71.5 70.0 72.0	3 4 3 3 3 3 4	1699.83 1935.18 1529.90 1461.76 2352.45 2350.47 2544.60	2.263 1.803 1.214 -1.358 3.886 4.128 0.138	0.627 0.408 0.068 0.244 0.523 0.647 0.015	HCD2_MOUSE S8S1_MOUSE TOM1_MOUSE E9PYJ9_MOUSE ACTA_MOUSE ACTB_MOUSE E9Q9F5_MOUSE	Q99N15_MOUSE E9QP82_MOUSE Q3UDC3_MOUSE	3-hydroxyacyl-CoA dehydrogenase type-2; Suprabasin; Target of Myb protein 1; Actin, aortic smooth muscle; Actin, cytoplasmic 1;	17-beta-hydroxysteroid dehydrogenase 10;3-hydroxy-2-methylbutyryl-CoA dehydrogenase;3-hydroxyacyl-CoA dehydrogenase type II;Endoplasmic reticulum-associated amyloid beta-peptide-binding protein;Mitochondrial ribonuclease P protein 2;Type II HDH;	0.85 - 1.00 0.85 - 1.00 0.75 - 0.85 0.15 - 0.25 0.85 - 1.00 0.85 - 1.00 0.25 - 0.75
AHQLFGRGFSF VHTSVASATS PTLILAQGSN	VATGLMEDDGKPR VATKTEQGPSPSEYIFER VDELGCSHLGQSYER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, C +57.02 Da	29.0 32.1 44.8	62.3 72.2 71.1	3 3 3	1443.83 2268.45 1870.01	-0.044 -1.252 -0.811	0.002 0.119 0.142	K6A1_MOUSE OAT_MOUSE CO3A1_MOUSE	Q505N6_MOUSE	Ribosomal protein S6 kinase alpha-1; Ornithine aminotransferase, mitochondrial; Collagen alpha-1(III) chain;	Ribosomal protein S6 kinase 1;MAP kinase-activated protein kinase 1a;Ribosomal S6 kinase 1; Ornithine--oxo-acid aminotransferase;	0.25 - 0.75 0.15 - 0.25 0.25 - 0.75
REALLGVQED EVNKRDIVFL	VDEYVVLGHEEQQR VDGSSSLGPSNFNAIR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	20.5 39.0	32.4 47.1	3 3	1784.96 1647.90	5.382 -0.599	1.218 0.036	RCN2_MOUSE E9PWQ3_MOUSE	D3YWD1_MOUSE	Reticulocalbin-2;	Taipoxin-associated calcium-binding protein 49;	0.85 - 1.00 0.25 - 0.75
AGKHVPRAVF AGKHVPRAVF	VDLEPTVIDEIR VDLEPTVIDEVR	N-ter +28.03 Da N-ter +34.06 Da	39.2 32.5	38.6 49.8	2 3	1425.83 1417.86	1.731 4.364	0.48 1.026	TBA4A_MOUSE TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-4A chain; Tubulin alpha-1A chain;	Alpha-tubulin 4;Alpha-tubulin isotype M-alpha-4;Tubulin alpha-4 chain; Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;	0.75 - 0.85 0.85 - 1.00

Table S11, Tholen et al.

Non Prime Site	Prime Site	Modifications	Hyperscore	Mass error in ppm	Charge	Precursor neutral mass in Da	Fold change (log ₂) of ASAPRatio	FC-error of ASAPRatio	Uniprot ID 1	Uniprot ID 2	Protein Name 1	Protein Name 2	Quantile
AGLPTSLTL	YLDNNKISNIPDEVFKR	N-ter +34.06 Da, K +34.06 Da	28.3	72.8	4	2230.41	-3.644	0.456	LUM_MOUSE		Lumican;	Keratan sulfate proteoglycan lumican;	0.00 - 0.15
LGLKPLSFL	YMEKNQLEEVPSALPR	N-ter +34.06 Da, K +34.06 Da	50.4	49.7	3	1971.17	1.996	0.235	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;	0.85 - 1.00
ETIKRLETY	YNATEPVIISFYDKR	N-ter +34.06 Da, K +34.06 Da	43.5	54.1	3	1770.06	-1	0.14	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;	0.15 - 0.25
DEQLTSLKVL	YNDLGAQVTEGKQDLER	N-ter +28.03 Da, K +28.03 Da	22.3	59.3	3	1991.11	0.299	0.027	E9Q6R7_MOUSE				0.25 - 0.75
DLQLERINVV	YNEATGGKYVPR	N-ter +28.03 Da, K +28.03 Da	19.6	68.7	3	1409.83	0.202	0.032	TBB2C_MOUSE	TBB5_MOUSE	Tubulin beta-4B chain; WD repeat domain phosphoinositide-interacting protein 2;	Tubulin beta-2C chain;	0.25 - 0.75
VGASDGLYLM	YNLDPQEGGECALMR	N-ter +28.03 Da, C +57.02 Da	45.6	68.1	3	1779.91	0.651	0.124	WIPI2_MOUSE	D3YWK1_MOUSE			0.25 - 0.75
STSSPVFHPK	YQACSGPILPHR	N-ter +28.03 Da, C +57.02 Da	30.3	63.5	3	1425.81	-0.737	0.061	Q99M20_MOUSE				0.25 - 0.75
DKAKELWDTL	YQLETDKFEFGKLR	N-ter +34.06 Da, K +34.06 Da	22.6	54.0	4	2166.42	-1.434	0.116	TNNT3_MOUSE	A2A6J0_MOUSE	Troponin T, fast skeletal muscle;	Fast skeletal muscle troponin T;	0.15 - 0.25
RLMEIQEKL	YRPPVLDALGR	N-ter +28.03 Da	40.1	71.5	3	1380.89	1.736	0.172	E9Q005_MOUSE	E9PVA8_MOUSE			0.75 - 0.85
PGLTGNFAAQ	YSDKGVSSGPGMGLMGPR	N-ter +28.03 Da, K +28.03 Da	74.9	67.8	3	1948.09	-4.322	0.864	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;	0.00 - 0.15
VQVEEYIDL	YSEEPGEEPAWVQTER	N-ter +28.03 Da	45.3	48.1	3	2063.01	2.356	0.262	RCN3_MOUSE	D3ZTT1_MOUSE	Reticulocalbin-3;		0.85 - 1.00
SPRRSQVHPE	YSEGEAHSEVSQR	N-ter +28.03 Da	39.2	82.5	3	1505.80	-0.494	0.278	E9QPZ3_MOUSE	FILA2_MOUSE			0.25 - 0.75
MLQTRFPLDY	YSIPFPTPTLTLGR	N-ter +28.03 Da	25.3	47.3	3	1674.98	-0.252	0.024	UBP2L_MOUSE	E9PZA1_MOUSE	Ubiquitin-associated protein 2-like;		0.25 - 0.75
AAMKANTMSN	YSLPASLLDHR	N-ter +28.03 Da	40.0	84.6	3	1411.90	1.585	0.227	ST2B1_MOUSE	E9QK1_MOUSE	Sulfotransferase family cytosolic 2B member 1;	Alcohol sulfotransferase;Hydroxysteroid sulfotransferase 2;	0.75 - 0.85
FIHHELLAYL	YSSADQSSLMEEAEQQR	N-ter +28.03 Da	57.8	50.4	3	2144.04	2.646	0.537	DYN2_MOUSE	Q91Z39_MOUSE	Dynamain-2;	Dynamain UDNM;	0.85 - 1.00
CTFFLAVSGL	YSSDDVIELTPSNFNR	N-ter +34.06 Da	48.0	47.5	3	1977.05	0.614	0.084	PDIA6_MOUSE	Q3TML0_MOUSE	Protein disulfide-isomerase A6;	Thioredoxin domain-containing protein 7;	0.25 - 0.75
SYMKIDELSL	YSVPEGQSKYVEEPR	N-ter +28.03 Da, K +28.03 Da	22.2	58.9	3	1823.02	-0.474	0.118	APOO_MOUSE	B1ASQ2_MOUSE	Apolipoprotein O;	Protein FAM121B;	0.25 - 0.75
PLAKLKDSGT	YTCTASNEAGSSSSAAVAVR	N-ter +34.06 Da, C +57.02 Da	20.4	41.6	4	2109.07	-4.644	1.161	TITIN_MOUSE	E9Q8K5_MOUSE	Titin;	Connectin;	0.00 - 0.15
RSESIYEML	YTPPEPNGMASEEVTEKER	N-ter +28.03 Da, K +28.03 Da	31.3	61.8	3	2122.12	2.118	0.678	E9Q3A1_MOUSE	E9Q6H8_MOUSE			0.85 - 1.00
YGFQNAILVR	YTQKAPQVSTPTLVEAAR	N-ter +28.03 Da, K +28.03 Da	58.5	50.2	3	2015.21	1.799	0.274	ALBU_MOUSE		Serum albumin;		0.85 - 1.00
QKIGQPTLLL	YVDAGAETMTQR	N-ter +34.06 Da	35.4	68.4	3	1374.76	1.362	0.207	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;	0.75 - 0.85
MYAKRAFVHW	YVGEEMEEGFSEAR	N-ter +28.03 Da	48.0	64.7	3	1716.84	4.994	0.694	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;	0.85 - 1.00
LCALLVPGGA	YVLDDSDGLGR	N-ter +28.03 Da	23.5	47.1	2	1236.66	0.816	0.046	GALC_MOUSE		Galactocerebrosidase;	Galactocerebrosidase;Galactosylceramidase;Galactosylceramide beta-galactosidase;	0.25 - 0.75
LGGALDSGAA	YVLEQASSHIGNSTQAAVR	N-ter +28.03 Da	51.8	53.4	3	2058.16	1.664	0.278	ATLA3_MOUSE	E9PYT3_MOUSE	Atlastin-3;		0.75 - 0.85
HPFMWNEHLG	YVLTCPNSLGTGLR	N-ter +28.03 Da, C +57.02 Da	30.5	39.4	3	1577.89	-2.737	0.365	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;	0.00 - 0.15
AFRPMEVANF	YYEPDCLAYGAKAAR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	29.1	63.1	3	1802.98	-0.943	0.145	CEBPB_MOUSE		CCAAT/enhancer-binding protein beta;	AGP/EBP;Interleukin-6-dependent-binding protein;Liver-enriched transcriptional activator;	0.15 - 0.25
LQKRPKPDEK	YSSSIWGPCTCDGLDR	N-ter +34.06 Da, C +57.02 Da	18.0	97.2	4	1910.06	-6.644	0.001	DCOR_MOUSE	Q8CIC5_MOUSE	Ornithine decarboxylase;		0.00 - 0.15