

Table S7: Dimethylated (naturally unmodified) N-termini identified in the TAILS experiment comparing wild-type and *Ctsb*^{-/-} skin (replicate 1). 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
QTATQQAQLA	AAAEIDEEPVKAKQSR	N-ter +34.06 Da, K +34.06 Da	28.7	88.0	4	1930.29	0.28	0.04	NACAM_MOUSE	NACA_MOUSE	Nascent polypeptide-associated complex subunit alpha, muscle-specific form;	Alpha-NAC, muscle-specific form;
RRAPAAQPPA	AAAPSAVGSPAAAPR	N-ter +28.03 Da	45.2	50.3	3	1320.78	0.23	0.04	CHCH2_MOUSE	B2RPJ8_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;	
DLLATGGTMM	AACDLLHLRL	N-ter +34.06 Da, C +57.02 Da	26.0	48.9	3	1229.74	-1.29	0.09	APT_MOUSE	Q6PK77_MOUSE	Adenine phosphoribosyltransferase;	
APFRPSSERF	AACTVEEILAKMEQPR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	26.6	69.3	3	1913.17	-1.60	0.29	TB182_MOUSE		182 kDa tankyrase-1-binding protein;	
MIRFH	AADVKFVEMYR	N-ter +28.03 Da, K +28.03 Da	28.8	78.9	3	1454.87	1.45	0.10	Q9D1Q5_MOUSE			
TATQQAQLAA	AAEIDEEPVKAKQSR	N-ter +28.03 Da, K +28.03 Da	28.8	68.9	4	1841.12	1.69	0.07	NACAM_MOUSE	NACA_MOUSE	Nascent polypeptide-associated complex subunit alpha, muscle-specific form;	Alpha-NAC, muscle-specific form;
CGTCGQPADK	AAGGAGAQQVGGSSISSGSSASVTVTR	N-ter +28.03 Da	91.5	51.3	3	2249.24	-1.60	0.19	LMNA_MOUSE		Prelamin-A/C;	
SQADCAVLIV	AAGVGEFAGKISNGQTR	N-ter +28.03 Da, K +28.03 Da	26.0	56.3	3	1847.06	1.55	0.06	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
MTRPLEQAV	AAIVCTFQEYAGR	N-ter +34.06 Da, C +57.02 Da	30.7	34.2	3	1518.82	-1.29	0.13	S10A3_MOUSE		Protein S100-A3;	Protein S-100E;S100 calcium-binding protein A3;
TAGAGVRARR	AALDQTSGLPGGAAQDPGGR	N-ter +34.06 Da	40.6	53.0	3	1872.05	-0.54	0.02	ATS2_MOUSE		A disintegrin and metalloproteinase with thrombospondin motifs 2;	Procollagen I N-proteinase;Procollagen I/II amino propeptide-processing enzyme;Procollagen N-endopeptidase;
PFAGGGYRLG	AAPEEESAVVAGER	N-ter +34.06 Da	40.9	52.5	3	1511.81	-0.20	0.03	NSF1C_MOUSE		NSFL1 cofactor p47;	p97 cofactor p47;
LRAMRGVING	AAPELVPVTTGGPMAGAR	N-ter +28.03 Da	41.2	41.9	3	1618.92	0.19	0.01	VATB2_MOUSE		V-type proton ATPase subunit B, brain isoform;	subunit;Vacuolar proton pump subunit B 2;
EKEERALLYAD	AAPGDKNLLHHYPDGR	N-ter +34.06 Da, K +34.06 Da	32.2	61.8	4	1804.14	-0.54	0.05	SRCA_MOUSE		Sarcalumenin;	
YALSSPLQLL	AAQASSSTPVVITR	N-ter +34.06 Da	31.9	51.1	3	1420.88	-0.32	0.02	FOXK1_MOUSE	E9Q4K6_MOUSE	Forkhead box protein K1;	Myocyte nuclear factor;
NSVQSGNLAL	AASAAAVDAGMAMAGSQSPVLR	N-ter +34.06 Da	56.8	41.2	3	1978.10	0.35	0.02	PTBP1_MOUSE	Q922I7_MOUSE	Poly(pyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;
GTKASKMPKP	AASDLPVPAEGVVR	N-ter +34.06 Da	37.8	31.7	2	1314.78	-0.58	0.02	Q8VCQ8_MOUSE	E9Q0M9_MOUSE		
QHLKSVMLQI	AATELEKEER	N-ter +34.06 Da, K +34.06 Da	32.1	73.5	3	1329.84	0.01	0.00	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;
QTQDPLYGYF	AAVAGDQGIADDELQQR	N-ter +28.03 Da	59.4	48.5	3	1783.96	-3.32	0.33	SORCN_MOUSE	F6T867_MOUSE	Sorcin;	
DLYTAKGLFR	AAVPSGASTGIYEALERL	N-ter +28.03 Da	53.2	45.4	3	1832.05	0.80	0.08	ENOA_MOUSE	ENOB_MOUSE	Alpha-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;
MVHLTDAEK	AAVSCLWGWKNSDEVGGEALGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	49.0	74.9	4	2342.41	-4.06	0.68	HBB1_MOUSE		Hemoglobin subunit beta-1;	Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
LWLLPSLALA	AAVTEPADLEYTEVPR	N-ter +34.06 Da	46.3	38.5	3	1793.99	-0.79	0.04	Q8BVL6_MOUSE			
LSGEDKSNIK	AAWGIKGGHGAEGAEALER	N-ter +34.06 Da, K +34.06 Da	45.5	61.2	4	2110.25	-3.47	0.39	HBA_MOUSE	Q91VB8_MOUSE	Hemoglobin subunit alpha;	Alpha-globin;Hemoglobin alpha chain;
SVTRESGQY	AAYSINAVGAAYSSAR	N-ter +34.06 Da	32.5	75.7	3	1604.96	-6.64	0.00	OBSCN_MOUSE	E9QQ96_MOUSE	Obscurin;	Obscurin-RhoGEF;Obscurin-myosin light chain kinase;
QPFPPTVPTK	ACDITLIKTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	19.3	119.3	3	1233.82	3.72	0.27	CG031_MOUSE		Uncharacterized protein C7orf31 homolog;	Protein TISP74;
M	ACGLVASNLNLKPGECKVLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	36.0	62.7	4	2282.40	0.21	0.02	LEG1_MOUSE			14 kDa lectin;Beta-galactoside-binding lectin L-14-I;Galactin;Lactose-binding lectin 1;Lectin galactoside-binding soluble 1;S-Lac lectin 1;
YEKRAMEVA	ADALGEEWKGIVVR	N-ter +28.03 Da, K +28.03 Da	26.4	84.3	3	1648.00	-1.56	0.18	RS6_MOUSE	D3YX41_MOUSE	40S ribosomal protein S6;	Phosphoprotein NP33;
LLLESYTSHG	ADANLEAGSLKETR	N-ter +34.06 Da, K +34.06 Da	29.6	63.7	3	1541.97	0.19	0.03	FBN1_MOUSE	A2AQ53_MOUSE	Fibrillin-1;	
IQNLHSFDPF	ADASKGDDLLPAGTEDYHIR	N-ter +34.06 Da, K +34.06 Da	64.4	71.6	4	2324.40	0.90	0.10	EIF1_MOUSE		Eukaryotic translation initiation factor 1;	Protein translation factor SUI1 homolog;
IQNLQSFDPF	ADATKGDDLLPAGTEDYHIR	N-ter +28.03 Da, K +28.03 Da	46.9	80.6	4	2326.37	1.99	0.21	EIF1B_MOUSE		Eukaryotic translation initiation factor 1b;	
ALMLQGVDDL	ADAVAVTMGPCKGR	N-ter +28.03 Da, K +28.03 Da	35.8	70.7	3	1327.82	0.54	0.06	CH60_MOUSE	D3Z2F2_MOUSE	60 kDa heat shock protein, mitochondrial;	60 kDa chaperonin;Chaperonin 60;HSP-65;Heat shock protein 60;Mitochondrial matrix protein P1;
LLSQVLLVTS	ADDLECTPGFQR	N-ter +28.03 Da, C +57.02 Da	24.5	54.3	3	1435.72	0.04	0.01	CAD13_MOUSE		Cadherin-13;	Heart cadherin;Truncated cadherin;
MSFSAQDI	ADFKFAFLFDR	N-ter +34.06 Da, K +34.06 Da	40.6	70.7	3	1538.99	0.41	0.11	E9PWG4_MOUSE			
VQIKRRKRV	ADGIFKAELNEFLTR	N-ter +34.06 Da, K +34.06 Da	24.7	55.5	3	1791.12	-1.06	0.18	RS3_MOUSE	D3YV43_MOUSE	40S ribosomal protein S3;	
EELRSPKLFY	ADHPPIFLVR	N-ter +34.06 Da	23.7	60.9	3	1247.80	-0.36	0.01	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
VIDTQKVKL	ADIQIEQLNR	N-ter +34.06 Da	38.3	23.3	2	1232.72	0.66	0.03	PPD1_MOUSE	Q9CQF7_MOUSE	Prefoldin subunit 1;	
ALHAAAWKGY	ADIVQLLAKGAR	N-ter +34.06 Da, K +34.06 Da	29.6	80.5	3	1435.07	-1.56	0.23	OSTF1_MOUSE		Osteoclast-stimulating factor 1;	SH3 domain protein 3;
VPRPEDTLTY	ADLDMVHLR	N-ter +28.03 Da	35.5	62.3	3	1183.68	0.41	0.04	SHPS1_MOUSE	Q6P6I8_MOUSE	Tyrosine-protein phosphatase non-receptor type substrate 1;	Brain Ig-like molecule with tyrosine-based activation motifs;CD172 antigen-like family member A;inhibitory receptor SHPS-1;MyD-1 antigen;Signal-regulatory protein alpha-1;p84;
AGDEESYEVF	ADLFDVPVILR	N-ter +34.06 Da, K +34.06 Da	38.0	57.6	3	1353.94	-0.43	0.22	KCRS_MOUSE		Creatine kinase 5-type, mitochondrial;	Basic-type mitochondrial creatine kinase;Sarcomeric mitochondrial creatine kinase;
ASLFVVARIL	ADLNQQAPAPAPAEER	N-ter +28.03 Da	45.4	48.5	3	1575.88	-0.22	0.02	KLF13_MOUSE		Kruppel-like factor 13;	Basic transcription element-binding protein 3;Erythroid transcription factor FKLF-2;RANTES
LKGRVFEVSL	ADLNQDEVAFR	N-ter +34.06 Da	52.2	29.5	2	1310.71	1.10	0.07	RS3A_MOUSE	D3Z7W7_MOUSE	40S ribosomal protein S3a;	factor of late activated T-lymphocytes 1;Transcription factor BTEB3; Protein TU-11;

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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
YSNISKDRRY	ADLTEDQLPSCSKLDTIAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	49.0	55.8	3	2329.34	0.07	0.01	PGAM1_MOUSE		Phosphoglycerate mutase 1;	BPG-dependent PGAM 1;Phosphoglycerate mutase isozyme B;
IWTRHPVQG	ADLVQLDSICTR	N-ter +34.06 Da, C +57.02 Da	36.0	40.8	3	1510.85	0.04	0.00	LYVE1_MOUSE		Lymphatic vessel endothelial hyaluronate receptor 1;	Cell surface retention sequence-binding protein 1;Extracellular link domain-containing protein 1;
RSGETEDTFI	ADLVVGLCTGQKGTGAPCR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	61.0	57.7	3	2071.21	4.68	0.53	ENOB_MOUSE	ENOA_MOUSE	Beta-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 3;
ALPSRMRERWS	ADPLAPGAFCTQIVR	N-ter +34.06 Da, C +57.02 Da	41.9	52.4	3	1648.97	0.29	0.02	Q3URZ6_MOUSE	F7DBB3_MOUSE		Muscle-specific enolase;Skeletal muscle enolase;
TRRGRRAVGS	ADSADELENGALLQLQLSSPIGQR	N-ter +34.06 Da	23.1	9.0	4	3112.71	-6.64	0.00	RHG36_MOUSE		Rho GTPase-activating protein 36;	
LLPPPNAYA	ADTPGEATPPPR	N-ter +34.06 Da	27.1	80.7	3	1241.75	0.67	0.04	MESD_MOUSE	D3YVR4_MOUSE	LDLR chaperone MESD;	Mesoderm development candidate 2;
EKEKEPVQDY	ADVNLPLPCFYAVSR	N-ter +34.06 Da, C +57.02 Da	23.1	58.3	3	1884.08	-0.67	0.07	STAP1_MOUSE	E9PYX8_MOUSE	Signal-transducing adaptor protein 1;	Mesoderm development protein;
TLGISPFHEF	ADWVFTANDSGHR	N-ter +34.06 Da	56.0	70.0	3	1421.81	-1.79	0.12	TTHY_MOUSE		Transthyretin;	Stem cell adaptor protein 1;
VREKEAQLPE	AEAPGVLDLGLPEGR	N-ter +28.03 Da	42.8	43.8	3	1520.89	-0.36	0.03	NIBAN_MOUSE		Protein Niban;	Prealbumin;
VPYEPDSVVM	AEAPVGVETDLIDVGFDDVKKGGPGR	N-ter +34.06 Da, K +34.06 Da	51.8	88.5	4	2843.83	-2.25	0.21	IST1_MOUSE	Q8BHC2_MOUSE	IST1 homolog;	Protein FAM129A;
VLDDEDLDF	AEATEEVLSDSPER	N-ter +28.03 Da	45.6	69.2	3	1559.84	-0.03	0.00	SNX2_MOUSE		Sorting nexin-2;	
APVAPCENKF	AEDSAEAAVSPESR	N-ter +34.06 Da	42.0	55.9	3	1550.85	0.99	0.10	CA174_MOUSE	E9PUHO_MOUSE	UPF0688 protein C1orf174 homolog;	
M	AEGQVLVDGR	N-ter +28.03 Da	48.1	16.8	2	1183.68	0.00	0.00	RL13A_MOUSE	Q3TDS9_MOUSE	60S ribosomal protein L13a;	Transplantation antigen P198;Tum-P198 antigen;
AGDEEYEVF	AELFDPVIQER	N-ter +34.06 Da	34.4	8.0	2	1349.75	-0.60	0.05	KCRU_MOUSE	B0R0F0_MOUSE	Creatine kinase U-type, mitochondrial;	Acidic-type mitochondrial creatine kinase;Ubiquitous mitochondrial creatine kinase;
LEITESQSAD	AEPPPPDKPDLRSR	N-ter +34.06 Da, K +34.06 Da	42.1	63.9	3	1467.97	-0.14	0.00	ZDHC5_MOUSE	E9Q092_MOUSE	Palmitoyltransferase ZDHC5;	Zinc finger DHHC domain-containing protein 5;
SLQLVSWTLA	AEPVDVLEAWGVHR	N-ter +34.06 Da	67.8	84.8	3	1611.00	0.25	0.02	Q9JL12_MOUSE			
ARSKPSPQLS	AETPVAALPEFPR	N-ter +28.03 Da	28.9	54.9	3	1424.85	-0.23	0.01	E9Q0S6_MOUSE			
SAAGSIVTLM	AEVNLSTQVDADQLDLQLSR	N-ter +34.06 Da	58.5	54.2	3	2377.35	-0.69	0.08	SYNEM_MOUSE	F6VN34_MOUSE	Synemin;	Desmuslin;
ISLEVSRGSR	AEVSTHLSQSPGR	N-ter +34.06 Da	51.8	69.8	3	1427.89	-1.56	0.14	SYNEM_MOUSE	F6VN34_MOUSE	Synemin;	Desmuslin;
KKPRKGMYSY	AFVQTCSR	N-ter +34.06 Da, C +57.02 Da	27.5	32.2	2	1061.59	0.45	0.02	HMG81_MOUSE	HMG82_MOUSE	High mobility group protein B1;	High mobility group protein 1;
PFDAAGTYSR	AFNELGEALAECKLDVLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	33.1	76.3	3	2002.24	-1.89	0.28	MYPC2_MOUSE	F8W134_MOUSE	Myosin-binding protein C, fast-type;	C-protein, skeletal muscle fast isoform;
PKHLSRKTIV	AFPKVMPPPOAR	N-ter +28.03 Da, K +28.03 Da	34.4	56.3	3	1521.93	0.90	0.04	Q3U422_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;	
SSVLTPTPPQ	AFTVIDQNR	N-ter +28.03 Da	32.6	30.5	2	1090.61	1.09	0.04	MLRS_MOUSE	F6ULR7_MOUSE		Fast skeletal myosin light chain 2;MLC2F;
DFRTHMVGGR	AGDAFGDTSFLTSKAR	N-ter +28.03 Da, K +28.03 Da	40.8	80.1	3	1698.99	-0.64	0.05	BORG4_MOUSE	A2A6Q2_MOUSE	Cdc42 effector protein 4;	Binder of Rho GTPases 4;
RTFGTTGERR	AGEEAADSPELPR	N-ter +28.03 Da	60.6	44.1	2	1368.71	-0.20	0.01	ADXL_MOUSE		Adrenodoxin-like protein, mitochondrial;	Ferredoxin-1-like protein;
FKRSSEGGQED	AGELDFSGLLKR	N-ter +28.03 Da, K +28.03 Da	42.3	67.7	3	1360.86	-0.14	0.02	D3YU50_MOUSE	Q6P6L5_MOUSE		
VFVSEAGPAG	AGESKCLPMVKVLDVAVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.4	68.3	4	1956.22	0.10	0.01	TTHY_MOUSE		Transthyretin;	Prealbumin;
VCDNGSLGCK	AGFAGDDAPR	N-ter +34.06 Da	39.6	39.6	2	1009.54	-0.69	0.07	ACTA_MOUSE	ACTB_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;
M	AGGEAGVTLGQPILSR	N-ter +28.03 Da	49.2	8.7	2	1576.85	5.53	0.72	IF2H_MOUSE		Eukaryotic translation initiation factor 2 subunit 3, Y-linked;	Eukaryotic translation initiation factor 2 subunit gamma, Y-linked;
GGPPPPGPPP	AGGGGGAAGAGGGPPPPGPPGAGDR	N-ter +34.06 Da	76.8	56.8	3	1848.01	0.29	0.03	FUBP2_MOUSE		Far upstream element-binding protein 2;	KH type-splicing regulatory protein;
ENALGLDQFL	AGLDLNSDDNSQSGSTASKGR	N-ter +28.03 Da, K +28.03 Da	40.7	84.3	3	2077.18	0.00	0.00	DDX3X_MOUSE		ATP-dependent RNA helicase DDX3X;	D1Pas1-related sequence 2;DEAD box RNA helicase DEAD3;DEAD box protein 3, X-chromosomal;Embryonic RNA helicase;
YSLGQLPGL	AGLHGDOGAPVPGVAGPR	N-ter +28.03 Da	35.3	36.8	3	1737.95	0.65	0.03	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
MN	AGSDPVVIVSAAR	N-ter +28.03 Da	32.4	19.7	2	1268.73	0.37	0.01	THIC_MOUSE		Acetyl-CoA acetyltransferase, cytosolic;	Cytosolic acetoacetyl-CoA thiolase;
RGQSSANRR	AGSSSGSGVQGSASAGLAADASR	N-ter +28.03 Da	75.4	55.3	3	1948.03	2.40	0.41	E9Q019_MOUSE	FILA_MOUSE		
IKVDKGVVPL	AGTNGETTQGLDLSER	N-ter +34.06 Da	39.3	52.3	3	1840.00	0.85	0.04	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
QADCAVLIVA	AGVGEFEAGISKNGQTR	N-ter +34.06 Da, K +34.06 Da	37.6	64.0	3	1788.10	0.33	0.02	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
GARGAQVRGN	AGVSDGSEVAKAQAAPGGASPTIFSR	N-ter +34.06 Da, K +34.06 Da	33.6	58.2	4	2660.65	-0.07	0.01	HINT2_MOUSE		Histidine triad nucleotide-binding protein 2, mitochondrial;	HINT-3;
QMSYGYDEKS	AGVSVPGPMGSPGPR	N-ter +28.03 Da	47.6	54.9	3	1392.80	1.06	0.07	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
KQVSLAYVEA	AGYLTEPVNR	N-ter +34.06 Da	32.2	16.6	2	1152.65	0.07	0.00	GPDM_MOUSE	A2AQR0_MOUSE	Glycerol-3-phosphate dehydrogenase, mitochondrial;	Protein TISP38;
VLLGLTPARA	AHEDPVKIEGFSR	N-ter +34.06 Da, K +34.06 Da	36.9	105.3	4	1780.17	0.25	0.00	SBS1_MOUSE	E9QPB2_MOUSE	Suprabasin;	
RAISTSVCLR	AHGSVVKSEDYAFPTYADR	N-ter +34.06 Da, K +34.06 Da	21.9	62.8	4	2180.25	0.33	0.03	COX41_MOUSE		Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;	Cytochrome c oxidase polypeptide IV;
LTDPAATTF	AHLDTATVLSR	N-ter +34.06 Da	30.5	36.4	3	1216.74	-0.60	0.01	ATPB_MOUSE		ATP synthase subunit beta, mitochondrial;	Cytochrome c oxidase subunit IV isoform 1;
DRQKEVNEF	AIDJIAQQPVNEVHR	N-ter +28.03 Da	51.3	62.5	3	1859.11	0.08	0.00	NDU56_MOUSE	D3YV32_MOUSE	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial;	Complex I-13kD-A;NADH-ubiquinone oxidoreductase 13 kDa-A subunit;
SLAEHYDILC	AIETSAKSSNVEEAFTR	N-ter +34.06 Da, K +34.06 Da	16.9	64.6	4	2022.18	-1.52	0.13	RAB43_MOUSE	Q91Z34_MOUSE	Ras-related protein Rab-43;	
AAAAAASRI	AIPGLAGAGNSVLLVSNLNPFR	N-ter +34.06 Da	56.3	51.1	3	2195.36	-1.89	0.28	PTBP1_MOUSE	Q92217_MOUSE	Polypyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;

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AMRILGGVIS EFEQLPMMQ	AISEAAQYNPEPPPR AISNNKQGGYEDFVEGLR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	45.0 31.9	48.5 67.4	3 3	1835.01 2167.20	0.00 0.51	0.00 0.06	CPNS1_MOUSE E9PWG4_MOUSE	D3YW48_MOUSE MYL1_MOUSE	Calpain small subunit 1; Calpain small subunit 1; Calcium-dependent protease small subunit 1; Calpain regulatory subunit;	Calcium-activated neutral proteinase small subunit; Calcium-dependent protease small subunit; Calcium-dependent protease small subunit 1; Calpain regulatory subunit;
LLPLLAGAQA	AIVFIKEPSSQDALQGR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	31.7	64.4	3	1926.24	1.37	0.12	PTK7_MOUSE	Q3V2W2_MOUSE	Inactive tyrosine-protein kinase 7;	Protein chuzhoi; Protein-tyrosine kinase 7; Pseudo tyrosine kinase receptor 7; Tyrosine-protein kinase-like 7;
DFHRCEKAMT PDLSKHNNHM	AKGGDVSVCEWYR AKVLTPLDYNKLR	N-ter +34.06 Da, K +34.06 Da	42.1 19.7	64.1 56.0	3 4	1581.86 1632.17	-1.29 0.82	0.13 0.07	CX6B1_MOUSE KCRM_MOUSE		Cytochrome c oxidase subunit 6B1; Creatine kinase M-type;	Cytochrome c oxidase subunit VIb isoform 1; Creatine kinase M chain; M-CK; Beta-2-globin; Hemoglobin beta-2 chain; Hemoglobin beta-minor chain;
AEKSAVSCDLW SKYREPEKYI	AKVNPDEVGGEALGR ALDGDLSLTDLVNLGKGR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	46.4 47.3	53.5 62.4	3 3	1578.98 2015.18	-0.94 0.53	0.05 0.08	HBB2_MOUSE HUTH_MOUSE	F8WH73_MOUSE	Hemoglobin subunit beta-2; Histidine ammonia-lyase;	Acetyl-CoA acyltransferase; Beta-ketothiolase; Mitochondrial 3-oxoacyl-CoA thiolase;
FAPQFLSVQK	ALDLDPSKTNVSGGAIALGHLGGSGSR	N-ter +28.03 Da, K +28.03 Da	34.0	68.5	4	2702.62	0.10	0.01	THIM_MOUSE		3-ketoacyl-CoA thiolase, mitochondrial; NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4;	Complex I-MLRQ; NADH-ubiquinone oxidoreductase MLRQ subunit; Heparin-binding protein 44; Low density lipoprotein receptor-related protein-associated protein 1;
TGAALYVMRL	ALFNPDVSWDR	N-ter +34.06 Da	43.5	27.5	2	1352.73	1.28	0.08	NDUA_MOUSE			
RKDAQMVHNS	ALNEDTQDELGDPR	N-ter +28.03 Da	29.0	59.9	3	1599.83	0.43	0.03	AMRP_MOUSE	F6Y09_MOUSE	Alpha-2-macroglobulin receptor-associated protein;	
ERHLLITMIV SLVSGQMQL	ALNPDFKPPADYKPPATR ALSEASQTDPSPGPPR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	22.7 58.9	53.2 47.5	4 3	2099.34 1642.92	0.60 -0.25	0.04 0.01	SF01_MOUSE F134C_MOUSE	Q3UI45_MOUSE	Splicing factor 1; Protein FAM134C;	CW17; Mammalian branch point-binding protein; Transcription factor ZFM1; Zinc finger gene in MEN1 locus; Zinc finger protein 162;
KTDQVIQFFI GMLPEKDCRY LALAFGLAHA	ALVNDPQPEHLR ALYDASFETKESR AMEGPWKTVAIAADR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	41.4 38.0 31.2	62.7 61.9 71.9	3 3 3	1512.90 1583.94 1683.07	-0.09 -1.25 0.79	0.01 0.09 0.03	UB2L3_MOUSE DEST_MOUSE AZAEN9_MOUSE	Q9D3H2_MOUSE	Ubiquitin-conjugating enzyme E2 L3; Destrin;	UbcM4; Ubiquitin carrier protein L3; Ubiquitin-protein ligase L3; Actin-depolymerizing factor; Sid 23;
PREIFKQKER SPVSSGVNLF	AMSTTSVTSSQPGKLR ANDGSFLEFKR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	34.8 32.2	63.6 65.5	3 3	1706.01 1451.87	-1.18 0.01	0.11 0.00	DBNL_MOUSE CS043_MOUSE		Drebrin-like protein; Uncharacterized protein C19orf43 homolog;	
QPISNVRAIQ NPEESIEDIY CDIDIRKDLY SPSEIPGMP FGVTTLDIVR CDVDIRKDLY QSQWQKVKDF HHSFYNELRV M	ANINIPMGAFRPGAGOPPR ANIPDLSPSYPSR ANNVMSGGTTMYPGIADR ANQDTIFEGIGGPR ANTFVAELKGLDPR ANTVLSGGTTMYPGIADR ANVYVDVAVKDSGR APEEHPTLLTEAPLNPKANR APKGGSKQSEEDLLQDFSR	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 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	23.1 33.1 24.7 50.8 25.2 36.1 42.1 28.4 33.1	63.7 33.1 71.4 54.1 63.4 52.4 70.2 73.1 59.8	3 3 3 3 3 3 3 3 4	1997.21 1562.90 1882.01 1501.83 1657.03 1857.05 1460.93 2253.38 2416.40	-0.15 -1.29 -2.84 0.52 0.89 -0.25 -1.18 3.03 1.40	0.01 0.06 0.20 0.04 0.03 0.02 0.14 0.20 0.16	SMPX_MOUSE PALMD_MOUSE ACT5_MOUSE COSA1_MOUSE MDHM_MOUSE ACTB_MOUSE APOA1_MOUSE ACTA_MOUSE SSRG_MOUSE	Q3UV77_MOUSE	Small muscular protein; Palmdelphin; Actin, alpha skeletal muscle; Collagen alpha-1(V) chain; Malate dehydrogenase, mitochondrial; Actin, cytoplasmic 1; Apolipoprotein A-I; Actin, aortic smooth muscle; Translocon-associated protein subunit gamma; Serine/threonine-protein phosphatase 6 catalytic subunit;	Stretch-responsive skeletal muscle protein; Alpha-actin-1;
M QSKGQWLTE M	APLDLDKYVEIAR APLDTINVHLR APNVLASEPEIPKGR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da	13.7 33.0 36.1	59.5 46.8 63.5	3 3 3	1570.03 1275.79 1758.18	1.14 0.63 -0.23	0.15 0.07 0.01	PPP6_MOUSE LYAG_MOUSE KAD2_MOUSE		Lysosomal alpha-glucosidase; Adenylate kinase 2, mitochondrial;	Acid maltase; ATP-AMP transphosphorylase 2;
TSQLTAFPLG	APPPWPIQDSSGPELGSR	N-ter +28.03 Da	42.4	46.8	3	2015.11	0.08	0.00	GORS1_MOUSE		Golgi reassembly-stacking protein 1;	Golgi peripheral membrane protein p65; Golgi reassembly-stacking protein of 65 kDa; Proline-rich and coiled-coil-containing protein 1;
ATSASGALLS VAGPQAQTG NAILVRYTQK M	APPSGPPISGFSVGTYYDTR APQGLSLEYLFR APQVSTPTLVEAAR APVEHVADAGAFIR	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +34.06 Da	55.9 43.1 29.3 42.3	46.4 63.2 47.8 53.9	3 3 3 3	2153.22 1499.88 1466.88 1584.97	-0.12 0.64 -0.45 -0.54	0.01 0.04 0.03 0.02	PRRC1_MOUSE FRIL1_MOUSE ALBU_MOUSE NOB1_MOUSE	Q9CPX4_MOUSE F6YB8_MOUSE	Protein PRRC1; Ferritin light chain 1; Serum albumin; RNA-binding protein NOB1;	Ferritin L subunit 1;
LLATVWHGQG LAQYREVAAF	APVIEPSGPELVPEGETVTLR AQFGSDLAATQQLLSR	N-ter +28.03 Da N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	40.8 59.2 41.5	37.9 54.6 36.8	3 3 4	2316.35 1854.07 3206.71	-0.11 -0.67 -1.89	0.01 0.02 0.28	CSF1R_MOUSE ATPA_MOUSE ALBU_MOUSE	Q3TBH6_MOUSE D3ZGF5_MOUSE	Macrophage colony-stimulating factor 1 receptor; ATP synthase subunit alpha, mitochondrial;	CSF-1 receptor; Proto-oncogene c-Fms;
EQLKTMDDF	AQFLDTCCKAADKDTCTFSTEGPNLVTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.5	36.8	4	3206.71	-1.89	0.28	ALBU_MOUSE		Serum albumin;	
ITQASMTSL NLQSRFRIL QNSHSNPVSN	AQGPSTSAITFPPEEQDPR AQMTGTEYMQDPPDEALR AQPAGAEKPEAKVLFDR	N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	30.2 49.0 19.1	48.3 49.7 78.4	3 3 4	2158.12 2118.05 2110.21	-0.36 -0.40 0.76	0.04 0.05 0.02	PRRC1_MOUSE E9PYJ9_MOUSE SYEP_MOUSE	LDB3_MOUSE	Protein PRRC1; Bifunctional glutamate/proline-tRNA ligase; Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;	Proline-rich and coiled-coil-containing protein 1;
MRAAPRRAPA	AQPAAAAPSVAVSPAAAPR	N-ter +34.06 Da	64.3	50.5	3	1791.08	0.00	0.00	CHCH2_MOUSE	B2RP8_MOUSE		
SVQSGNLALA KQFPPIVLV SPCLPRVHL	ASAAAVDAGMAMAGQSPVLR ASAEEEDVEEAALKR ASAFSGSTESLVAR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da	60.8 28.5 55.8	25.4 63.4 33.1	3 3 2	1907.03 1858.08 1409.76	0.26 -0.74 1.04	0.01 0.07 0.07	PTBP1_MOUSE CO6A5_MOUSE THEMS_MOUSE	Q922I7_MOUSE CO6A6_MOUSE	Poly(pyrimidine tract-binding protein 1; Collagen alpha-5(VI) chain; Thioesterase superfamily member 5;	Heterogeneous nuclear ribonucleoprotein I; Collagen alpha-1(XIX) chain;

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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
KNVREATESF	ASDPILYRVAVALDTKGEIR	N-ter +34.06 Da, K +34.06 Da	21.6	62.3	4	2448.59	-1.18	0.11	KPYM_MOUSE		Pyruvate kinase isozymes M1/M2;	Pyruvate kinase muscle isozyme; C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36;
GKRHPYKMNLLGISLPQVEL	ASEPQEVLIHGSANHR	N-ter +28.03 Da	34.9	85.1	4	1772.05	0.36	0.02	PDLI1_MOUSE		PDZ and LIM domain protein 1;	
ENAFRSRSGGR	ASFGAEGPEIVSAEAGTAGSR	N-ter +28.03 Da	41.1	41.2	3	2088.10	0.14	0.01	PRAX_MOUSE	Q6NVF7_MOUSE	Periaxin;	
GAVGAPGPAG	ASGDKEAEGAPQVEAGKR	N-ter +28.03 Da, K +28.03 Da	32.7	83.5	4	1883.13	-1.06	0.22	Q8VC08_MOUSE	E9QM09_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
ARGAAVTRSM	ASGGGVPTDEEQATGLER	N-ter +28.03 Da	52.1	58.1	3	1800.95	-0.11	0.01	COX5B_MOUSE	Q9D881_MOUSE	Cytochrome c oxidase subunit 5B, mitochondrial;	Cytochrome c oxidase polypeptide Vb;
KTSEGSWEFF	ASGKTAESGELGLTTDEKFEVGYR	N-ter +34.06 Da, K +34.06 Da	21.2	75.4	4	2882.77	1.70	0.13	TTHY_MOUSE		Transthyretin;	Prealbumin; Aldehyde dehydrogenase family 5 member A1;NAD(+)-dependent succinic semialdehyde dehydrogenase;
EPAGTPRRSY	ASGPGGLHADLLR	N-ter +34.06 Da	38.7	50.2	3	1296.80	0.63	0.03	SSDH_MOUSE		Succinate-semialdehyde dehydrogenase, mitochondrial;	H1 VAR.1;H1C;
KTGAAAGKRK	ASGPPVELITKAVAASKER	N-ter +34.06 Da, K +34.06 Da	34.3	80.8	4	2112.47	-1.52	0.04	H13_MOUSE		Histone H1.2;	
MENANVLARY	ASICQQNGIVPIPELIPDGDHDKR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	55.5	80.3	4	3068.84	-6.64	0.00	ALDOA_MOUSE	ALDOC_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
QEVRCLEERSY	ASKPTLNEVVIVSAIR	N-ter +28.03 Da, K +28.03 Da	48.4	74.0	3	1752.18	0.58	0.03	THII_MOUSE		Acetyl-CoA acetyltransferase, mitochondrial;	Acetoacetyl-CoA thiolase;
AQEQFGGNPF	ASLVSSSSAEATQPSR	N-ter +34.06 Da	28.4	61.5	3	1683.95	0.10	0.01	UBQLL_MOUSE		Ubiquilin-1;	Protein linking IAP with cytoskeleton 1;
KPLRRALSGR	ASPVTPSSGLHAAVR	N-ter +28.03 Da	54.1	61.4	3	1547.94	-0.76	0.04			Uncharacterized protein KIAA1522;	
M	ASQTQGIQQLLQAEKR	N-ter +28.03 Da, K +28.03 Da	38.2	12.3	3	1854.06	5.36	0.47	VATG2_MOUSE		V-type proton ATPase subunit G 2;	V-ATPase 13 kDa subunit 2;Vacuolar proton pump subunit G 2;
RSALQSIW	ASQTTDGKLPVTKDVER	N-ter +28.03 Da, K +28.03 Da	17.4	65.2	4	2057.24	-0.12	0.01	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor I6;
TTLNNAVSSL	ASTGLSLTKVDER	N-ter +34.06 Da, K +34.06 Da	28.9	54.7	3	1443.94	1.08	0.17	PICA_MOUSE		Phosphatidylinositol-binding clathrin assembly protein;	Clathrin assembly lymphoid myeloid leukemia;
LSNAIGPSAQ	ASTGSLVITPCSNLNDLKESNNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	34.3	67.6	4	2644.56	0.19	0.02	SHLB1_MOUSE	Q3TYR7_MOUSE	Endophilin-B1;	SH3 domain-containing GRB2-like protein B1; Alpha-CP1;Heterogeneous nuclear ribonucleoprotein E1;
EVKGYWASLD	ASTQTTHLTIPTNNLIGCIGR	N-ter +34.06 Da, C +57.02 Da	51.4	56.8	3	2442.45	-0.67	0.15	PCBP1_MOUSE		Poly(rC)-binding protein 1; WD repeat domain phosphoinositide-interacting protein 2;	
WTGYFGKVLMM	ASTSYLPSQVTEFMFNQGR	N-ter +34.06 Da	38.6	65.6	3	2049.14	-2.94	0.45	WIPI2_MOUSE	D3YWK1_MOUSE		
HDLRHAFSPV	ASVESASGETLHSPKVGQGAAGVSPMCPGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	46.1	54.8	4	3173.73	1.50	0.16	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertryptin;Fetuin-A;
IIPTRARCLY	ASVLTAAQPR	N-ter +34.06 Da	29.6	35.6	2	975.63	-1.40	0.11	EF2_MOUSE		Elongation factor 2;	
IREGEVEVLK	ATEMVEVGEPEDEVGAEAR	N-ter +28.03 Da	49.2	59.2	3	1959.99	-0.23	0.03	PTRF_MOUSE		Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
IKKRLETYYN	ATEPVISFYDKR	N-ter +28.03 Da, K +28.03 Da	42.6	52.2	3	1480.87	-0.12	0.01	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
VIQHRPSQOY	ATLDVYNPFENR	N-ter +34.06 Da	27.4	59.5	3	1471.84	-0.15	0.01	SCAM3_MOUSE	Q3UXS0_MOUSE	Secretory carrier-associated membrane protein 3;	
GRRDKSPTK	ATPLPAEGKNTLR	N-ter +28.03 Da, K +28.03 Da	24.5	69.1	4	1579.06	-0.40	0.05	E41L2_MOUSE		Band 4.1-like protein 2;	Generally expressed protein 4.1; Cargo selection protein TIP47;Mannose-6-phosphate receptor-binding protein 1;
PLTEAELALI	ATPPEDSDMASLQQQR	N-ter +28.03 Da	58.1	57.9	3	1800.94	0.59	0.02	PLIN3_MOUSE		Perilipin-3;	
MAAN	ATTNPSQLLPLELVKICIGSR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	52.9	53.1	3	2367.41	0.47	0.07	LSM5_MOUSE		U6 snRNA-associated 5m-like protein LSM5;	
AMGGVAPQAL	AVAASGGSSFR	N-ter +34.06 Da	29.8	32.1	2	1139.65	1.25	0.06	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein; Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;
QERQTAQVLQ	AVADKVKEDSQVPAQTQLQR	N-ter +34.06 Da, K +34.06 Da	37.3	58.5	4	2285.48	-0.01	0.00	AKA12_MOUSE		A-kinase anchor protein 12; Mitochondrial import inner membrane translocase subunit Tim13;	
AIMEQVKVQI	AVANAQELLOR	N-ter +34.06 Da	37.0	37.1	3	1245.77	0.30	0.02	TIM13_MOUSE			
KRGTTGGVDTA	AVGAVFDISNADR	N-ter +28.03 Da	48.7	29.8	2	1361.73	1.23	0.07	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
IIPASTGAAK	AVGKVIPELNGKLTGMAFR	N-ter +34.06 Da, K +34.06 Da	26.4	84.2	4	2102.49	-1.56	0.05	G3P_MOUSE	F8WJL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH; Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
AVDSASPVIQ	AVIKQSKPEDEADEWAR	N-ter +28.03 Da, K +28.03 Da	20.9	77.9	4	2156.28	0.47	0.02	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	
GPEPTTDCFV	AVMHGETETVPGNALVVDPEKPFRR	N-ter +34.06 Da, K +34.06 Da	42.5	55.3	4	2717.60	0.03	0.00	EHD2_MOUSE		EH domain-containing protein 2;	
WGRGLSTVLA	AVPAPPPTSPR	N-ter +28.03 Da	38.3	29.9	2	1116.66	-0.01	0.00	HTRA2_MOUSE	F6XUR8_MOUSE	Serine protease HTRA2, mitochondrial;	High temperature requirement protein A2;Omi stress-regulated endoprotease;Serine protease 25;Serine proteinase OMI;
VLTFGGMTLT	AVPIAQKSEPOSLNEALMR	N-ter +34.06 Da, K +34.06 Da	42.2	80.4	4	2236.43	0.08	0.01	Q542V8_MOUSE	D3ZK5_MOUSE		
TIAPELLAC	AVQEEWLDIPSKLDNR	N-ter +28.03 Da, K +28.03 Da	54.9	77.0	3	1968.18	-0.43	0.04	E9Q7D5_MOUSE			
LSLEVQELAQ	AVRPLQLLGTCAELCR	N-ter +34.06 Da, C +57.02 Da	54.6	83.0	3	1890.20	-0.27	0.04	Q8BTE6_MOUSE			Splicing factor that interacts with PQBP-1 and PP1;
KTSAYGPPAR	AVSILPLLGHGVPR	N-ter +34.06 Da	52.4	79.2	3	1462.04	-0.09	0.02	WBP11_MOUSE		WW domain-binding protein 11;	
QEASIPQEQE	AVSPDITSTER	N-ter +34.06 Da	38.1	42.1	2	1208.70	0.52	0.04	CO6A2_MOUSE	D3Z7D5_MOUSE	Collagen alpha-2(VI) chain;	
HSSPASLQLG	AVSPGTLTASGVSGPAAAPAAQHRL	N-ter +34.06 Da	51.0	75.5	4	2419.52	0.47	0.05	YAP1_MOUSE		Yorkie homolog;	65 kDa Yes-associated protein;
AASRATLSN	AVSSLASTGLSLTKVDER	N-ter +34.06 Da, K +34.06 Da	38.5	62.1	3	1901.23	0.51	0.06	PICA_MOUSE		Phosphatidylinositol-binding clathrin assembly protein;	Clathrin assembly lymphoid myeloid leukemia;
LSKDITANTW	AVTVDCPSTNAKR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	30.3	6.0	3	1570.82	-6.64	0.00	PPR3A_MOUSE		Protein phosphatase 1 regulatory subunit 3A;	Protein phosphatase 1 glycogen-associated regulatory subunit;Protein phosphatase type-1 glycogen targeting subunit;

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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
LWSVAGSNM EAYLGTVTN	AVVTGGSVVKLLNTR AVVTVPAYFNDSQR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +34.06 Da	27.7 18.8	59.7 56.8	3 3	1684.13 1599.94	-0.32 -0.38	0.02 0.03	SDF2_MOUSE HSP7C_MOUSE		Stromal cell-derived factor 2; Heat shock cognate 71 kDa protein;	Heat shock 70 kDa protein 8;
TISLQMGTK	CASQVGMTAPGTR	N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	33.9 45.8	69.5 81.5	3 4	1368.77 2513.38	-0.38 -1.84	0.02 0.20	CNN2_MOUSE ALBU_MOUSE	D3Z7R6_MOUSE	Calponin-2; Serum albumin;	Calponin H2, smooth muscle;Neutral calponin;
MDDFAQLDT ARNLGRVGTK	CCKAADKDTFCSTEGPNLVTR CCTLPEDQR	N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	35.4 47.7	41.9 59.5	2 3	1211.60 1974.11	-0.18 -0.62	0.03 0.07	ALBU_MOUSE ACTC_MOUSE		Serum albumin; Actin, alpha cardiac muscle 1;	
CDDEETALV MEPYS HNLPGLFCE WLLDHCQESY TCCKAADKDT QAGRFBVNL	CDNGSLVKAGFAGDDAPR CDTFVALPPATVGNR CEIGYELDR CEPTVCQPTCYQR CFSTEGPNLVTR CGEEQGADAAHLFNPR	N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da	30.4 35.4 35.5 39.6 88.7	37.2 34.4 56.9 31.0 49.6	3 2 3 2 3	1650.92 1187.61 1725.83 1407.73 1798.90	0.52 1.14 1.09 -0.04 1.44	0.02 0.07 0.09 0.00 0.15	ACTC_MOUSE SCRN3_MOUSE FBN1_MOUSE ALBU_MOUSE LEG7_MOUSE	ACTS_MOUSE A2AWQ9_MOUSE A2AQ53_MOUSE	Actin, alpha cardiac muscle 1; Secernin-3; Fibrillin-1; Serum albumin; Galectin-7;	Alpha-cardiac actin;
ESLWNQENRF SRTTSTSTM	CGWFDAELSEKGAEAAKR CGYGNYYGGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	39.9 34.7 28.8	61.5 53.5 66.6	4 2 3	2184.27 1356.63 2122.19	-1.84 -1.43 -6.64	0.13 0.19 0.00	PGAM2_MOUSE KR168_MOUSE CFAI_MOUSE		Phosphoglycerate mutase 2; Keratin-associated protein 16-8; Complement factor I;	BPG-dependent PGAM 2;Muscle-specific phosphoglycerate mutase;Phosphoglycerate mutase isozyme M; Keratin-associated protein 16.8;
NKVFCQPWR DDFAQLDTC	CIEGTICKLPYQCP CKAADKDTFCSTEGPNLVTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	41.1 53.2	77.9 69.8	4 3	2353.32 2038.24	-0.23 -0.62	0.02 0.09	ALBU_MOUSE HBB2_MOUSE		Serum albumin; Hemoglobin subunit beta-2;	
LDTAEKSAVS LDTAEKAAVS	CLWAKVNPDEVGGEALGR CLWGKVNDSVEVGGEALGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	53.2 50.7	69.8 65.7	3 3	2038.24 2002.13	-0.62 -0.09	0.09 0.01	HBB2_MOUSE HBB1_MOUSE		Hemoglobin subunit beta-2; Hemoglobin subunit beta-1;	Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain; Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
TLSSAFADSL CQQVGGISTV GNSTHPMHSR KPTDGASSN AEFKAADFDMF	CPSTSLYLGR CQPVGISTVCQPTCGVSR CSPDPGLTALLSDHR CVTDISHLVR DADGGDISVKELGTVMR	N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da	30.4 41.3 39.0 35.1 45.2	34.8 49.2 82.0 58.1 52.3	2 3 3 3 3	1299.75 2090.07 1665.95 1226.72 1875.04	0.64 0.26 5.84 0.78 1.54	0.05 0.03 1.45 0.04 0.20	ERN1_MOUSE E9Q2E9_MOUSE HEMO_MOUSE NASP_MOUSE TNNC2_MOUSE		Serine/threonine-protein kinase/endoribonuclease IRE1; Hemopexin; Nuclear autoantigenic sperm protein; Troponin C, skeletal muscle;	Endoplasmic reticulum-to-nucleus signaling 1;inositol-requiring protein 1;Ire1-alpha;
TRNRESRIR MQN	DAEKELCKEFENQVR DAGEFVDLYVPR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +28.03 Da	20.0 35.0	54.4 61.6	4 3	1996.19 1407.79	0.67 1.35	0.09 0.07	Q148R4_MOUSE RS21_MOUSE	Q8BM18_MOUSE	40S ribosomal protein S21;	
MELHPSCRY LGVKSVQKLL	DALEVFAAGSGTSGQR DAVDYIPVPT	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	41.6 35.7 23.0	46.5 35.0 63.1	3 2 4	1527.84 1373.77 1834.13	-1.06 0.19 2.19	0.04 0.01 0.09	PCOC1_MOUSE EFTU_MOUSE	D3YZE3_MOUSE D3YVN7_MOUSE	Procollagen C-endopeptidase enhancer 1; Elongation factor Tu, mitochondrial;	P14;Procollagen COOH-terminal proteinase enhancer 1;Type 1 procollagen C-proteinase enhancer protein;Type I procollagen COOH-terminal proteinase enhancer;
ASGTTLEAL LPLLARLSAG	DCILPPTRPDKPLR DCPCSEALCQPIR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	42.0 42.6 32.0	56.0 66.2 96.6	3 3 2	1709.87 1980.07 1354.78	0.52 -0.84 -2.94	0.07 0.15 0.45	EF1A1_MOUSE DIAC_MOUSE IGJ_MOUSE	D3YZ68_MOUSE	Elongation factor 1-alpha 1; Di-N-acetylchitinase; Immunoglobulin J chain;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
IFVKAVLVTG VVANRFHQLL ESAAKDEAVF	DDEATILADNCKMCTR DDESDFDILR DDEVAPDAAAENCLAER	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, C +57.02 Da	42.6 32.0 45.6	66.2 96.6 82.2	3 2 3	1980.07 1354.78 1872.97	-0.84 -2.94 0.18	0.15 0.45 0.02	IGJ_MOUSE HABP4_MOUSE E9PVP1_MOUSE	E9QK82_MOUSE	Intracellular hyaluronan-binding protein 4;	
VLLTFGVRA DLNPDNLQGG DNGKHAIHII AAGGGGGENY	DDEVDVDTVEEDLKGSR DDLDPNYVLSR DDLKQAVAYR DDPHKTPASPVVHIR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	55.8 48.2 28.6 25.3	66.6 25.6 76.9 88.8	3 2 3 4	2045.14 1426.75 1320.81 1724.09	0.14 0.53 -1.40 -0.45	0.02 0.04 0.18 0.03	ENPL_MOUSE KCRM_MOUSE ATPA_MOUSE HNRPL_MOUSE	KCRB_MOUSE D3Z6F5_MOUSE E9Q8W8_MOUSE	Endoplasmic; Creatine kinase M-type; ATP synthase subunit alpha, mitochondrial; Heterogeneous nuclear ribonucleoprotein L;	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; Creatine kinase M chain;M-CK;
PPPCPRELF TNLRDDIMRL	DDPSYNIQNLDKAR DDTVHVVIATPGR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	33.7 35.3	76.2 81.1	3 3	1803.05 1406.87	0.25 2.00	0.01 0.15	SHC1_MOUSE DDX6_MOUSE		SHC-transforming protein 1; Probable ATP-dependent RNA helicase DDX6;	SHC-transforming protein A;Src homology 2 domain-containing-transforming protein C1; ATP-dependent RNA helicase p54;DEAD box protein 6;Oncogene RCK homolog;
TWKLVSSENF LAAGPRPSLG	DDYMKVEGVGFATR DEAIHCPCCSEKLAR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	52.3 29.8	76.7 69.9	3 4	1642.93 1967.06	-1.18 0.67	0.16 0.06	FABP4_MOUSE IBP4_MOUSE		Fatty acid-binding protein, adipocyte; Insulin-like growth factor-binding protein 4;	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;

Table S7, 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
KAVLSAEKLR	DEEVHTGLGELLR	N-ter +34.06 Da	49.7	67.6	3	1500.90	1.05	0.12	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
VIGAVVDVQF	DEGLPPLNALEVQGR	N-ter +34.06 Da	55.6	58.5	3	1754.08	-0.58	0.06	ATPB_MOUSE		ATP synthase subunit beta, mitochondrial;	
IENHEGVRRF	DEILEASDGMIVAR	N-ter +34.06 Da	43.8	50.9	3	1551.88	-1.18	0.08	KPYM_MOUSE		Pyruvate kinase isozymes M1/M2;	Pyruvate kinase muscle isozyme;
NFASQMSYGY	DEKASGVSPGPMGSPGR	N-ter +28.03 Da, K +28.03 Da	26.6	85.6	3	1880.11	-0.38	0.03	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
GSQAWHWVQK	DEPOSQWDKVDVANVYVDVAVKDSGR	N-ter +34.06 Da, K +34.06 Da	30.2	99.6	4	3132.00	-1.15	0.18	APOA1_MOUSE	Q8BPD5_MOUSE	Apolipoprotein A-I;	Apolipoprotein A1;
ALRAYFERIM	DEPSPLAK	N-ter +28.03 Da, K +28.03 Da	20.5	118.5	2	1042.66	-3.47	0.39	ACACA_MOUSE		Acetyl-CoA carboxylase 1;	ACC-alpha;Acetyl-CoA carboxylase 265;
NYPKDNKRKM	DETDASSAVKVR	N-ter +34.06 Da, K +34.06 Da	26.3	83.3	4	1507.04	-0.01	0.00	TADBP_MOUSE	Q8R0B4_MOUSE	TAR DNA-binding protein 43;	
YGKWFYFVMV	DEVAPFLTAQATHLR	N-ter +34.06 Da	21.8	67.2	4	1702.04	-2.12	0.18	E9PZQ0_MOUSE			Williams-Beuren syndrome chromosomal region 1 protein homolog;
KFKGCYCFV	DEVSLKEALTYDGLGDR	N-ter +34.06 Da, K +34.06 Da	61.9	58.9	3	2247.32	0.86	0.21	IF4H_MOUSE	Q80U88_MOUSE	Eukaryotic translation initiation factor 4H;	Myostatin;
VTDPTRKRRR	DFGLDCDEHSTESR	N-ter +28.03 Da, C +57.02 Da	57.3	76.0	3	1694.81	-0.47	0.09	GDF8_MOUSE		Growth/differentiation factor 8;	
SQASDSEGH5	DFSEGGVAGHAHR	N-ter +34.06 Da	39.8	87.8	3	1306.76	0.04	0.00	F6TL02_MOUSE	FILA_MOUSE		
		N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.7	88.9	4	2077.28	-0.36	0.02	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;
GKSTIKRRK	DGDKLVVECMKGVSTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	24.0	67.1	3	1266.78	0.86	0.10	CS043_MOUSE		Uncharacterized protein C19orf43 homolog;	
VSSGVNLFAN	DGSFLELFKR	N-ter +28.03 Da, K +28.03 Da	41.3	64.8	3	1617.90	-0.79	0.04	RS21_MOUSE		40S ribosomal protein S21;	
SASNRIIAK	DHASIQMNVAEVDK	N-ter +34.06 Da	51.8	59.4	4	1936.14	-2.12	0.28	MDHM_MOUSE		Malate dehydrogenase, mitochondrial;	
SPLVRLTLTY	DIAHTPGVAADLSHIETR	N-ter +34.06 Da	39.6	31.4	2	1324.71	-5.64	0.00	CATB_MOUSE		Cathepsin B;	Cathepsin B1;
KLPGRVAFGE	DIDLPETFDAR	N-ter +34.06 Da	41.5	35.9	2	1282.72	0.56	0.02	CTNB1_MOUSE	F7CRC6_MOUSE	Catenin beta-1;	Beta-catenin;
AWNNETADLGL	DIGAQAQGEALGYR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.6	73.3	4	2672.55	1.47	0.12	PKHH2_MOUSE		Pleckstrin homology domain-containing family H member 2;	
HCLQGNKIC	DISKWEQASKEQPGKCEGSR	N-ter +28.03 Da, K +28.03 Da	52.0	66.8	3	2056.13	-0.07	0.01	KV5A5_MOUSE	KV5A6_MOUSE	Ig kappa chain V-V region T1;	
LLLVFPKIC	DIKMTQSPSSMYASLGER	N-ter +28.03 Da, K +28.03 Da	50.6	55.9	3	1923.18	-0.45	0.08	KV5A9_MOUSE		Ig kappa chain V-V region L7;	
LLFWIPASRG	DILLTQSPAILSVSPGER	N-ter +34.06 Da	48.0	37.7	3	1940.05	0.45	0.06	KV5A7_MOUSE	KV5A8_MOUSE	Ig kappa chain V-V region MOPC 41;	
LLVWFGARC	DIQMTQSPSSLSASLGER	N-ter +28.03 Da, C +57.02 Da	46.7	65.8	3	2265.05	-0.97	0.17	FBLN1_MOUSE		Fibulin-1;	Basement-membrane protein 90;
L5LLAARANA	DISMEACCTDGNQMANQHR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	34.7	32.0	2	1234.67	-1.79	0.25	PPIA_MOUSE	E9Q1E3_MOUSE	Peptidyl-prolyl cis-trans isomerase A;	Cyclophilin A;Cyclosporin A-binding protein;Rotamase A;SP18;
MVNPVTFV	DITADDEPLGR	N-ter +34.06 Da	44.1	72.0	4	2106.24	-0.40	0.04	KV5A1_MOUSE		Ig kappa chain V19-17;	Ig kappa chain V-V region MPC11;
MLLWLSGVEG	DIVMTQSHKFMSTSVGDR	N-ter +34.06 Da, K +34.06 Da	48.5	62.4	3	1610.02	0.35	0.01	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK;
QQLIDHFLF	DKPVPPLLLASGMAR	N-ter +28.03 Da, K +28.03 Da	41.9	25.7	2	1311.72	-0.30	0.02	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LNPDNLQGGD	DLDPNVVLSRR	N-ter +34.06 Da	38.2	32.6	2	1264.73	0.82	0.04	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
GDEESTVFK	DLFPIIQDR	N-ter +34.06 Da	32.3	39.7	2	1139.58	0.47	0.04	ALBU_MOUSE		Serum albumin;	
TKVKNKCCHG	DLLECCADDR	N-ter +34.06 Da, C +57.02 Da	20.1	71.7	3	1393.99	-1.43	0.16	ACON_MOUSE		Aconitate hydratase, mitochondrial;	Citrate hydro-lyase;
HFEPEYIRY	DLLEKNINIVR	N-ter +34.06 Da, K +34.06 Da	27.8	82.5	3	1287.89	1.39	0.16	Q3U422_MOUSE	NDUV3_MOUSE		
HHDYNTYTF	DLNLDLSKFR	N-ter +34.06 Da, K +34.06 Da										
PTESKDILLV	DLNSEIDTQNSLR	N-ter +34.06 Da	39.9	51.1	3	1651.91	-0.40	0.04	DAB2_MOUSE	E9QL31_MOUSE	Disabled homolog 2;	DOC-2;Mitogen-responsive phosphoprotein;
		N-ter +34.06 Da	44.3	3.2	2	1184.68	-0.86	0.02	LEG3_MOUSE	Q8C253_MOUSE	Galectin-3;	35 kDa lectin;Carbohydrate-binding protein 35;Galactose-specific lectin 3;IgE-binding protein;L-34 galactoside-binding lectin;Laminin-binding protein;Lectin L-29;Mac-2 antigen;
CPRWTAVPY	DLPLPGVMR	N-ter +34.06 Da										Leukemia-associated gene protein;Leukemia-associated phosphoprotein p18;Metablastin;Oncoprotein 18;Phosphoprotein p19;Protein Pr22;pp17;
		N-ter +28.03 Da, K +28.03 Da	47.0	59.8	3	1652.11	0.28	0.12	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;
PRTLASPKKK	DLSEEEIQKLEAAEER	N-ter +28.03 Da, K +28.03 Da	49.4	40.3	2	1265.69	0.28	0.03	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;
LTSESSRPTR	DLSSSDLTASKIVK	N-ter +34.06 Da, K +34.06 Da										
LTSESSRPTR	DLSSSDLTASK	N-ter +28.03 Da, K +28.03 Da										
		N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	53.9	49.3	3	1925.16	0.58	0.08	Q9D1B1_MOUSE			
RKTRVSGEHM	DLTTCPLAAGGQQEKLK	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	19.3	68.1	4	1797.18	-0.52	0.07	TETN_MOUSE	Q8CFZ6_MOUSE	Tetranectin;	C-type lectin domain family 3 member B;Plasminogen kringle 4-binding protein;
KAKKAANAKK	DLVSKMFEELKNR	N-ter +34.06 Da, K +34.06 Da	27.4	49.6	3	1677.88	-0.43	0.08	OLFL3_MOUSE		Olfactomedin-like protein 3;	
KGKGRNREKY	DMVYDCSYTVAQVR	N-ter +34.06 Da, C +57.02 Da	39.6	34.4	2	1234.67	0.47	0.01	ARC1B_MOUSE	F6THG2_MOUSE	Actin-related protein 2/3 complex subunit 1B;	Arp2/3 complex 41 kDa subunit;p41-ARC;
HDCFPVLFY	DNAAVTL5FGGR	N-ter +28.03 Da	50.8	90.8	4	2068.29	0.76	0.10	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
WPDARGIWHN	DNKSFLVWVNEEDHLR	N-ter +34.06 Da, K +34.06 Da	36.5	50.5	4	1936.10	0.74	0.05	LUM_MOUSE		Lumican;	Keratan sulfate proteoglycan lumican;
LPTSLTLTYL	DNKISNIPDEYFKR	N-ter +28.03 Da, K +28.03 Da										CRP55;Calregulin;Endoplasmic reticulum resident protein 60;HACBP;
LLGLLGLAAA	DPAIYKEQFLDGAWNTNR	N-ter +28.03 Da, K +28.03 Da	30.3	70.7	3	2341.30	-0.43	0.11	CALR_MOUSE		Calreticulin;	Countertryptin;Fetuin-A;
LLTACLASRA	DPASTLPDIQVQENFSESR	N-ter +34.06 Da	46.4	35.9	3	2166.14	0.39	0.02	AMBP_MOUSE		Protein AMBP;	Lysosomal acid alpha-mannosidase;Mannosidase alpha class 2B member 1;Mannosidase alpha-B;
VPTANAALPA	DPPASVVVGPVVVPR	N-ter +34.06 Da	41.8	44.4	3	1520.98	1.77	0.06	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Complement factor P;
		N-ter +34.06 Da, K +34.06 Da	27.2	70.6	3	1554.02	0.76	0.06	MA2B1_MOUSE		Lysosomal alpha-mannosidase;	
PTSYPEPSKL	DPTSVTLKPMER	N-ter +34.06 Da, K +34.06 Da	54.8	57.3	3	1820.95	0.49	0.01	PROP_MOUSE		Properdin;	
LLVILPATGS	DPVLCFTQYEESGR	N-ter +34.06 Da, C +57.02 Da										

Table S7, 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
SWASRNEAAP	DQDEIDCLPLAKQPSFR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	46.9	46.1	3	2144.16	-0.11	0.01	PPGB_MOUSE	A2A5J9_MOUSE	Lysosomal protective protein;	Carboxypeptidase C;Carboxypeptidase L;Cathepsin A;Protective protein cathepsin A;Protective protein for beta-galactosidase; Adenylate kinase 3;Adenylate kinase 3 alpha-like 1;
EIGVLAKTFI	DQGLKIPDDVMTR	N-ter +34.06 Da, K +34.06 Da	31.9	59.3	3	1554.96	-0.11	0.01	KAD3_MOUSE		GTP:AMP phosphotransferase, mitochondrial; Membrane-associated progesterone receptor component 1;	
IFLLYKIVRG	DQPASGDNDDDEPPPLPR	N-ter +28.03 Da	30.3	58.6	3	2019.00	0.08	0.00	PGRC1_MOUSE	Q3TFP8_MOUSE	Plasminogen activator inhibitor 1 RNA-binding protein;	PAI1 RNA-binding protein 1;SERPINE1 mRNA-binding protein 1;
EGIRRVRRP	DQQLQGDGKLIARR	N-ter +28.03 Da, K +28.03 Da	17.0	91.1	4	1697.08	0.38	0.01	PAIRB_MOUSE		Plasminogen activator inhibitor 1 RNA-binding protein;	PAI1 RNA-binding protein 1;SERPINE1 mRNA-binding protein 1;
EGIRRVRRP	DQQLQGDGKLIARR	N-ter +34.06 Da, K +34.06 Da	26.6	66.1	3	1552.99	0.43	0.06	PAIRB_MOUSE		Plasminogen activator inhibitor 1 RNA-binding protein;	Alpha-1 protease inhibitor 1;Alpha-1-antiprotease;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
DVQETDTSQK	DQSPASHEIATNLGDFAIISLYR	N-ter +34.06 Da	63.2	48.5	3	2438.35	0.00	0.00	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	
DVQETDTSQK	DQSPASHEIATNLGDFALR	N-ter +28.03 Da	51.7	57.5	3	2069.14	0.03	0.00	A1AT4_MOUSE		Alpha-1-antitrypsin 1-4; Myosin regulatory light chain 2, skeletal muscle isoform;	Alpha-1 protease inhibitor 4;Serine protease inhibitor 1-4;Serine protease inhibitor A1d;
EGSSNVFSMF	DQTQIQEFKEAFTVIDQNR	N-ter +34.06 Da, K +34.06 Da	42.2	71.2	4	2377.42	0.16	0.04	MLRS_MOUSE	F6ULR7_MOUSE	Collagen alpha-2(I) chain;	Fast skeletal myosin light chain 2;MLC2F;
GAPGPAGASG	DRGEAGAAGPSGPAGPR	N-ter +34.06 Da	52.9	68.5	3	1555.90	1.31	0.23	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-1(I) chain;	Alpha-2 type I collagen;
GPVGPAGKNG	DRGETGAGPAGPIGPAGAR	N-ter +28.03 Da	55.5	66.2	3	1831.06	2.24	0.14	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
MHR	DSCPLDKVYVYVNLGNNGNKTELER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	25.2	57.2	4	2953.68	-1.03	0.13	SRSF3_MOUSE		Serine/arginine-rich splicing factor 3; MKI67 FHA domain-interacting nucleolar phosphoprotein;	Pre-mRNA-splicing factor SRP20;Protein X16;Splicing factor, arginine/serine-rich 3; Nucleolar protein interacting with the FHA domain of pK1-67;
KPKNIAVAHR	DSEGNQVLDPQKEGLSGEPRR	N-ter +28.03 Da, K +28.03 Da	19.9	54.5	4	2366.31	0.68	0.04	MKG71_MOUSE		ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase;
QTRGFVSDSS	DSMDTGAGSIR	N-ter +34.06 Da	39.9	62.3	2	1142.62	1.06	0.03	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	
PRQPSQSS	DSQVHSGVQVEGR	N-ter +34.06 Da	47.6	76.1	3	1430.84	0.88	0.08	F6TL02_MOUSE	FILA_MOUSE	ATPase inhibitor, mitochondrial;	
KVLQTRGFVS	DSSDSMDTGAGSIR	N-ter +28.03 Da	53.2	47.9	2	1425.67	1.14	0.11	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase;
DVEPDTYCRY	DSVSFVNGAVSDSDSKR	N-ter +34.06 Da, K +34.06 Da	72.1	59.1	3	1750.02	-0.23	0.03	PCOC1_MOUSE	D3ZE3_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;
QGVVMVGMGQK	DSYVGDEAOSKR	N-ter +34.06 Da, K +34.06 Da	38.7	85.1	3	1421.86	-1.15	0.13	ACTC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;
LATLVQRQYGG	DTDGFNLEDALKETSSVKQR	N-ter +28.03 Da, K +28.03 Da	21.2	101.2	4	2336.42	-1.94	0.22	C99L2_MOUSE		CD99 antigen-like protein 2;	MIC2-like protein 1;
ARHGFLPRHR	DTGLDISGR	N-ter +34.06 Da	36.9	19.9	2	1079.63	0.68	0.07	MBP_MOUSE	F7A0B0_MOUSE	Myelin basic protein;	Myelin A1 protein;
CDYNKFMVSVL	DTNKDCEVDFGEYVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	40.8	77.3	3	1901.99	-0.03	0.01	S10A3_MOUSE		Protein S100-A3;	Protein S-100E;S100 calcium-binding protein A3;
CPPPESKRRR	DTQSNELIEINPQTEGKVVYTR	N-ter +28.03 Da, K +28.03 Da	56.8	74.1	4	2490.44	0.41	0.05	COGA1_MOUSE	A3KFV3_MOUSE	Collagen alpha-1(XVI) chain;	
IMEKGELVPL	DTVLDMLR	N-ter +28.03 Da	25.6	59.0	2	989.58	0.66	0.03	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
PEEYVSPNSE	DVGVEGPKDGPQGPGR	N-ter +34.06 Da, K +34.06 Da	33.6	68.5	3	1729.06	0.83	0.11	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
VDTNTQSACF	DVIDQKSLPTSAEER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	49.9	58.9	3	1743.01	0.41	0.01	PRC2C_MOUSE	E9QKG5_MOUSE	Protein PRRC2C;	BAT2 domain-containing protein 1;HLA-B-associated transcript 2-like 2;Proline-rich and coiled-coil-containing protein 2C;
KDYGKESQAK	DVIEEYFKCK	N-ter +34.06 Da	21.2	99.1	4	1594.13	-3.32	0.33	RS12_MOUSE	D3Z6B6_MOUSE	40S ribosomal protein S12;	
LTKYKTLG	DVPVVADPTVNVTVTR	N-ter +34.06 Da	47.8	57.6	3	1812.13	-0.52	0.03	GDIR2_MOUSE		Rho GDP-dissociation inhibitor 2;	D4;Rho-GDI beta;
LVLLKGVQC	DVQLVESGGGLVQPGGSR	N-ter +34.06 Da	50.8	39.4	3	1788.03	3.69	0.37	HVM16_MOUSE		Ig heavy chain V region MOPC 21;	
SVGDGETVEF	DVVEGEKGAEEANVTGDPGVPEVGSR	N-ter +34.06 Da, K +34.06 Da	58.2	79.8	4	2606.55	0.90	0.15	DBPA_MOUSE	F6TIF5_MOUSE	DNA-binding protein A;	Cold shock domain-containing protein A;Y-box protein 3;
TDKRLRPLQ	DVYKIGGIGTVPVGR	N-ter +28.03 Da, K +28.03 Da	57.2	64.3	3	1586.02	-0.14	0.01	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
LVFAPVGVQS	DWLSISLPHR	N-ter +34.06 Da	40.8	72.6	3	1256.80	-0.49	0.03	Q9EQY5_MOUSE	D3YYJ5_MOUSE		Glycine- and tyrosine-rich RNA-binding protein;NS1-associated protein 1;Synaptotagmin-binding, cytoplasmic RNA-interacting protein;pp68;
GKLERVKKLK	DYAFIHFDER	N-ter +34.06 Da	36.6	60.1	3	1345.73	-1.94	0.22	HNRPO_MOUSE		Heterogeneous nuclear ribonucleoprotein Q;	
ILGGVISALS	EAAAQYNPEPPPPR	N-ter +28.03 Da	29.2	59.9	3	1563.86	1.15	0.03	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;
DGSASGTLL	EALDCILPPTRPDKPLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	33.2	63.8	4	2159.38	1.49	0.04	EF1A1_MOUSE	D3Y268_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
EGNASGVSL	EALDTLPPTRPTDKPLR	N-ter +28.03 Da, K +28.03 Da	30.4	81.4	4	2088.36	1.16	0.02	EF1A2_MOUSE	B7ZBW3_MOUSE	Elongation factor 1-alpha 2;	Eukaryotic elongation factor 1 A-2;Statin-S1;
VLDPMYSTYL	EALGIKGTIPPEYR	N-ter +28.03 Da, K +28.03 Da	33.5	75.4	3	1728.08	-2.84	0.00	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;
GSYIYEKPT	EAPQVTGPIEVVVR	N-ter +28.03 Da	30.4	29.1	3	1617.96	1.25	0.11	CRIP2_MOUSE		Cysteine-rich protein 2;	Heart LIM protein;
PISARLYAR	EATQAVLDKPELSSDASTR	N-ter +28.03 Da, K +28.03 Da	37.3	60.7	3	2174.24	1.00	0.12	ACADV_MOUSE		Very long-chain specific acyl-CoA dehydrogenase, mitochondrial;	MVLCAD;

Table S7, 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
GTEAAATVF	EAVPMSMPPILR	N-ter +34.06 Da	24.9	53.3	3	1373.84	-0.30	0.02	A1AT2_MOUSE			Alpha-1 protease inhibitor 2;Alpha-1-antitrypsinase;Serine protease inhibitor 1-2;Serine protease inhibitor A1b;
LGTPRLGVQ	EDGLDFPEYDGVDR	N-ter +34.06 Da	48.5	36.6	2	1659.81	-0.92	0.09	CASQ1_MOUSE	E9Q489_MOUSE	Calsequestrin-1;	Calsequestrin, skeletal muscle isoform; Eukaryotic initiation factor 5A isoform 1;eIF-4D;
GTDIPTGKY	EDICPSTHNDVPIK	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	47.9	69.9	4	2093.21	1.59	0.16	IF5A1_MOUSE	IF5A2_MOUSE	Eukaryotic translation initiation factor 5A-1;	Cathepsin B1;
PKLPGRVAF	EDIDLPEFDAR	N-ter +34.06 Da	30.3	25.5	2	1453.75	-5.64	0.00	CATB_MOUSE		Cathepsin B;	Alpha-1 type I collagen;
GATALLTHGQ	EDIPEVSCIHNGLR	N-ter +34.06 Da, C +57.02 Da	45.4	78.9	3	1671.98	-0.92	0.09	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	
TLTAVHDAIL	EDLVFSEIVGKR	N-ter +34.06 Da, K +34.06 Da	52.7	75.7	3	1556.04	0.58	0.05	RS7_MOUSE	F6SVV1_MOUSE	40S ribosomal protein S7;	
KVSSGTPKI	EDPNQFVPLNTNPTVELEKR	N-ter +34.06 Da, K +34.06 Da	32.9	59.9	3	2407.45	-0.86	0.13	ADDG_MOUSE		Gamma-adducin;	Adducin-like protein 70;
LGTLPARAAH	EDPVEKIVIEGFSR	N-ter +34.06 Da, K +34.06 Da	28.5	84.9	3	1572.02	0.51	0.01	SBSN_MOUSE	E9QPB2_MOUSE	Suprabasin;	
HSDASKRLI	EDTEDWRPR	N-ter +34.06 Da	14.5	93.0	3	1236.71	2.50	0.14	PDU15_MOUSE	Q9CRA2_MOUSE	PDZ and LIM domain protein 5;	Enigma homolog;Enigma-like PDZ and LIM domains protein;
RVLKEDKERW	EDVKEEMTSALATMR	N-ter +28.03 Da, K +28.03 Da	41.5	82.2	3	1766.00	-1.69	0.38	MAPK2_MOUSE		MAP kinase-activated protein kinase 2;	
TAKQTGHTLL	EDYQIVERPQR	N-ter +28.03 Da	20.3	51.5	3	1459.82	-0.23	0.01	SPG20_MOUSE		Spartin;	
DMLEEQTAF	EDYVQSMVDAAFNK	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	40.0	64.6	3	1797.04	-1.15	0.08	EF1B_MOUSE		Elongation factor 1-beta;	
SGLLLTQTG	EEAQEIDCNDEAVFQAVDASLKLINAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	49.6	93.2	4	3164.95	-1.84	0.26	Q65913_MOUSE	Q65912_MOUSE		
IDSHFEARKK	EEEELIALKER	N-ter +28.03 Da, K +28.03 Da	24.1	68.1	3	1413.87	-1.43	0.12	TNNT3_MOUSE	A2A6J0_MOUSE	Troponin T, fast skeletal muscle;	Fast skeletal muscle troponin T; 2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase; 140 kDa Ser/Arg-rich domain protein;U2-associated protein SR140;
LAKYNQLRI	EELGSKAKFAGR	N-ter +34.06 Da, K +34.06 Da	14.7	83.4	4	1523.05	0.14	0.01	ENOA_MOUSE	Q6PHC1_MOUSE	Alpha-enolase;	
EDEKAAEYF	EEFLAFAEGSDGNKVTFR	N-ter +28.03 Da, K +28.03 Da	39.0	57.9	4	2327.35	0.29	0.02	SR140_MOUSE	E9QM87_MOUSE	U2 snRNP-associated SURP motif-containing protein;	
DLLEEITKF	EEHVQSDVIAAFNK	N-ter +34.06 Da, K +34.06 Da	44.6	70.3	3	1767.11	-3.64	0.46	D3YV68_MOUSE	Q80T06_MOUSE		
GHACTQKFSN	EIAMATVTLAR	N-ter +34.06 Da	41.7	17.5	2	1337.77	0.20	0.01	ALDOA_MOUSE	ALDOC_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
MPCKI	EEIKFLLTAR	N-ter +28.03 Da, K +28.03 Da	33.9	75.2	3	1389.89	0.31	0.03	RL38_MOUSE		60S ribosomal protein L38;	
LULSGELYA	EEKQCFPTVENGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	34.0	53.9	3	1775.97	-0.12	0.01	F13B_MOUSE	B1AY02_MOUSE	Coagulation factor XIII B chain;	Protein-glutamine gamma-glutamyltransferase B chain;Transglutaminase B chain;
FSETLTRAKF	EELNMDLFR	N-ter +28.03 Da	26.9	44.9	2	1193.63	-1.40	0.15	GRP78_MOUSE		78 kDa glucose-regulated protein;	Heat shock 70 kDa protein 5;immunoglobulin heavy chain-binding protein;
PHLHYSKEAF	EEMEGTSPSPHVSAR	N-ter +28.03 Da	52.2	70.8	3	1824.96	0.31	0.03	E9Q056_MOUSE	E9Q6Y2_MOUSE		
LIVKDEKSLV	EEQLPDGKGLQGR	N-ter +34.06 Da, K +34.06 Da	17.7	87.7	4	1686.16	-0.18	0.01	TITIN_MOUSE	E9Q8M7_MOUSE	Titin;	Connectin;
ERGNPVIQW	EEVEDASEEAPLRDR	N-ter +34.06 Da	37.1	69.8	3	1777.98	0.00	0.00	SRCA_MOUSE		Sarcalumenin;	
ERGNPVIQW	EEVEDASEEAPLR	N-ter +34.06 Da	46.5	56.9	3	1506.81	2.17	0.21	SRCA_MOUSE		Sarcalumenin;	
FRHACVPVDF	EEVHVSSNADEEDIR	N-ter +34.06 Da	58.3	78.2	3	1761.96	1.01	0.25	IDHG1_MOUSE	Q3TKM5_MOUSE	Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;	Isocitric dehydrogenase subunit gamma;NAD(+)-specific ICDH subunit gamma;
DQNSSGPDAY	EEVTDGAQTGGGLFNLR	N-ter +28.03 Da	54.2	38.9	3	1790.95	0.28	0.03	PTN18_MOUSE		Tyrosine-protein phosphatase non-receptor type 18;	Fetal liver phosphatase 1;PTP-K1;
KYRSQHIIPL	EEVTLEPLTELQAKNR	N-ter +28.03 Da, K +28.03 Da	52.0	75.8	3	2022.25	0.73	0.08	PKHF1_MOUSE		Pleckstrin homology domain-containing family F member 1;	Lysosome-associated apoptosis-inducing protein containing PH and FYVE domains;
TEEHLRDYF	EEYKIDTIEITDR	N-ter +34.06 Da, K +34.06 Da	32.7	70.0	3	1862.16	2.10	0.23	ROA2_MOUSE	F6U106_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1; Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;
FSMFDQTIQ	EFKEAFTVIDQNR	N-ter +34.06 Da, K +34.06 Da	33.6	80.0	3	1664.05	0.10	0.01	MLRS_MOUSE	F6ULR7_MOUSE		
RLSLESEGAN	EGATAAPELSALEAFRR	N-ter +34.06 Da	25.4	75.5	3	1951.17	-0.52	0.11	TPPP_MOUSE		Tubulin polymerization-promoting protein;	
RLSLESEGAN	EGATAAPELSALEAFR	N-ter +28.03 Da	49.0	35.2	2	1788.95	0.25	0.05	TPPP_MOUSE		Tubulin polymerization-promoting protein;	
IIRNVKGPVQ	EGDVLTLLESER	N-ter +28.03 Da	38.2	24.8	2	1387.75	0.44	0.03	RS28_MOUSE	D3YVD9_MOUSE	40S ribosomal protein S28;	
GVSEQASDS	EGHSDFSEGOAVGAHR	N-ter +34.06 Da	44.0	87.7	4	1716.95	1.29	0.17	F78V11_MOUSE	FILA_MOUSE		
KKAGHPFMWN	EHLGYVLTCPSNLTGLR	N-ter +34.06 Da, C +57.02 Da	55.3	72.6	3	2020.21	0.01	0.00	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
DAYGPPSNFL	EIDVSNPQTVGVGR	N-ter +34.06 Da	23.1	41.0	3	1503.87	0.36	0.01	SNX3_MOUSE	Q78ZM0_MOUSE	Sorting nexin-3;	SDP3 protein;
LARELSGTH	EILGTAQSGVCNDVGR	N-ter +28.03 Da, C +57.02 Da	45.3	62.3	3	1702.94	0.29	0.03	RL12_MOUSE		60S ribosomal protein L12;	
DPLNNGRTL	EIPGSSDPNIPDGDVSLVR	N-ter +34.06 Da	36.7	47.5	3	2234.23	0.59	0.04	CO4B_MOUSE		Complement C4-B;	
YPGIADRMQK	EITALAPSTMKIIAPP	N-ter +34.06 Da, K +34.06 Da	21.9	80.1	4	2280.62	1.23	0.05	ACTS_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	Alpha-actin-1;
NLVKTNCDLY	EKLGEYGFQNAIVR	N-ter +28.03 Da, K +28.03 Da	42.9	67.6	3	1792.11	-0.58	0.03	ALBU_MOUSE		Serum albumin;	
LAVLPTTTA	EKNQIDIVSLTVDSR	N-ter +34.06 Da, K +34.06 Da	42.8	59.7	3	1777.10	1.29	0.10	Q9BKB8_MOUSE	Q8C7G9_MOUSE		
KLPSLAFLYM	EKNQLEEVPSALPR	N-ter +34.06 Da, K +34.06 Da	48.0	44.2	3	1677.05	0.38	0.03	PRELP_MOUSE			
NIGGASGYI	EKPQTEAPQVTGPIEVVVR	N-ter +28.03 Da, K +28.03 Da	47.9	75.8	4	2229.41	0.70	0.06	CRIP2_MOUSE		Cysteine-rich protein 2;	Heart LIM protein;
FASQMSIYGYD	EKSAGVSPGPMGSPGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da, K +34.06 Da	26.4	67.2	3	1765.04	0.37	0.02	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
AIPNLRNYG	ELADCCTKQEPER	N-ter +34.06 Da	24.1	69.1	3	1702.95	-3.84	1.10	ALBU_MOUSE		Serum albumin;	
KDKSGFIEED	ELGSILKPFSSDAR	N-ter +34.06 Da, K +34.06 Da	29.7	76.2	3	1547.02	0.39	0.03	PRVA_MOUSE		Parvalbumin alpha;	
MNSDLKAQLR	ELNITAAKEIEVGGR	N-ter +34.06 Da, K +34.06 Da	20.4	53.2	3	1724.10	-0.25	0.01	RS7_MOUSE	F6SVV1_MOUSE	40S ribosomal protein S7;	
QKQRKNLDLM	ELQALIDSHFAR	N-ter +28.03 Da	53.9	78.5	3	1555.92	-0.49	0.07	TNNT3_MOUSE	A2A6J0_MOUSE	Troponin T, fast skeletal muscle;	Fast skeletal muscle troponin T;
RQMRHRSLAR	ELSGTIKEILGTAQSGVCNDVGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	49.2	73.6	4	2471.51	-0.20	0.04	RL12_MOUSE		60S ribosomal protein L12;	
EGEVVVKAT	EMVEVGPEDDEVGAER	N-ter +34.06 Da	39.9	43.9	3	1793.90	0.47	0.03	PTRF_MOUSE		Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
LGQQQLNLL	ENWDTLGVSTVQLQER	N-ter +28.03 Da	39.5	54.4	3	1890.01	0.16	0.02	APOA1_MOUSE	Q8BPD5_MOUSE	Apolipoprotein A-I;	Apolipoprotein A1;
DKLCAIPNLR	ENYGELADCCTKQEPER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	43.6	68.8	3	2154.08	2.83	0.28	ALBU_MOUSE		Serum albumin;	

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
RLYFCEDRKA LQLVSWTLAA LLWAAACAQS	EPEGLRR EPVDVLEAWGVHR EQDYFDKAVNIR	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	8.7 66.4 21.6	2.0 70.4 74.6	2 3 3	889.52 1539.93 1699.98	-2.64 0.28 -0.32	0.17 0.03 0.02	AICDA_MOUSE Q9JL12_MOUSE QPX7_MOUSE		Activation-induced cytidine deaminase; Glutathione peroxidase 7;	Cytidine aminohydrolase;
LIWDNGMVLG KGKSCRTITF	EQEVS DNELQELSTQGSR EQFQEALEELAKKR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	56.3 29.4	38.2 69.7	3 4	2082.07 1820.22	-0.18 1.07	0.01 0.12	CLUS_MOUSE TPPP_MOUSE	E9Q988_MOUSE	Clusterin; Tubulin polymerization-promoting protein;	Apolipoprotein J;Clusterin;Sulfated glycoprotein 2;
KRSRWNQDTM GPRGERGTPG	EQKTVIPGMPPTVPPGLTR ESGAAGPSGPIGSR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	40.7 48.1	58.7 32.3	3 2	2089.32 1275.70	0.36 1.18	0.01 0.09	SF01_MOUSE CO1A2_MOUSE	Q3U145_MOUSE E9Q6U9_MOUSE	Splicing factor 1; Collagen alpha-2(I) chain;	CW17;Mammalian branch point-binding protein;Transcription factor ZFM1;Zinc finger gene in MEN1 locus;Zinc finger protein 162; Alpha-2 type I collagen;
RSGGESHQDQ VSEAGPAGAG	ESIHQLQSSFFSLQEEDKSR ESKCLPMVKVLDVAVR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	23.1 22.6	88.9 75.0	4 4	2397.50 1846.27	-5.64 1.81	0.00 0.21	ARP21_MOUSE TTHY_MOUSE	E9Q4A0_MOUSE	cAMP-regulated phosphoprotein 21; Transthyretin;	Regulator of calmodulin signaling;Thymocyte cAMP-regulated phosphoprotein;
LSIFVSGSCFS ADRQGRRGVSV RSPRRSPVHP	ESPTKVLQVGGAAHR ESQASDSEGHSDFSEGGAVGAHR ESSEGEHSVVPQR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +34.06 Da	38.5 61.0 34.5	86.3 89.1 66.8	4 4 3	1546.06 2421.28 1602.88	0.26 2.51 0.93	0.03 0.54 0.10	CDSL_MOUSE F6TL02_MOUSE FILA2_MOUSE	F7BVV1_MOUSE FILA2_MOUSE	CD5 antigen-like; Filaggrin-2;	Intermediate filament-associated protein; Interferon-induced, double-stranded RNA-activated protein kinase inhibitor;Protein kinase inhibitor of 58 kDa; Eukaryotic initiation factor 5A isoform 1;eIF-4D;
GRYTDATSKY MADDLDF GPAGKNGDRG GGKGEQKQMK	ESVMKTEPSVAEYTVR ETGDAGASATPFMQCSALR ETGPAGPAGPIGAGAR ETIMNKEKLAQLQAVR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	34.7 55.4 50.0 17.5	61.5 36.2 49.2 66.2	3 3 3 4	1881.07 1996.97 1508.89 2083.32	0.19 0.47 2.64 1.31	0.02 0.04 0.20 0.09	DNIC3_MOUSE IF5A1_MOUSE CO1A1_MOUSE BTF3_MOUSE		Dnal homolog subfamily C member 3; Eukaryotic translation initiation factor 5A-1; Collagen alpha-1(I) chain; Transcription factor BTF3;	HESB-like domain-containing protein 1;
RRSGRLLTRW LASLLSGQA FSRGLSNAER	ETSSSIPEAGEGQIR EVEDASEEAPLR EVGKALEGINNGITQAGR	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	39.7 44.8 52.2	56.4 40.0 61.4	3 2 3	1607.91 1371.71 1882.14	0.39 -0.76 -0.43	0.05 0.09 0.03	ISCA2_MOUSE SRCA_MOUSE SBSN_MOUSE	E9QP82_MOUSE	Iron-sulfur cluster assembly 2 homolog, mitochondrial; Sarcalumenin; Suprabasin;	
VLSAEKLDE LTKLPGYPVK GAGFRPKVKR	EVHTGLGELLR EVKCDMEVSCPEGYTCCR EVKVDCEYLALSKR	N-ter +28.03 Da 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	33.6 55.9 33.3	42.6 47.0 61.6	3 3 4	1250.75 2335.05 1880.12	0.68 0.77 0.87	0.07 0.09 0.09	SERPH_MOUSE GRN_MOUSE Q8BM18_MOUSE		Serpin H1; Granulins;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
VLMDIFQVKA VAFVKHTTF LMAVIGINS	EVLDMAENAFDDEYLKCKSR EVLPEKADRQYELLCLDNTR EVQLQSQGAELVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +34.06 Da	44.9 31.4 48.8	95.1 58.6 39.4	4 4 3	2516.43 2644.54 1489.89	-6.64 -1.74 0.60	0.00 0.12 0.06	NAR3_MOUSE TRFE_MOUSE HVMO2_MOUSE	E9Q1U7_MOUSE E9Q035_MOUSE	Ecto-ADP-ribosyltransferase 3; Serotransferrin; Ig heavy chain V region 93G7;	Mono(ADP-ribosyl)transferase 3;NAD(P)(+)-arginine ADP-ribosyltransferase 3;
DKRSALQISN LASVFHATAF EEHHLRDYFE	EWASQITDGLKPEVTKDVER EWDTEGNPFDQDIYGR EYKIDTIEITDR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	39.9 42.7 22.3	70.7 80.5 80.3	4 3 3	2372.39 1975.04 1721.06	0.51 -0.84 -1.47	0.03 0.12 0.08	SERPH_MOUSE SERPH_MOUSE ROA2_MOUSE		Serpin H1; Serpin H1; Heterogeneous nuclear ribonucleoproteins A2/B1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
IHFPRLSISG GIRGITGLPG RSFSTSVVVRP	EYNKLTMLSPGLITR FAGPPGLPGLPGHPGPR FAKLVRRPVQVYVIEGR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	33.5 24.9 36.8	71.7 44.1 48.7	3 3 4	1803.19 1650.97 1984.26	1.02 1.61 -0.97	0.15 0.07 0.06	A1AT1_MOUSE CO4A3_MOUSE ATPO_MOUSE	A1AT3_MOUSE D3Z4J0_MOUSE	Alpha-1-antitrypsin 1-1; Collagen alpha-3(IV) chain; ATP synthase subunit O, mitochondrial;	Alpha-1 protease inhibitor 1;Alpha-1-antiprotease;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
PSSLITRVSY PEISASVMKI	FAVFDGGHGR FDAAKAPIQWEER	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	38.5 23.7	51.6 62.1	3 3	1208.71 1615.94	-1.89 -0.40	0.07 0.04	ILKAP_MOUSE IDH3A_MOUSE		Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial;	Oligomycin sensitivity conferral protein;
GKADVSVFLV PYQLKTAMFC	FDCNNEICIER FDEGSSTPGTSGPPKPTAR	N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da	28.0 56.1	53.3 54.1	3 3	1502.75 1944.06	-1.40 0.00	0.15 0.00	KCY_MOUSE SYP2L_MOUSE		UMP-CMP kinase; Synaptopodin 2-like protein;	Isocitric dehydrogenase subunit alpha;NAD(+)-specific ICDH subunit alpha; Cytidine monophosphate kinase;Cytidylylate kinase;Deoxycytidylylate kinase;Uridine monophosphate kinase;Uridine monophosphate/cytidine monophosphate kinase;
EIFDKARVLF VVKGEKILPV DGLRKRPLUV	FDELDSIAKAR FDEPPNPTNVEESLKR FDGSSTSTSIKVKR	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	19.9 37.7 22.7	71.1 61.3 85.8	3 3 4	1331.87 1939.15 1596.03	-1.25 -1.18 0.07	0.18 0.05 0.00	TERA_MOUSE TMOD3_MOUSE ASHWN_MOUSE		Transitional endoplasmic reticulum ATPase; Tropomodulin-3; Ashwin;	15S Mg(2+)-ATPase p97 subunit;Valosin-containing protein; Ubiquitous tropomodulin;

Table S7, 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
MVNPTVF QQQLIDHFL	FDITADDEPLGR FDKPVSPLLASGMAR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	51.6 37.5	38.8 66.8	2 3	1375.72 1757.11	-0.86 0.67	0.08 0.05	PPIA_MOUSE KCRM_MOUSE	E9Q1E3_MOUSE KCRB_MOUSE	Peptidyl-prolyl cis-trans isomerase A; Creatine kinase M-type;	Cyclophilin A;Cyclosporin A-binding protein;Rotamase A;SP18; Creatine kinase M chain;M-CK;
KGPKVTKVY	FDLQIGDESIVGR	N-ter +28.03 Da	37.9	37.4	2	1362.73	-0.04	0.00	PPIB_MOUSE		Peptidyl-prolyl cis-trans isomerase B; Myosin regulatory light chain 2, skeletal muscle isoform;	CYP-51;Cyclophilin B;Rotamase B;5-cyclophilin;
AEGSSNVFSM SYTYLSLGF	FDQTIQEFKEAFTVIDQNR FDRDDVALEGVGHFFR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	54.0 61.3	66.0 101.0	4 4	2512.43 1913.16	0.19 -2.12	0.05 0.18	MLRS_MOUSE FRIL1_MOUSE	F6ULR7_MOUSE FRIL2_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform; Ferritin light chain 1;	Fast skeletal myosin light chain 2;MLC2F; Ferritin L subunit 1;
VDSRSPGMPL	FDVEEGLSKR	N-ter +34.06 Da, K +34.06 Da	25.9	49.6	3	1345.85	0.26	0.02	CMYA5_MOUSE	E9QU10_MOUSE	Cardiomyopathy-associated protein 5;	Heart and skeletal muscle-specific and sprout domain-containing;Myospryn;Stretch-response protein 553;Stretch-responsive fibronectin protein type 3;TRIM-like protein; BAT2 domain-containing protein 1;HLA-B associated transcript 2-like 2;Proline-rich and coiled-coil-containing protein 2C; Rotamase H; NDR1 protein kinase;Nuclear Dbf2-related kinase 1;
HVDNTQASAC KRARVNPVVF	FDVIDQKSLPTSAEER FDVSIQGEVGR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	36.1 27.0	79.7 39.5	3 2	1890.12 1290.71	-1.09 -1.40	0.12 0.15	PRC2C_MOUSE PPIH_MOUSE	E9QKGS_MOUSE A2BG19_MOUSE	Protein PRC2C; Peptidyl-prolyl cis-trans isomerase H;	Hippocampus abundant transcript 3;SCG10-like protein;SCG10-related protein HIAT3;
GVEEIKNLF DTEEYNLRDY	FEQVDWEHIR FEKYKJIEIVMEDR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	29.9 37.9	52.5 70.0	3 4	1314.70 2070.22	0.84 0.53	0.09 0.04	STK38_MOUSE ROA3_MOUSE	A2AL12_MOUSE	Serine/threonine-protein kinase 38; Heterogeneous nuclear ribonucleoprotein A3;	
QLDKRRSGQS KSIIIMYLSL	FEVILKSPDLSPEVLSPPPKR FEVLPQQVTIDAIR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da,	19.6 31.1	65.0 55.6	4 3	2710.78 1656.02	-2.12 0.14	0.18 0.01	STMN3_MOUSE Q3TR59_MOUSE	F6QG16_MOUSE E9Q6R7_MOUSE	Stathmin-3;	
NRPPTYTKY GGPKLPGRVA EQALEDFSS	FGCELGAQTQDFVKNDR FGEDIDLPEFDAR FGPISEVVVKDR	C +57.02 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	31.5 34.2 27.8	60.5 39.6 62.7	3 3 3	2052.16 1657.87 1499.96	0.03 -6.64 1.73	0.01 0.00 0.19	IFS_MOUSE CATB_MOUSE RBM3_MOUSE	Q8BVV6_MOUSE Q8BG13_MOUSE	Eukaryotic translation initiation factor 5; Cathepsin B; Putative RNA-binding protein 3;	Cathepsin B1; RNA-binding motif protein 3; DNA-binding p52/p100 complex, 100 kDa subunit;Polypyrimidine tract-binding protein-associated-splicing factor;
MMGSDMRTER	FGQGGAGVPGQGQPR	N-ter +34.06 Da	34.9	56.6	3	1374.80	0.65	0.03	SFPQ_MOUSE		Splicing factor, proline- and glutamine-rich; Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;
SMFDQTIQIE	FKEAFTVIDQNR	N-ter +28.03 Da, K +28.03 Da	45.0	49.0	3	1522.89	-0.14	0.01	MLRS_MOUSE	F6ULR7_MOUSE		
VARGKHLVLL	FKEETEIPAR	N-ter +34.06 Da, K +34.06 Da	34.4	51.6	3	1286.82	0.01	0.00	PRDBP_MOUSE		Protein kinase C delta-binding protein; Myosin regulatory light chain 2, skeletal muscle isoform;	Cavin-3;Serum deprivation response factor-related gene product that binds to C-kinase;
PEGKTIKKQ	FLEELLTQCDDR	N-ter +34.06 Da, C +57.02 Da	26.0	49.5	3	1557.87	2.30	0.15	MLRS_MOUSE			Fast skeletal myosin light chain 2;MLC2F; Annexin I;Annexin-1;Calpactin II;Calpactin-2;Chromobindin-9;Lipocortin I;Phospholipase A2 inhibitory protein;p35;
MVSEFLKQAR	FLENQEYEVQAVK	N-ter +34.06 Da, K +34.06 Da	44.2	42.0	3	1792.04	-0.67	0.03	ANXA1_MOUSE	E9QA30_MOUSE	Annexin A1;	
KIVSNVPQLE	FLNLSNPLSLVLER	N-ter +28.03 Da	27.9	54.4	4	1816.11	2.62	0.19	TBCEL_MOUSE		Tubulin-specific chaperone cofactor E-like protein;	Leucine-rich repeat-containing protein 35; Adhesion and degranulation promoting adaptor protein;FVB-120/130;FYN-T-binding protein;SLAP-130;SLP-76-associated phosphoprotein;
FSKVAGAKSK	FMPAAQDTSKPR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	27.5 23.4	70.3 61.1	3 3	1530.92 1931.16	-0.62 -0.64	0.12 0.13	FYB_MOUSE MYPC2_MOUSE	F8W134_MOUSE	FYN-binding protein; Myosin-binding protein C, fast-type;	C-protein, skeletal muscle fast isoform;
EEFDARWVWY MK	FNKPIDAWELR FNPFVTSDR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da	38.3 31.9	61.6 26.9	3 2	1570.97 1109.58	-1.79 0.31	0.25 0.01	COX5A_MOUSE RL26_MOUSE	D3Z3Q9_MOUSE	Cytochrome c oxidase subunit 5A, mitochondrial; 60S ribosomal protein L26;	Cytochrome c oxidase polypeptide Va; Silica-induced gene 20 protein;
RATVASSSQK EAASGALSMF TGSILVAVNP	FQDLGVKNSEPAAR FQGEETENEENLSSEKAGLDR FQMLPLYLTLQVQIYYSR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	25.7 42.9 24.8	63.0 62.9 62.1	3 4 4	1599.01 2593.41 2325.37	2.08 0.35 -1.22	0.15 0.05 0.09	SEPT9_MOUSE A2AIX1_MOUSE MYO7B_MOUSE	A2A6J3_MOUSE E9QAT4_MOUSE	Septin-9; Myosin-VIIB;	SL3-3 integration site 1 protein;
IILYEQHGFA ELNGKLTGMA	FQSGQVLSALPR FRVPTPNVSVVDLTCR	N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da	30.0 50.6	54.5 72.5	3 3	1329.81 1887.14	0.28 0.30	0.03 0.02	CBPB2_MOUSE E9Q9E5_MOUSE	G3PT_MOUSE	Carboxypeptidase B2; Glyceraldehyde-3-phosphate dehydrogenase;	Carboxypeptidase R;Carboxypeptidase U;Thrombin-activable fibrinolysis inhibitor;
VLRPPGGGSN SLNDITKKEK	FSLGFDEPAEQPR FSPILTANLMLLAENGR	N-ter +28.03 Da N-ter +34.06 Da	40.9 30.6	54.5 69.9	3 3	1618.89 1894.15	0.84 -0.27	0.03 0.04	HN1_MOUSE ATPO_MOUSE	D3Z4J0_MOUSE	Hematological and neurological expressed 1 protein; ATP synthase subunit O, mitochondrial;	Oligomycin sensitivity conferral protein; Calgizzarin;Endothelial monocyte-activating polypeptide;Protein S100-C;S100 calcium-binding protein A11;
LSFMTELA SAPRVEFDLA ATLVESSTSG	FTKNQKDPGVLDL FTPEISWSLR FTPSGAGASVSMIASR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +28.03 Da	19.8 29.6 45.2	91.7 37.5 43.8	4 2 3	1601.04 1268.75 1565.86	0.19 0.52 0.21	0.02 0.04 0.02	S10AB_MOUSE MUG1_MOUSE NASP_MOUSE	F6S3J5_MOUSE	Protein S100-A11; Muringlobulin-1; Nuclear autoantigenic sperm protein; Myosin regulatory light chain 2, skeletal muscle isoform;	
SVLTPPPQA RYLSPKIKM	FTVIDQNR FVLDEADEMLSR	N-ter +28.03 Da N-ter +28.03 Da	23.3 38.1	47.9 34.9	2 2	1019.59 1451.75	0.71 0.58	0.02 0.07	MLRS_MOUSE IF4A1_MOUSE	F6ULR7_MOUSE IF4A2_MOUSE	Eukaryotic initiation factor 4A-1;	Fast skeletal myosin light chain 2;MLC2F; ATP-dependent RNA helicase eIF4A-1; Deubiquitinating enzyme 47;Ubiquitin thiolesterase 47;Ubiquitin-specific-processing protease 47;
LDRHANTIRL	FVLLPEQSPGSYSKR	N-ter +28.03 Da, K +28.03 Da	44.7	62.0	3	1763.07	-0.92	0.05	UBP47_MOUSE	F6ZD38_MOUSE	Ubiquitin carboxyl-terminal hydrolase 47;	

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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
RTSTSAVPLN	FVPLNTNPKVEQEMR	N-ter +34.06 Da, K +34.06 Da	21.5	60.9	3	1869.16	0.01	0.00	ADDA_MOUSE	E9Q1K3_MOUSE	Alpha-adducin;	Erythrocyte adducin subunit alpha;
WGMKVLQTRG	FVSDSSDMTGTAGSIR	N-ter +34.06 Da	26.5	74.9	3	1764.94	-0.97	0.10	ATF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase;
HRDDGLADLL	FVSSGPTNASAFER	N-ter +34.06 Da	43.7	49.5	3	1603.89	0.08	0.01	MAP4_MOUSE	E9QPW8_MOUSE	Microtubule-associated protein 4;	
GGAAGATSLC	FVYPLDFAR	N-ter +28.03 Da	21.9	43.3	2	1154.66	0.38	0.03	ADT1_MOUSE	ADT2_MOUSE	ADP/ATP translocase 1;	ADP,ATP carrier protein 1;ADP,ATP carrier protein, heart/skeletal muscle isoform
NESGNPSYKY	FVYSAEQVVGGMKEAQR	N-ter +34.06 Da, K +34.06 Da	23.9	66.4	3	2166.29	-5.64	0.00	TXD12_MOUSE		Thioredoxin domain-containing protein 12;	T1;Adenine nucleotide translocator 1;Solute carrier family 25 member 4;mANC1;
GPPPPAGGGG	GAAGAGGPPPGPPGADR	N-ter +34.06 Da	44.0	67.3	3	1548.89	-0.52	0.04	FUBP2_MOUSE		Far upstream element-binding protein 2;	Endoplasmic reticulum resident protein 19;Thioredoxin-like protein p19;
NPLKNSGIEV	GAFOGLKLSYIR	N-ter +34.06 Da, K +34.06 Da	30.7	61.6	3	1507.01	1.60	0.17	PGS2_MOUSE		Decorin;	KH type-splicing regulatory protein;
LLRGGPVARA	GAGAVGAGPVVR	N-ter +34.06 Da	47.7	37.7	2	1043.67	-0.12	0.01	Q6PE62_MOUSE			Bone proteoglycan II;PG-S2;PG40;
RNLHKTAVHN	GAGGALFVHR	N-ter +34.06 Da	46.6	40.3	2	1017.63	0.37	0.05	NDUV2_MOUSE		NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial;	NADH-ubiquinone oxidoreductase 24 kDa subunit;
MSVFGKLF	GAGGGKAGGGPTPQEAQR	N-ter +34.06 Da, K +34.06 Da	24.2	86.3	4	1938.32	0.18	0.03	CHM48_MOUSE		Charged multivesicular body protein 4b;	Chromatin-modifying protein 4b;
ATPKGPRML	GAPEADANEQVVR	N-ter +28.03 Da	34.9	62.4	3	1470.75	0.60	0.05	CYTC_MOUSE	A2APX3_MOUSE	Cystatin-C;	Cystatin-3;
RVAGQPQAQT	GAPQGSLEYLFR	N-ter +28.03 Da	41.3	67.4	3	1550.88	-0.36	0.03	FRIL1_MOUSE	Q9CPX4_MOUSE	Ferritin light chain 1;	Ferritin L subunit 1;
ESEIGIGSNF	GAPSASVAAPAPAR	N-ter +34.06 Da	31.4	52.6	3	1326.82	0.59	0.10	AP181_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;
AGSSSGSGVQ	GASAGLAADASR	N-ter +28.03 Da	72.7	45.5	2	1130.62	2.12	0.16	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;	
TISLQMGTKN	GASQAGMLAPGTR	N-ter +34.06 Da	65.1	40.0	2	1249.72	-0.47	0.04	CNN3_MOUSE		Calponin-3;	Calponin, acidic isoform;
VSQKTTPRAQP	GATTVQEQLR	N-ter +28.03 Da	40.1	37.7	2	1129.65	-1.60	0.10	PLD4_MOUSE		Phospholipase D4;	Choline phosphatase 4;Phosphatidylcholine-hydrolyzing phospholipase D4;
GKSGGSGGAGK	GAVSAEQVIAGFNR	N-ter +34.06 Da	42.8	58.5	3	1451.88	-0.67	0.04	PFDD2_MOUSE	F8WJ30_MOUSE	Prefoldin subunit 2;	
DYKSAHKGFK	GAYDAQGLTSLKIFKLGR	N-ter +34.06 Da, K +34.06 Da	30.0	84.6	4	1983.37	-0.49	0.05	F7A0B0_MOUSE	F6RT34_MOUSE		
TDLNPDLQGG	GDDLDPNVYLSRR	N-ter +28.03 Da	37.1	33.9	2	1477.75	0.35	0.03	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK;
TMRQTYPLQR	GDEAATLENLASER	N-ter +28.03 Da	23.0	45.5	3	1615.88	0.31	0.06	E9Q492_MOUSE	Q3V0V1_MOUSE		
PASHEIATNL	GDFAIISLYR	N-ter +34.06 Da	34.7	29.1	2	1074.62	0.87	0.08	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	Alpha-1 protease inhibitor 1;Alpha-1-antitrypsinase;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
SHDFNFHINY	GDGLFGLPEDLR	N-ter +34.06 Da	48.2	36.6	2	1321.76	-0.92	0.12	HYOU1_MOUSE		Hypoxia up-regulated protein 1;	Hypoxia c(2+)-binding protein;
LTKVNEKCECH	GDLLCADDR	N-ter +34.06 Da, C +57.02 Da	37.7	33.3	2	1196.60	-0.62	0.02	ALBU_MOUSE		Serum albumin;	
EDERKMLTGS	GDPKEEEEEVDPLTTR	N-ter +34.06 Da, K +34.06 Da	47.8	62.0	3	2252.31	-0.14	0.02	QCR6_MOUSE		Cytochrome b-c1 complex subunit 6, mitochondrial;	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;
PGPVGPAGKN	GDRGETGPAGPAGIPAGAR	N-ter +34.06 Da	73.5	47.2	3	1894.08	2.32	0.30	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
RPVGLPHTRY	GDSPKIDLAGSALSGLDKDLSDR	N-ter +34.06 Da, K +34.06 Da	65.1	82.4	4	2544.66	-0.25	0.04	SH3K1_MOUSE	B0R0Y8_MOUSE	SH3 domain-containing kinase-binding protein 1;	Regulator of ubiquitous kinase;SH3-containing, expressed in tumorigenic astrocytes;
LNDGDILSTY	GDSTVNTESATASAPR	N-ter +34.06 Da	48.6	59.4	3	1596.88	0.77	0.14	B0QZV3_MOUSE	A1L3P4_MOUSE	Sodium/hydrogen exchanger;	Nervous system over-expressed protein 20;Protein FAM114A1;
VECVDVSLLE	GDTGSEIPLKEQDDAAVDPSSQAGR	N-ter +34.06 Da, K +34.06 Da	49.5	74.4	4	2610.50	-0.62	0.10	NXP20_MOUSE	D3Z2J2_MOUSE	Protein Noxp20;	
IRNVKGPQVE	GDVLTLLSESR	N-ter +28.03 Da	38.6	37.0	2	1258.72	-1.84	0.13	RS28_MOUSE	D3YVD9_MOUSE	40S ribosomal protein S28;	
SLTKYKTKLL	GDVPPVADPTVNVTVTR	N-ter +28.03 Da	47.2	39.4	3	1863.08	0.43	0.04	GDIRZ_MOUSE		Rho GDP-dissociation inhibitor 2;	D4;Rho-GDI beta;
VLGVSEPVLA	GDVSSCDNPSGTEPSGTNR	N-ter +34.06 Da, C +57.02 Da	49.7	66.7	3	1969.98	0.39	0.07	Q9D140_MOUSE			
VSGALSDLSF	GEAPAAPQSPMSSEER	N-ter +28.03 Da	32.7	66.3	3	1670.87	-0.30	0.02	GLYG_MOUSE	D3Z5N4_MOUSE	Glycogenin-1;	
ASVPTLASTL	GEAPVPPPLSVR	N-ter +28.03 Da	18.9	83.6	3	1245.81	4.90	0.46	IGDC3_MOUSE	Q5R1W1_MOUSE	Immunoglobulin superfamily DCC subclass member 3;	Putative neuronal cell adhesion molecule;
LSNNQEVSAF	GEDGEGDDLWLTVR	N-ter +28.03 Da	45.1	89.8	3	1703.92	0.01	0.00	SDF2L_MOUSE		Stromal cell-derived factor 2-like protein 1;	
AGRFHVNLCC	GEEQGADAALHFNPR	N-ter +34.06 Da	83.8	54.7	3	1644.90	1.31	0.09	LEG7_MOUSE	Q9CRB1_MOUSE	Galectin-7;	
ARQGHREPQQ	GEIAHQPLQPTGPPSR	N-ter +34.06 Da	34.4	69.6	3	1708.03	-0.34	0.05	Q9QZV4_MOUSE	E9Q399_MOUSE		
EKIREYFGQF	GEIEAIELPIDPKLNKR	N-ter +28.03 Da, K +28.03 Da	29.5	65.2	4	2018.31	-1.94	0.15	ROAA_MOUSE	Q8QXR6_MOUSE	Heterogeneous nuclear ribonucleoprotein A/B;	CarG-binding factor-A;
CAIPNLRINY	GELADCCKQEPER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	30.8	67.2	3	1759.97	-1.22	0.23	ALBU_MOUSE		Serum albumin;	
MSDN	GELEDKPPAPVVR	N-ter +28.03 Da, K +28.03 Da	31.7	71.5	3	1459.91	1.31	0.07	PAK2_MOUSE		Serine/threonine-protein kinase PAK 2;	Gamma-PAK;p21-activated kinase 2;
FVSEAGPAGA	GESKPLMKVVLDAVR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	27.5	76.2	4	1903.29	-0.04	0.00	TTHY_MOUSE		Transthyretin;	Prealbumin;
ACGSVTMSNP	GESFIDLADR	N-ter +34.06 Da	37.9	39.9	2	1129.59	-0.01	0.00	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];	
DCTKVVCYRC	GETGHVAINCSKTSEVNCYR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	34.5	77.5	4	2337.27	0.20	0.04	CNBP_MOUSE		Cellular nucleic acid-binding protein;	Zinc finger protein 9;
VGPAGKNGDR	GETGPAGPAGIPGAGAR	N-ter +34.06 Da	57.1	48.2	3	1565.91	1.60	0.10	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
NVVKTRGVML	GETNPADSKPGTIR	N-ter +28.03 Da, K +28.03 Da	46.7	71.4	3	1497.89	1.40	0.21	NDKA_MOUSE	NDKB_MOUSE	Nucleoside diphosphate kinase A;	Metastasis inhibition factor NM23;NDPK-A;Tumor metastatic process-associated protein;nm23-M1;

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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
KGVVPLAGTN	GETTTQGLDGLSER	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da,	46.5	47.5	3	1490.79	0.28	0.02	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
KDLTEYLSRF	GEVVDCTIKTPDVTGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	40.2	67.2	3	1802.05	1.14	0.11	HNRDL_MOUSE	F6VQH5_MOUSE	Heterogeneous nuclear ribonucleoprotein D-like;	JKT41-binding protein;
KDLKDYFSKF	GEVVDCTLKLDPITGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	40.4	55.1	3	1828.08	-0.11	0.03	HNRPD_MOUSE	E9QC56_MOUSE	Heterogeneous nuclear ribonucleoprotein D0;	AU-rich element RNA-binding protein 1;
DLHLKGPNVK	GEYDVTVPR	N-ter +28.03 Da	37.9	41.0	2	1062.58	-0.69	0.02	F7BRM2_MOUSE	E9Q616_MOUSE		
KTNCDLYEKL	GEYGFQNAILVR	N-ter +34.06 Da	36.1	46.9	3	1399.83	-0.69	0.02	ALBU_MOUSE		Serum albumin;	
PPGGGSNFL	GFDEPAEQPVR	N-ter +28.03 Da	42.9	31.7	2	1271.66	0.66	0.04	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
TLHIVERPYS	GFDPASSEGEPTQGEAR	N-ter +28.03 Da	43.5	56.0	3	1858.94	-1.09	0.02	PTRF_MOUSE	Q3U4N4_MOUSE	Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
												Alpha-mannosidase IIx;Mannosidase alpha class 2A member 2;Mannosyl-oligosaccharide 1,3-1,6-alpha-mannosidase; Metastatic lymph node gene 50 protein;
SQGTFFDLN	GFQIQPR	N-ter +34.06 Da	23.9	17.8	2	878.53	-0.34	0.00	MA2A2_MOUSE	Q197W7_MOUSE	Alpha-mannosidase 2x;	
KEEFEKNGK	GFVWADTPELQR	N-ter +34.06 Da	34.3	31.2	3	1451.83	0.10	0.01	LASP1_MOUSE	A2A6G6_MOUSE	LIM and SH3 domain protein 1;	
EEYSGLSDGY	GFITDLFGR	N-ter +34.06 Da	28.0	35.9	2	1046.60	2.18	0.12	HNRPF_MOUSE		Heterogeneous nuclear ribonucleoprotein F;	
KTDLNPDLNQ	GGDDLDPNYVLSR	N-ter +28.03 Da	41.2	38.0	2	1534.79	0.66	0.04	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK; CDKN2A-interacting protein N-terminal-like protein;
MV	GGEASAAEVLVSGVR	N-ter +34.06 Da, K +34.06 Da	54.3	56.6	3	1597.04	0.82	0.04	C2AIL_MOUSE		CDKN2AIP N-terminal-like protein;	STNC;
KAADFMDAD	GGGDISVKELGTVMR	N-ter +34.06 Da, K +34.06 Da	26.7	71.7	3	1586.03	0.82	0.07	TNNC2_MOUSE		Troponin C, skeletal muscle;	
ETRANRAKRR	GGGGHDALKGNVCGSR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.8	105.2	4	1694.01	-0.23	0.01	FBN1_MOUSE	A2AQ53_MOUSE	Fibrillin-1;	
GGNFGGDSR	GGGGNFGPGGNSFR	N-ter +28.03 Da	54.6	66.1	3	1404.75	-0.25	0.01	ROA2_MOUSE	F6U106_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1;	56 kDa cytokeatin;Cytokeatin-10;Keratin, type I cytoskeletal 59 kDa;Keratin-10; Alpha-globin;Hemoglobin alpha chain;
VRVSTRGSL	GGGYSSGGFSGGFSR	N-ter +34.06 Da	53.8	26.5	2	1499.73	-1.60	0.15	K1C10_MOUSE	A2A513_MOUSE	Keratin, type I cytoskeletal 10;	
SNIKAAWGKI	GGHGAEGAEALER	N-ter +34.06 Da	57.9	77.0	3	1449.82	-0.62	0.05	HBA_MOUSE	Q91V88_MOUSE	Hemoglobin subunit alpha;	
AHLTVKIFIV	GGIKEDTEEYNLR	N-ter +34.06 Da, K +34.06 Da	20.4	50.8	3	1590.93	-1.69	0.22	ROA3_MOUSE	A2AL12_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;	
VASSLGLVSL	GGKATTASQAKAVLSAEKLR	N-ter +28.03 Da, K +28.03 Da	17.7	84.9	4	2098.43	1.80	0.22	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
QEVQSRSGR	GGNFGGDSR	N-ter +28.03 Da	37.3	48.9	2	1040.52	-0.58	0.01	ROA2_MOUSE	F6U106_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1;	
YVASYLAL	GGNSSPSAKDIKILDSVIGIEADDR	N-ter +28.03 Da, K +28.03 Da	31.9	103.6	4	2798.76	-5.06	1.69	RLA2_MOUSE		60S acidic ribosomal protein P2;	
AVLTSQETLF	GGSDCTGNFLFKSTTKDLFR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	27.3	107.5	4	2607.56	-4.32	0.86	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
YGGGGGGGYG	GGSGYGGGGGGYGGGEGYSISPNYSR	N-ter +34.06 Da	22.3	43.9	4	2460.19	-5.64	0.00	E9QNN1_MOUSE			
GFSSRSLSL	GGSKSIFGNLVGR	N-ter +28.03 Da, K +28.03 Da	53.2	49.8	3	1346.83	-0.30	0.03	K2C1B_MOUSE		Keratin, type II cytoskeletal 1b;	Cytokeatin-18;Embryonic type II keratin-1;Keratin-77;Type-II keratin Kb39;
MQAISNNKDK	GGYEDFVEGLR	N-ter +34.06 Da	37.4	33.6	2	1274.68	0.77	0.05	MYL1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;
PQQQMTSSY	GGYKEPAAPVSIQR	N-ter +34.06 Da, K +34.06 Da	31.1	66.2	3	1540.01	0.11	0.02	LASP1_MOUSE	A2A6H0_MOUSE	LIM and SH3 domain protein 1;	Metastatic lymph node gene 50 protein;
VSESQASDSE	GHSDFSEGGQAVGAHR	N-ter +28.03 Da	44.3	109.0	4	1581.90	1.10	0.19	E9Q019_MOUSE	FILA_MOUSE		
LRQLPFRGDD	GIFDNDFIEER	N-ter +34.06 Da	45.6	25.3	2	1387.72	-1.79	0.12	SNX3_MOUSE	Q78ZM0_MOUSE	Sorting nexin-3;	SDP3 protein;
VCYGRRYGPK	GIGFGQGAGCLDSTTGEHLGLQFQQSPKPAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	59.3	66.9	4	3281.91	0.07	0.00	CSR3_MOUSE		Cysteine and glycine-rich protein 3;	Cysteine-rich protein 3;LIM domain protein, cardiac;Muscle LIM protein;
NIKRNDQFLI	GIQDGYLLQDSGEVR	N-ter +28.03 Da	47.9	66.8	3	1877.08	-2.12	0.37	IF5A1_MOUSE		Eukaryotic translation initiation factor 5A-1;	Eukaryotic initiation factor 5A isoform 1;eIF-4D;
SSNSDGTGKI	GIQLPELVSVSTKK	N-ter +34.06 Da, K +34.06 Da	38.9	49.0	3	1858.24	0.71	0.03	E9Q1H8_MOUSE	E9Q616_MOUSE		
MD	GIVPDIAGTKR	N-ter +34.06 Da, K +34.06 Da	40.5	77.0	3	1292.95	0.84	0.05	PTBP1_MOUSE	Q92217_MOUSE	Polypyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;
ARYASICOQN	GIVPVEPELPGDHDHDKR	N-ter +34.06 Da, K +34.06 Da	43.3	51.4	4	2279.43	0.07	0.00	ALDOA_MOUSE	ALDOC_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
EKLKRRKERF	GIVTSSAGTGTTEDEAKKR	N-ter +28.03 Da, K +28.03 Da	43.1	83.6	4	2092.28	1.77	0.31	SARNP_MOUSE		SAP domain-containing ribonucleoprotein;	Nuclear protein Hcc-1;
M	GKDYQTGLAR	N-ter +34.06 Da, K +34.06 Da	32.8	38.8	3	1451.90	0.43	0.04	DNJB1_MOUSE		Dnaj homolog subfamily B member 1;	Heat shock 40 kDa protein 1;
PSNQVIMLTF	GKFDVEPDTYCR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	30.9	51.6	3	1553.86	-1.47	0.08	PCOC1_MOUSE	D3ZE3_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;
HHLRDYFEFY	GKIDTIEITDR	N-ter +28.03 Da, K +28.03 Da	36.9	71.1	3	1428.92	1.04	0.05	ROA2_MOUSE	F6U106_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1;	
YNLRDYFEFY	GKIEIIVMEDR	N-ter +28.03 Da, K +28.03 Da	39.3	32.2	3	1474.82	0.82	0.06	ROA3_MOUSE	A2AL12_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;	
EDKSNIAKAW	GKIGGHGAEGAEALER	N-ter +34.06 Da, K +34.06 Da	32.6	71.8	4	1782.10	-0.97	0.02	HBA_MOUSE	Q91V88_MOUSE	Hemoglobin subunit alpha;	Alpha-globin;Hemoglobin alpha chain; Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
AEKAASVCLW	GKVNSEVDEGGALGR	N-ter +28.03 Da, K +28.03 Da	52.7	63.1	3	1542.90	0.00	0.00	HBB1_MOUSE		Hemoglobin subunit beta-1;	2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
DVAASEFYRN	GKYDLDFKSPDDPAR	N-ter +28.03 Da, K +28.03 Da	36.0	54.9	4	1807.01	0.14	0.01	ENOB_MOUSE		Beta-enolase;	Carboxypeptidase N 83 kDa chain;Carboxypeptidase N large subunit;Carboxypeptidase N polypeptide 2;Carboxypeptidase N regulatory subunit; Calsequestrin-1, skeletal muscle isoform;
NPGHLSRFL	GLDEGEPAGSWDLTVEGR	N-ter +28.03 Da	45.2	60.2	3	1915.01	-1.25	0.03	CPN2_MOUSE		Carboxypeptidase N subunit 2;	
TPRLGVQGED	GLDFPEYDGVDR	N-ter +34.06 Da	31.2	5.0	2	1415.69	-0.58	0.04	CASQ1_MOUSE	E9Q489_MOUSE	Calsequestrin-1;	

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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
VTVVRNLETY	GLDPCSVAAILQQR	N-ter +28.03 Da, C +57.02 Da	47.3	58.5	3	1554.91	0.63	0.04	E1F2D_MOUSE	E9PUG7_MOUSE	Eukaryotic translation initiation factor 2D;	Ligatin;
KTFSHELSDF	GLESTTGEVPPVAIR	N-ter +28.03 Da	39.3	31.1	3	1554.91	1.06	0.08	PDIA3_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;
MFGGLSSWL	GLKPPGAAEEGEEPPSR	N-ter +34.06 Da, K +34.06 Da	25.5	50.6	3	1859.10	-1.56	0.09	SYAP1_MOUSE		Synapse-associated protein 1;	GCS heavy chain;Gamma-ECS;Gamma-glutamylcysteine synthetase;
M	GLLSQGSPLSWEETQR	N-ter +28.03 Da	62.2	51.5	3	1815.01	0.77	0.06	GSH1_MOUSE		Glutamate--cysteine ligase catalytic subunit;	Alpha-2 type I collagen;
PGLKGYSLQ	GLPGLAGLHGDQGAGPVPAGPR	N-ter +28.03 Da	49.2	82.1	4	2175.33	0.82	0.07	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	
MGTK	GLPLYPDCR	N-ter +34.06 Da, C +57.02 Da	43.1	21.3	2	1220.67	-0.23	0.01	YI005_MOUSE		Uncharacterized protein FLJ45252 homolog;	
QPRGSLRSVR	GLSAPSCGLDDKTEASAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	57.1	62.4	3	1999.16	-1.29	0.19	PLIN1_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;
SLDQTMAAF	GLSVPNVHGLAPLAIPIASAAAAAASR	N-ter +28.03 Da	55.7	75.0	4	2480.57	0.26	0.03	PTBP1_MOUSE	Q92217_MOUSE	Poly(pyrimidine tract-binding protein 1);	Heterogeneous nuclear ribonucleoprotein I;
ERRRQLAEKY	GLTLDPEADSEYLSR	N-ter +28.03 Da	33.3	6.5	2	1692.83	0.42	0.04	SVIL_MOUSE	Q8K4L2_MOUSE	Supervillin;	Archvillin;p205/p250;
KGYMRPTKSR	GLTPDLPKSASQER	N-ter +28.03 Da, K +28.03 Da	29.2	66.8	3	1553.95	-0.32	0.02	F7CK47_MOUSE		Microtubule-associated protein;	
GRPRHQGMV	GMGQKDSYVGEAQSKR	N-ter +34.06 Da, K +34.06 Da	38.8	92.1	4	1957.22	0.41	0.05	ACT5_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	Alpha-actin-1;
VGPISGADLH	GMLEIPDLR	N-ter +34.06 Da	34.2	21.0	2	1076.63	0.25	0.02	DSG1A_MOUSE	DSG1B_MOUSE	Desmoglein-1-alpha;	DG1;DG1;Desmosomal glycoprotein I;
IFAREILDSR	GNPTVEVDLHTAKGR	N-ter +28.03 Da, K +28.03 Da	21.6	101.9	4	1649.06	0.71	0.02	ENOB_MOUSE	Q5SX59_MOUSE	Beta-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
LAGLVFVSEA	GPAGAGESKCLPMVKLVDAVR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	41.1	57.3	3	2256.45	-0.11	0.00	TTHY_MOUSE		Transthyretin;	Prealbumin;
YHEINTDFM	GLPSLSAESLKR	N-ter +28.03 Da, K +28.03 Da	34.2	69.2	3	1584.00	-0.62	0.06	PPR3A_MOUSE		Protein phosphatase 1 regulatory subunit 3A;	Protein phosphatase 1 glycogen-associated regulatory subunit;Protein phosphatase type-1 glycogen targeting subunit;
SMPDVLHLK	GNPKVGEYDVTVPR	N-ter +28.03 Da, K +28.03 Da	30.4	68.0	3	1585.95	-0.15	0.01	E9Q616_MOUSE	F7BRM2_MOUSE	Lamina-associated polypeptide 2, isoforms	Thymopoietin isoforms alpha/zeta;
PPLAAGANSK	GPPDFSSDEEREPTVLGSGASVGR	N-ter +28.03 Da	44.2	79.3	4	2570.43	1.71	0.09	LAP2A_MOUSE	LAP2B_MOUSE	alpha/zeta;	
QDHPSSMGVY	GQESGGFSGPENR	N-ter +34.06 Da	48.9	62.6	3	1411.74	0.54	0.05	EWS_MOUSE	Q5SUS8_MOUSE	RNA-binding protein EWS;	CarG-binding factor-A;
ATEEKIREYF	GQFGEIEAIELPIDPKLNKR	N-ter +28.03 Da, K +28.03 Da	47.4	90.9	4	2350.54	-1.60	0.24	ROAA_MOUSE	Q80XR6_MOUSE	Heterogeneous nuclear ribonucleoprotein A/B;	Basement-membrane protein 40;Osteonectin;Secreted protein acidic and rich in cysteine;
MYIFPVHWQF	GQLDQHPIDGYSLTELAPLR	N-ter +34.06 Da	52.8	62.1	4	2393.40	-0.12	0.01	SPRC_MOUSE	Q5NCU4_MOUSE	SPARC;	
RSRTLVCGTC	GQPADKAAGGAGAGQVGSISSGSSASSVTVTR	N-ter +28.03 Da, K +28.03 Da	66.1	76.6	4	2873.67	0.61	0.06	LMNA_MOUSE		Prelamin-A/C;	
FQLRSICYLL	GQPEPLAPGTTLPAPDR	N-ter +28.03 Da	26.3	37.4	3	1743.98	0.01	0.00	RN123_MOUSE	Q05CH9_MOUSE	E3 ubiquitin-protein ligase RNF123;	Kip1 ubiquitination-promoting complex protein 1;RING finger protein 123;
VSKQPSRITN	GQPQQTGAASGGYIKR	N-ter +34.06 Da, K +34.06 Da	40.3	73.8	3	1787.13	0.61	0.05	SNP23_MOUSE	Q9D3L3_MOUSE	Synaptosomal-associated protein 23;	Syndet;Vesicle-membrane fusion protein SNAP-23;
EVQVVRGHYK	GQQJGKVVQVYR	N-ter +34.06 Da, K +34.06 Da	30.8	69.8	3	1442.00	-0.79	0.05	RL26_MOUSE	D3Z3Q9_MOUSE	60S ribosomal protein L26;	Silica-induced gene 20 protein;
HGHGHGYAA	GQTWQEGDKVIRPQVSGAGEMEQFGQVGR	N-ter +34.06 Da, K +34.06 Da	28.5	60.2	4	3370.90	-0.11	0.01	E9QP82_MOUSE			
MR	GQVGDLSPPQQEALAR	N-ter +34.06 Da	51.2	45.0	3	1729.99	-0.36	0.02	S14L4_MOUSE		SEC14-like protein 4;	Branched-chain alpha-keto acid dehydrogenase complex component E2;Dihydroliipoamide acetyltransferase component of branched-chain alpha-keto acid dehydrogenase complex;Dihydroliipoamide branched chain transacylase;Dihydroliipoalysine-residue (2-methylpropanoyl)transferase;
HSLRTAAVLQ	GQVQFKLSDIGEGIR	N-ter +34.06 Da, K +34.06 Da	43.7	69.4	3	1813.20	0.35	0.02	ODB2_MOUSE		Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial;	Alpha-2 type I collagen;
EGPVGPLGID	GRPGIPGAGPR	N-ter +28.03 Da	32.5	60.6	3	1158.73	1.55	0.11	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	
RGDSPKIDLA	GSALSGLDKLDSLR	N-ter +34.06 Da, K +34.06 Da	38.5	79.5	3	1614.05	-0.40	0.03	SH3K1_MOUSE	B0R0Y8_MOUSE	SH3 domain-containing kinase-binding protein 1;	Regulator of ubiquitous kinase;SH3-containing, expressed in tumorigenic astrocytes;
EETLALVCDN	GSGLVKAGFAGDDAPR	N-ter +28.03 Da, K +28.03 Da	36.0	73.7	3	1572.94	0.67	0.08	ACTC_MOUSE	ACTS_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;
HPTSPRPPG	GSITVYKPEIR	N-ter +28.03 Da, K +28.03 Da	40.4	60.1	3	1430.94	0.54	0.03	MA2B2_MOUSE		Epididymis-specific alpha-mannosidase;	Mannosidase alpha class 2B member 2;
GGRPAMEPGN	GSLDLGGDAAGR	N-ter +34.06 Da	57.5	26.3	2	1121.62	1.63	0.02	HNRPU_MOUSE		Heterogeneous nuclear ribonucleoprotein U;	Scaffold attachment factor A;
EASITGPMHT	GSPGLWEASILKTGAEDTR	N-ter +34.06 Da, K +34.06 Da	53.2	60.8	3	2055.25	0.39	0.05	Q3URZ6_MOUSE	F7DBB3_MOUSE		
GQSSANRRRA	GSSSGSVQVASAGGLAADASR	N-ter +34.06 Da	82.6	45.9	3	1883.01	1.52	0.24	FILA_MOUSE	F7BVV1_MOUSE	Filaggrin;	
HGPPMDQYL	GSTPVGSGVYR	N-ter +28.03 Da	37.7	50.5	2	1106.63	0.61	0.04	SF01_MOUSE	Q3UI45_MOUSE	Splicing factor 1;	CW17;Mammalian branch point-binding protein;Transcription factor ZFM1;Zinc finger gene in MEN1 locus;Zinc finger protein 162;
GDHSTPPSAY	GSKPYTNFDAER	N-ter +34.06 Da, K +34.06 Da	44.7	53.6	3	1550.92	1.40	0.21	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;

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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
ISTSVCLRAH	GSVVKSEDYAFPTYADR GTCGQPADKAAGGAGAQVGGSISSGSSASVTV	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	38.7	70.5	3	1960.10	0.64	0.07	COX41_MOUSE		Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;	Cytochrome c oxidase polypeptide IV;Cytochrome c oxidase subunit IV isoform 1;
YNLRSRTVLC		C +57.02 Da	73.1	77.0	4	3203.86	-1.40	0.18	LMNA_MOUSE		Prelamin-A/C;	
ILTRLRLQKR	GTGGVDTAAVGAVFDISNADR	N-ter +28.03 Da	67.1	52.8	3	2020.09	1.86	0.05	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
SVCVHLRNL	GTLDNPSLDEYATER	N-ter +28.03 Da	43.5	54.9	3	1794.93	0.26	0.03	FRDA_MOUSE	E9Q2P9_MOUSE	Frataxin, mitochondrial;	
FDQTTISLQMQ	GTNKGASQAGMLAPGTR	N-ter +28.03 Da, K +28.03 Da	34.7	49.6	3	1671.96	0.88	0.05	CNN3_MOUSE		Calponin-3;	Calponin, acidic isoform;
RKNKMASNIF	GTPEENPPSWAKSAGSKSSGGR	N-ter +34.06 Da, K +34.06 Da	30.3	65.7	4	2288.38	0.12	0.01	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
TIDCDVITLML	GTSPGTAEPYDGTAKAR	N-ter +34.06 Da, K +34.06 Da	41.3	70.7	3	1675.00	0.44	0.10	BSDC1_MOUSE		BSD domain-containing protein 1;	
QEFQHYPMAMG	GVAPQALVAASGPGSSFR	N-ter +34.06 Da	63.6	30.5	3	1776.03	0.18	0.01	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;
CDLPIKISQLD	GVDDGTESDTSVTATSR	N-ter +28.03 Da	39.9	51.0	3	1724.86	0.25	0.05	MLL1_MOUSE	E9QNQ1_MOUSE	Histone-lysine N-methyltransferase MLL;	ALL-1;Zinc finger protein HRX;
RLRLQKRGTQ	GVDTAAVAVGAVFDISNADR	N-ter +28.03 Da	64.1	53.5	3	1804.99	0.21	0.01	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LDHGRTLREQ	GVEEHETLLLR	N-ter +34.06 Da	36.3	55.6	3	1328.83	1.08	0.06	TLN1_MOUSE	A2AIM2_MOUSE	Talin-1;	
EYVSPNSEDEV	GVEGPKGDPGPGQGR	N-ter +28.03 Da, K +28.03 Da	36.7	69.1	3	1502.89	0.77	0.25	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
M	GVEIETISPGDGR	N-ter +28.03 Da	41.6	37.9	2	1356.74	-0.27	0.01	FKB1B_MOUSE		Peptidyl-prolyl cis-trans isomerase FKBP1B;	12.6 kDa FK506-binding protein;FK506-binding protein 1B;immunophilin FKBP12.6;Rotamase;
ADCAVLIVAA	GVGEFEAGISKNGQTR	N-ter +28.03 Da, K +28.03 Da	37.0	68.0	3	1705.00	1.13	0.10	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
PSVIGRPRHQ	GVMVMGQKQDSYVGEAQSQR	N-ter +28.03 Da, K +28.03 Da	38.6	60.1	4	2325.29	-0.20	0.02	ACTA_MOUSE	ACTB_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;
M	GVQPPNFWSVLPGR	N-ter +28.03 Da	37.0	46.8	3	1580.92	0.10	0.01	DUS23_MOUSE		Dual specificity protein phosphatase 23;	Low molecular mass dual specificity phosphatase 3;
AQKEAEKVAH	GVQTGVNQAGKETQR	N-ter +28.03 Da, K +28.03 Da	28.7	75.5	3	1627.99	1.20	0.12	SBSN_MOUSE	E9QP82_MOUSE	Suprabasin;	
M	GVQVETISPGDGR	N-ter +28.03 Da	52.9	35.1	2	1341.74	1.27	0.07	FKB1A_MOUSE	Q1JUQ8_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A;	12 kDa FK506-binding protein;FK506-binding protein 1A;immunophilin FKBP12;Rotamase;
LTLPRAARGF	GVQVSPSGEKITHGTQVYDEKDYR	N-ter +34.06 Da, K +34.06 Da	24.5	73.7	4	2794.71	-0.86	0.14	NDU56_MOUSE	D3YW32_MOUSE	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial;	Complex I-13kD-A;NADH-ubiquinone oxidoreductase 13 kDa-A subunit;
ARGAQVRGNA	GVSDGSEVAKAQAAPGGASPTIFSR	N-ter +28.03 Da, K +28.03 Da	36.0	68.5	4	2571.54	0.21	0.03	HINT2_MOUSE		Histidine triad nucleotide-binding protein 2, mitochondrial;	HINT-3;
WQEGDKVIRP	GVSQAGEEMEFGQGVRR	N-ter +34.06 Da	50.3	42.1	3	1841.96	0.01	0.00	SBSN_MOUSE	E9QP82_MOUSE	Suprabasin;	
GNFAAQYSDK	GVSSGPGPMLMGR	N-ter +28.03 Da	66.2	49.1	3	1426.78	0.38	0.02	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
SAPPKLASK	GVVPEDAVETLAGSLGR	N-ter +34.06 Da	60.6	51.9	3	1804.07	-0.18	0.03	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;
GGNFASQMSY	GYDEKSAGSVSPGMPGSPGR	N-ter +28.03 Da, K +28.03 Da	38.1	45.6	3	2100.13	0.42	0.01	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
QAISNKKDQSQ	GYEDFVEGLR	N-ter +28.03 Da	34.3	47.9	2	1211.64	0.21	0.02	MYL1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2;
AFRVFDKQDN	GYISAELR	N-ter +34.06 Da	31.1	15.3	2	1012.59	0.50	0.03	CALM_MOUSE	Q3UKW2_MOUSE	Calmodulin;	
QQQMTSSYSG	GYKEPAAPVSIQR	N-ter +34.06 Da, K +34.06 Da	37.8	65.7	3	1482.98	-0.03	0.00	LASP1_MOUSE	A2A6H0_MOUSE	LIM and SH3 domain protein 1;	Metastatic lymph node gene 50 protein;
TQCARIVEKY	GYTHLSAGELLR	N-ter +34.06 Da	30.1	35.7	3	1349.80	-0.74	0.04	KCY_MOUSE		UMP-CMP kinase;	Cytidine monophosphate kinase;Cytidylylate kinase;Deoxycytidylylate kinase;Uridine monophosphate kinase;Uridine monophosphate/cytidine monophosphate kinase;
TQCEKIVQKY	GYTHLSTGDLR	N-ter +28.03 Da	41.9	66.2	3	1359.80	-1.84	0.20	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
GHPFMWNEHL	GYVLTCPNSLGTGLR	N-ter +28.03 Da, C +57.02 Da	39.2	40.8	3	1634.91	0.29	0.02	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
SDHRTYHDLR	HAIFSPVASVESASGETLHSPK	N-ter +34.06 Da, K +34.06 Da	58.6	81.9	4	2205.35	-1.52	0.22	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertrypsin;Fetuin-A;
GIVEGLMTTV	HAITATQKTVDPGSPGLWLR	N-ter +28.03 Da, K +28.03 Da	21.0	77.2	4	2149.37	-1.09	0.12	G3P_MOUSE	F8WJL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;
MGHM	HAPGKGLSQSALPYR	N-ter +34.06 Da, K +34.06 Da	26.1	64.5	3	1649.08	-0.43	0.01	RS13_MOUSE	Q921R2_MOUSE	40S ribosomal protein S13;	
RPRSRTLAV	HDALILEDVFPSEIVGKR	N-ter +28.03 Da, K +28.03 Da	32.7	80.4	4	2093.32	-0.40	0.06	RS7_MOUSE	F6SVV1_MOUSE	40S ribosomal protein S7;	
GPHGGYHSHY	HDEGYGPPPHYEGR	N-ter +28.03 Da	37.2	92.2	4	1734.94	1.98	0.16	HNRPL_MOUSE	E9Q8W8_MOUSE	Heterogeneous nuclear ribonucleoprotein L;	
QICPNNLVAF	HDFSSDLENVPLHR	N-ter +28.03 Da	41.2	104.2	4	1693.00	-1.09	0.12	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;
LLGTLPARAA	HEDPVKEVIEGFSR	N-ter +28.03 Da, K +28.03 Da	36.9	41.7	4	1696.95	0.50	0.01	SBSN_MOUSE	E9QP82_MOUSE	Suprabasin;	
YWKTLGISPF	HEFADVFTANDSGHR	N-ter +34.06 Da	49.9	49.8	3	1834.97	-1.94	0.30	THY_MOUSE		Transthyretin;	Prealbumin;
PTDKHKTDLN	HENKGGDDLDPNYLSSR	N-ter +28.03 Da, K +28.03 Da	27.4	53.5	4	2184.20	0.49	0.01	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LIGALCAIC	HGNPVDDICAKPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	46.1	70.2	3	1646.97	0.45	0.05	ANT3_MOUSE		Antithrombin-III;	Serpin C1;
ENLATAFTIL	HHPEFTPDQPTER	N-ter +28.03 Da	33.1	86.1	3	1617.89	-0.12	0.02	TXLNB_MOUSE		Beta-taxilin;	Muscle-derived protein 77;
PVRLTFPLDY	HLNQPLFLVLR	N-ter +28.03 Da	21.8	48.9	3	1410.88	3.21	0.06	PEDF_MOUSE		Pigment epithelium-derived factor;	Caspin;Serpin F1;Stromal cell-derived factor 3;
SMSSGLEFVY	HNPPSEAAAPPVAR	N-ter +28.03 Da	25.7	46.1	3	1440.81	0.31	0.01	ATX2_MOUSE	E9QQ60_MOUSE	Ataxin-2;	Spinocerebellar ataxia type 2 protein homolog;
HIPTSAFVYQ	HPVSVYKVTSPGLR	N-ter +28.03 Da, K +28.03 Da	22.9	70.8	3	1595.03	2.69	0.28	E9Q476_MOUSE			
VFPSVIGRPR	HQQVMVMGQKQDSYVGEAQSQR	N-ter +34.06 Da, K +34.06 Da	63.5	62.9	4	2452.41	-4.06	0.00	ACT5_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;
PSPLAVPRRA	HSILPVDDDDINGNEEQQLR	N-ter +34.06 Da, K +34.06 Da	58.7	66.3	4	2500.52	0.71	0.08	IVD_MOUSE		Isovaleryl-CoA dehydrogenase, mitochondrial;	
QAQQAMDVQL	HSPAFQFPDVFDR	N-ter +28.03 Da	37.1	67.6	3	1702.96	-1.40	0.22	CLUS_MOUSE		Clusterin;	Apolipoprotein J;Clusterin;Sulfated glycoprotein 2;
MPAY	HSSLMDPDKLIGNMALLPLR	N-ter +28.03 Da, K +28.03 Da	23.9	81.9	4	2377.48	0.39	0.04	ARPC3_MOUSE		Actin-related protein 2/3 complex subunit 3;	Arp2/3 complex 21 kDa subunit;

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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
LLCMPFGKS MVKKTKAQTG	HTEEDFIHTKTGR HTLLEDDYQIVERPQR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	23.7 40.1	92.8 89.4	4 4	1703.05 1930.22	0.10 -0.27	0.01 0.02	CHLE_MOUSE SPG20_MOUSE		Cholinesterase; Spartin;	Acylcholine acylhydrolase;Butyrylcholine esterase;Choline esterase I;Pseudocholinesterase;
HRSGETEDTF	IADLVVLCTGQIKTGAPCR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	51.5	79.1	4	2184.35	0.30	0.04	ENOB_MOUSE	ENOA_MOUSE	Beta-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
SAAAAAASR YSKYREPEKY	IAIPGLAGAGNSVLLVSNLNP IALDGDLSSTEDLVNLGKGR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	58.4 42.5	38.4 57.7	3 3	2308.42 2140.32	-1.84 0.49	0.33 0.05	PTBP1_MOUSE HUTH_MOUSE	Q92217_MOUSE F8WH73_MOUSE	Polypyrimidine tract-binding protein 1; Histidine ammonia-lyase;	Heterogeneous nuclear ribonucleoprotein I;
TKTDQVIQFF	IALVNDPQPEHPLR	N-ter +34.06 Da	38.8	65.7	3	1632.03	-1.00	0.08	UB2L3_MOUSE		Ubiquitin-conjugating enzyme E2 L3;	UbcM4;Ubiquitin carrier protein L3;Ubiquitin-protein ligase L3; Cargo selection protein TIP47;Mannose-6-phosphate receptor-binding protein 1; Creatine kinase M chain;M-CK;
LPLTEAELAL SMTEAEQQL EDDFRRVDF	IATPPEDSDMASLQQQR IDHFLFDKVPSPLLASGMAR IDEGVNLGVEYKR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	46.2 23.0 28.9	47.3 84.9 54.7	3 4 3	1914.01 2497.55 1496.94	0.39 -0.14 0.23	0.01 0.02 0.01	PLIN3_MOUSE KCRM_MOUSE Q9CZN7_MOUSE		Perilipin-3; Creatine kinase M-type; Serine hydroxymethyltransferase;	15S Mg(2+)-ATPase p97 subunit;Valosin-containing protein; Osteoblast-specific factor 2;
AEKNAPAIIF EPVIKKYTKI IDRVFPLNSY PDKPSPNMFY SNCWQPVIDY EAPVGVETDL	IDELDAIAPKR IDGVVPVEITEKQTR IDGVMTMEATVSGILGKR IDPEKGDIVTVSPALLDR IDSKFEDYLNAEER IDVGFTDDKKGKGGPR	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 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	31.3 23.6 22.4 45.8 30.0 23.3	60.5 40.9 76.1 53.9 65.2 75.3	3 3 3 3 3 4	1307.89 1652.05 1931.19 2104.36 1754.03 1762.18	-0.79 0.43 0.54 -1.15 0.20 0.65	0.07 0.04 0.11 0.10 0.20 0.07	TERA_MOUSE POSTN_MOUSE ZCCHV_MOUSE CAD13_MOUSE E9Q9F5_MOUSE IST1_MOUSE		Transitional endoplasmic reticulum ATPase; Periostin; Zinc finger CCHC-type antiviral protein 1; Cadherin-13; SEPT7_MOUSE Q8BHC2_MOUSE	Heart cadherin;Truncated cadherin;
THSDASKKRL FVNPDCQLN QLEAAKPEPV	IETEDWRPR IEENDEVLVAGFGR IEEVDLANLAPR	N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da	19.8 35.7 39.8	52.9 34.3 43.2	3 3 3	1349.75 1580.88 1372.84	1.49 0.21 0.54	0.09 0.02 0.03	PDI5_MOUSE RS23_MOUSE CCD12_MOUSE	Q9CRA2_MOUSE Q9C215_MOUSE	PDZ and LIM domain protein 5; 40S ribosomal protein S23; Coiled-coil domain-containing protein 12;	Enigma homolog;Enigma-like PDZ and LIM domains protein;
NKLDKDNLSY	IEHIFEISR	N-ter +34.06 Da	30.4	53.6	3	1176.73	-0.01	0.00	PEA15_MOUSE	D3Z375_MOUSE	Astrocytic phosphoprotein PEA-15;	15 kDa phosphoprotein enriched in astrocytes; BAT2 domain-containing protein 1;HLA-B-associated transcript 2-like 2;Proline-rich and coiled-coil-containing protein 2C;
LKQLDEKLG MSSLKSVNGQ EGNKKEQIKI LANFNQYQFF KSNIKAWGK MENSQCKLF PRGLKMSFTF VPRKCSASNR PKHPVDQVQR MSFSKDWFSY	IEKQSPPEELR IESLSPDGRS IETLSQQLQAKGKELNEFR IGENMNPDMVALLDVR IGGHGAEGAEALER IGGLNVQTSSEGLR IGNSTAIQELFKR IIAAKHASIQMNVAEVDR IIGGSMDAKGSFPWQAK ILAHTFTPTETDTYACR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +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 N-ter +34.06 Da, C +57.02 Da	23.4 26.8 22.4 52.9 47.7 31.3 19.7 40.2 19.0 48.3	53.9 37.4 59.9 57.8 49.5 51.9 64.9 67.9 68.8 70.4	3 2 3 3 3 3 3 4 3 3	1392.90 1200.68 2333.52 1941.07 1562.87 1463.89 1544.04 2148.35 1876.12 2159.19	1.01 1.37 -0.11 -1.22 -1.84 -0.12 -0.92 -0.84 -0.86 -1.84	0.05 0.05 0.01 0.20 0.13 0.00 0.07 0.08 0.14 0.33	PRC2C_MOUSE CO3A1_MOUSE PFD2_MOUSE TCTP_MOUSE HBA_MOUSE Q9CX86_MOUSE TBB2A_MOUSE RS21_MOUSE HPT_MOUSE B2MG_MOUSE	E9QKG5_MOUSE Q5DTG2_MOUSE D3YU75_MOUSE Q91YB8_MOUSE	Protein PRC2C; Collagen alpha-1(III) chain; Prefoldin subunit 2; Translationally-controlled tumor protein; Hemoglobin subunit alpha;	21 kDa polypeptide;p21;p23; Alpha-globin;Hemoglobin alpha chain;
SSNLQSRFR	ILAQMTGTEYMQDPDEEALRR	N-ter +34.06 Da	40.2	73.3	4	2500.40	-1.06	0.13	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein; 28 kDa adipocyte protein;Adipon;C3 convertase activator;Properdin factor D; Cathepsin C;Cathepsin J;Dipeptidyl peptidase I;Dipeptidyl transferase;
AAVCAQPRGR	ILGGQEAHAAR	N-ter +34.06 Da	42.3	76.4	3	1226.79	0.04	0.01	CFAD_MOUSE		Complement factor D;	
APMTDEIQQQ SVPDSSGPER FTVNRPLFF	ILNLPESDWR ILSISADIETGEILK IMEDTIGVPLVFGSVR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	33.7 33.7 45.1	50.7 54.2 43.0	3 4 3	1455.82 1770.13 1766.06	0.52 7.06 -0.43	0.09 0.70 0.05	CATC_MOUSE HNRPK_MOUSE A2AP_MOUSE	D3Z220_MOUSE E9Q8D6_MOUSE	Dipeptidyl peptidase 1; Heterogeneous nuclear ribonucleoprotein K; Alpha-2-antiplasmin;	Alpha-2-plasmin inhibitor;Serpin F2; Lbc's second cousin;Lymphoid blast crisis-like 2;
LISEDVQRRF VLVSLTGLYA D D KPHSEAGTAF IGEEAPQMNY	IQEVVQSOQAAVSR IQKTPQIQVYSR IQMTQTPSSLSASLGDR IQMTQTTSSLSASLGDR IQTQLHAAMADTFLEHMCR IQVTPOEKEAIER	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da	31.6 29.3 31.9 50.3 45.2 19.9	23.1 24.8 28.3 55.4 83.6 51.2	3 3 3 3 3 3	1575.92 1515.92 1940.03 1938.04 2434.38 1595.97	1.05 0.78 -3.84 1.23 -3.32 0.30	0.07 0.06 0.00 0.02 0.66 0.02	ARHG1_MOUSE B2MG_MOUSE KVSFA_MOUSE KVSAA_MOUSE KPYM_MOUSE RD23A_MOUSE	E9PUF7_MOUSE Q91XJ8_MOUSE KVSAG_MOUSE KVSAB_MOUSE RD23B_MOUSE	Rho guanine nucleotide exchange factor 1; Beta-2-microglobulin; Ig kappa chain V-V region HP 91A3; Ig kappa chain V-V region MOPC 173; Pyruvate kinase isozymes M1/M2; UV excision repair protein RAD23 homolog A;	
LRTEEFKFK	ISDKDASVVGFFR	N-ter +28.03 Da, K +28.03 Da	16.4	81.5	3	1495.93	-1.69	0.16	PDIA3_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; 21 kDa transmembrane-trafficking protein;Transmembrane protein Tmp21;p24 family protein delta-1; Beta-actin; 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;
LLGPPSVLG ASLSTFQQMW	ISFHLPVNSR ISKQEYDESGPSIVHR	N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da	30.3 36.2	61.8 84.1	3 4	1196.74 1912.19	0.10 0.04	0.01 0.00	TMEDA_MOUSE ACTB_MOUSE	ACTG_MOUSE	Transmembrane emp24 domain-containing protein 10; Actin, cytoplasmic 1;	
SNKEIFREL FEQLPMMQA	ISNASDALDKIR ISNNKDGQGYEDFVEGLR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	28.2 17.7	45.5 73.4	3 3	1369.88 2108.24	0.47 0.14	0.03 0.02	ENPL_MOUSE E9PWG4_MOUSE	HS90B_MOUSE MYL1_MOUSE	Endoplasmic;	

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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
GHAGKTIPL	ISQCTPKVDFPQQDLATLGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	45.5	76.5	4	2442.51	-1.40	0.07	MDHM_MOUSE		Malate dehydrogenase, mitochondrial;	
LAHVAPRRS	ISSQQTIPPSAKYGG	N-ter +34.06 Da, K +34.06 Da	24.8	71.8	3	1757.14	-0.23	0.01	IDHG1_MOUSE		Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;	Isocitrate dehydrogenase subunit gamma;NAD(+)-specific IDH subunit gamma;
GSSSSSNFH	ISVEESVDGKVVSSR	N-ter +34.06 Da, K +34.06 Da	24.4	59.5	3	1658.05	0.87	0.06	K1C15_MOUSE	B1AQ77_MOUSE	Keratin, type I cytoskeletal 15;	Cytokeratin-15;Keratin-15;
IALNDFVKL	ISWYDNEYGSNR	N-ter +28.03 Da	37.1	30.1	2	1693.79	-1.56	0.14	G3P_MOUSE	F8WL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;
ASLSTFQQM	ITKQEYDEAGPSVHR	N-ter +28.03 Da, K +28.03 Da	35.7	82.9	4	1898.15	0.83	0.05	ACT5_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;
DAVTRQVRT	IVEEVQDGKVISSR	N-ter +34.06 Da, K +34.06 Da	18.7	66.7	3	1626.07	0.25	0.02	K1C17_MOUSE	D3YXP7_MOUSE	Keratin, type I cytoskeletal 17;	Cytokeratin-17;Keratin-17;
SLYASGRTTG	IVLDSGDGVTHNVPIYEGYALPHAIMR	N-ter +28.03 Da	53.9	95.1	4	2964.80	-2.32	0.35	ACTA_MOUSE	ACTC_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;
LLWVPGSTGD	IVLTQSPASLAVSLGQR	N-ter +34.06 Da	58.9	46.3	3	1888.17	0.50	0.10	KV3A1_MOUSE	KV3A2_MOUSE	Ig kappa chain V-III region PC 2880/PC 1229;	
RYASICQQNG	IVPIVEPEILDGDHDLKR	N-ter +34.06 Da, K +34.06 Da	35.4	77.1	4	2222.47	1.01	0.07	ALDOA_MOUSE	ALDOC_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
GSKGTQCEK	IVQKYGYTHLSTGDLR	N-ter +34.06 Da, K +34.06 Da	30.2	80.2	4	2031.34	-1.06	0.09	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
LTAASEAACL	IVSVDETIKNPR	N-ter +28.03 Da, K +28.03 Da	20.0	37.2	3	1425.87	1.14	0.09	TCPH_MOUSE		T-complex protein 1 subunit eta;	CCT-eta;
LKHVTEDCVF	IYQVGDGPKYKDPNDFR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	19.3	66.7	4	2516.47	-1.52	0.22	TXD17_MOUSE		Thioredoxin domain-containing protein 17;	14 kDa thioredoxin-related protein;Protein 42-9-9;Thioredoxin-like protein 5;
GVNIGGAGSV	IYEKPTTEAPQVTGPIEVPVVR	N-ter +28.03 Da, K +28.03 Da	52.1	73.0	4	2505.57	0.21	0.02	CRIP2_MOUSE		Cysteine-rich protein 2;	Heart LIM protein;
VTHGQVGVGK	KAEAVATVVAAVDQAR	N-ter +34.06 Da, K +34.06 Da	37.0	46.5	3	1666.08	-0.23	0.03	TITIN_MOUSE	E9Q8M7_MOUSE	Titin;	Connectin;
KRKFVADGVL	KAELNEFLTR	N-ter +34.06 Da, K +34.06 Da	29.2	22.5	3	1287.81	-0.32	0.01	RS3_MOUSE	D3YV43_MOUSE	40S ribosomal protein S3;	
KIREGEVIF	KATEMVEVGPEDDEVGAE	N-ter +28.03 Da, K +28.03 Da	58.7	64.0	3	2116.14	-0.84	0.12	PTRF_MOUSE		Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
YVKNKFSQVH	KATIGADFLTKEMVDDR	N-ter +28.03 Da, K +28.03 Da	47.5	69.6	4	2092.27	0.99	0.09	RAB7A_MOUSE		Ras-related protein Rab-7a;	
KKLSVSQVHQ	KAVIDVAETGTEAAATGVGGIR	N-ter +34.06 Da, K +34.06 Da	51.0	68.3	4	2337.51	-0.38	0.03	SPA3K_MOUSE		Serine protease inhibitor A3K;	Contrapsin;SPI-2;
PKSQETPAHK	KAVQGGAAAPVGVAVQVPGMPPMPQAPR	N-ter +34.06 Da, K +34.06 Da	48.0	58.4	4	2845.78	0.52	0.02	SNRPA_MOUSE	D3Z056_MOUSE	U1 small nuclear ribonucleoprotein A;	
SGLAWQDCDF	KDAEEAATGECTATVGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	29.0	83.9	4	1995.25	-3.32	0.00	KNG1_MOUSE	D3Z2B2_MOUSE	Kininogen-1;	
APPWKDSKFF	KDAPDGPPTVLTVDGR	N-ter +28.03 Da, K +28.03 Da	31.4	65.1	3	1695.03	-6.64	0.00	FA12_MOUSE	F6WLH2_MOUSE	Coagulation factor XII;	Hageman factor;
YKNSKFRHVI	KDFMIQGGDFTR	N-ter +28.03 Da, K +28.03 Da	31.7	48.5	3	1469.81	1.72	0.13	PPIB_MOUSE		Peptidyl-prolyl cis-trans isomerase B;	CYP-51;Cyclophilin B;Rotamase B;S-cyclophilin;
CSASNRIAA	KDHASIQMNVAEVDR	N-ter +28.03 Da, K +28.03 Da	39.9	61.2	3	1768.00	0.29	0.03	RS21_MOUSE		40S ribosomal protein S21;	
IATDKEIAF	KDLDAVLVGSMPR	N-ter +34.06 Da, K +34.06 Da	37.2	57.2	3	1567.03	-1.56	0.09	MHDC_MOUSE	B1ATQ3_MOUSE	Malate dehydrogenase, cytoplasmic;	Cytosolic malate dehydrogenase;
AGDEEYDVF	KDLFPPIIEER	N-ter +28.03 Da, K +28.03 Da	31.3	77.5	3	1429.89	-0.12	0.01	KCRB_MOUSE		Creatine kinase B-type;	B-CK;Creatine kinase B chain;
AGDEEYTVF	KDLFPPIQDR	N-ter +34.06 Da, K +34.06 Da	31.4	87.1	3	1426.97	-0.45	0.02	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LPMMQASINN	KDQGGYEDFVEGLR	N-ter +34.06 Da, K +34.06 Da	25.4	39.6	3	1679.95	0.56	0.01	MYL1_MOUSE	E9PWG4_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Myosin light chain alkali 1/2; Alpha-1-protease inhibitor 2;Alpha-1-antiprotease;Serine protease inhibitor 1-2;Serine protease inhibitor A1b;
EDVQETDTSQ	KDQSPASHEIATNLGDFAIISLYR	N-ter +28.03 Da, K +28.03 Da	43.1	99.7	4	2588.58	-5.64	0.00	A1AT2_MOUSE	A1AT1_MOUSE	Alpha-1-antitrypsin 1-2;	
MPGVTV	KDVNQEQFVR	N-ter +28.03 Da, K +28.03 Da	27.1	76.7	3	1317.81	1.18	0.02	RS19_MOUSE	F6Q5Z8_MOUSE	40S ribosomal protein S19;	Myosin regulatory light chain 2, skeletal muscle isoform;
MFDQTQIQEF	KEAFTVIDQNR	N-ter +28.03 Da, K +28.03 Da	35.6	60.5	3	1375.83	0.23	0.00	MLRS_MOUSE	F6ULR7_MOUSE		Fast skeletal myosin light chain 2;MLC2F;
TQDHSSVKY	KEAIGQGTPIPDLPVKR	N-ter +34.06 Da, K +34.06 Da	34.8	51.3	4	2049.37	1.39	0.12	A2AQ82_MOUSE	A2AQA9_MOUSE		
KLATDLTKVN	KECCHGDLLECCADR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	32.6	103.3	4	1933.01	0.08	0.01	ALBU_MOUSE		Serum albumin;	
EKSKLDWESF	KEEGIEELAIHNR	N-ter +34.06 Da, K +34.06 Da	25.9	80.3	4	1791.12	0.39	0.04	CFDP1_MOUSE		Craniofacial development protein 1;	27 kDa craniofacial protein;Bucentaur;Protein Cp27;
AGDNSTLLSF	KEGLITLLVPEAR	N-ter +28.03 Da, K +28.03 Da	40.3	81.5	3	1609.08	-0.01	0.00	BAIP2_MOUSE	B1AZ46_MOUSE	Brain-specific angiogenesis inhibitor 1-associated protein 2;	Insulin receptor substrate protein of 53 kDa;Insulin receptor tyrosine kinase 53 kDa substrate;
SQQTITLYGY	KEHISTKVPQPR	N-ter +28.03 Da, K +28.03 Da	19.1	99.4	4	1733.16	0.98	0.07	TITIN_MOUSE	E9Q8M7_MOUSE	Titin;	Connectin;
SLARELSGTI	KEILGTAQSVGCNVDR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	52.0	67.5	3	1859.08	0.73	0.09	RL12_MOUSE		60S ribosomal protein L12;	Metastatic lymph node gene 50 protein;
QQMTSSYGGY	KEPAAPVSIQR	N-ter +28.03 Da, K +28.03 Da	23.7	54.9	3	1250.80	0.42	0.03	LASP1_MOUSE	A2A6H0_MOUSE	LIM and SH3 domain protein 1;	CRP55;Calregulin;Endoplasmic reticulum resident protein 60;HACBP;
LAADPAIFY	KEQFLDGDWATNR	N-ter +28.03 Da, K +28.03 Da	42.7	49.8	3	1634.89	-1.56	0.14	CALR_MOUSE		Calreticulin;	Myosin light chain 1/3, skeletal muscle isoform;
DLSAIKIEFS	KEQQEDFKFAFLFDR	N-ter +28.03 Da, K +28.03 Da	40.0	101.3	4	2126.32	-2.32	0.46	MYL1_MOUSE	E0CZ30_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;	Protein DEK;
LEEVTMKQIC	KEVYENYPAYDLTER	N-ter +28.03 Da, K +28.03 Da	34.5	66.9	3	1945.08	0.51	0.06	DEK_MOUSE			
M	KFNFPVTSDR	N-ter +34.06 Da, K +34.06 Da	35.4	46.3	3	1408.85	-0.62	0.06	RL26_MOUSE	D3Z3Q9_MOUSE	60S ribosomal protein L26;	Silica-induced gene 20 protein;
FHRCEKAMTA	KGGDVSVCEWYR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	30.9	41.2	3	1510.79	0.90	0.05	CX6B1_MOUSE		Cytochrome c oxidase subunit 6B1;	Cytochrome c oxidase subunit VIb isoform 1;
ISMPDVLHL	KGPNVXGKEYDVTVPR	N-ter +34.06 Da, K +34.06 Da	22.8	87.9	4	1760.22	-0.12	0.01	F7BRM2_MOUSE	E9Q616_MOUSE		
MSMN	KGPTLLDGLPEQENVLQR	N-ter +34.06 Da, K +34.06 Da	47.7	85.2	4	2189.42	0.04	0.01	PLIN1_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;
IPTLEEYQHY	KGSDFDCELR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	27.2	80.7	3	1281.71	-0.92	0.12	HNRPK_MOUSE	E9Q8D6_MOUSE	Heterogeneous nuclear ribonucleoprotein K;	
RSAPPKLASL	KGVVPEDAVETLAGSLGR	N-ter +34.06 Da, K +34.06 Da	57.7	56.9	3	1966.25	0.08	0.01	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;
AAAAAAVYQ	KHSPQEAHPVQYER	N-ter +28.03 Da, K +28.03 Da	24.2	106.3	4	1761.08	0.85	0.11	CNTRF_MOUSE	Q9D586_MOUSE	Ciliary neurotrophic factor receptor subunit alpha;	
PLRLPLQDQVY	KIGGIGTVPVGR	N-ter +34.06 Da, K +34.06 Da	31.6	29.9	3	1220.86	0.73	0.07	EF1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
VPNTPPSTPV	KLEEDLPQEPSR	N-ter +34.06 Da, K +34.06 Da	23.3	69.4	3	1609.01	0.85	0.07	ADDA_MOUSE		Alpha-adducin;	Erythrocyte adducin subunit alpha;

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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
SLERQAGQIK	KLEVNEAELLR	N-ter +34.06 Da, K +34.06 Da	36.4	44.7	3	1380.92	-0.81	0.06	PTRF_MOUSE	Q3U4N4_MOUSE	Polymerase I and transcript release factor;	Cav-p60;Cavin-1; Adipocyte protein P27;Lung carbonyl reductase;NADPH-dependent carbonyl reductase 2;
M	KLNFSGLR	N-ter +34.06 Da, K +34.06 Da	31.3	39.6	3	1132.75	0.42	0.04	CBR2_MOUSE		Carbonyl reductase [NADPH] 2;	
M	KLNISFPATGQCKLIEVDDER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	40.9	73.5	4	2534.61	-1.00	0.08	R56_MOUSE	D3Z6N6_MOUSE	40S ribosomal protein S6;	Phosphoprotein NP33;
GPSAGDVEAI	KNAIANASTLAEVER	N-ter +28.03 Da, K +28.03 Da, N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	41.9	46.5	3	1641.98	0.03	0.00	RU2A_MOUSE		U2 small nuclear ribonucleoprotein A';	
NLEEAKKII	KNDPSPLEPACVKISALEGYR	N-ter +34.06 Da, K +34.06 Da	36.1	73.8	4	2445.56	0.03	0.00	SYNC_MOUSE		Asparagine-tRNA ligase, cytoplasmic;	Asparaginyl-tRNA synthetase;
QLIDDHFLFD	KPVSPILLASGMAR	N-ter +34.06 Da, K +34.06 Da, N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	42.8	45.2	3	1507.03	0.88	0.02	KCRM_MOUSE	KCRB_MOUSE	Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LDPEKGKTIK	KQFLEELTTQCDR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	38.3	62.4	3	1848.12	-0.92	0.09	MLRS_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F; Acidic-type mitochondrial creatine kinase;Ubiquitous mitochondrial creatine kinase;
DARGIWHNNE	KSFLIWWNEEDHTR	N-ter +34.06 Da, K +34.06 Da, N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	17.5	57.6	4	1841.12	-2.94	0.23	KCRU_MOUSE		Creatine kinase U-type, mitochondrial;	
ELINGYIRKI	KSGEEDFESLASQFSDCCSAKAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	51.2	72.9	4	2637.50	-1.03	0.15	PIN1_MOUSE		Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1;	Peptidyl-prolyl cis-trans isomerase Pin1;
AGLILPGILA	KSIGTSLDPCKDPTR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	18.9	84.9	4	1776.18	0.96	0.09	CDSN_MOUSE		Corneodesmosin;	
AQAYKALKDI	KSSLDISSLLQIEPR	N-ter +28.03 Da, K +28.03 Da	58.1	72.7	3	1828.16	0.77	0.10	TOM34_MOUSE		Mitochondrial import receptor subunit TOM34;	Translocase of outer membrane 34 kDa subunit;
NLHASNTRLQ	KTGTAEMSSILEER	N-ter +28.03 Da, K +28.03 Da	46.8	75.2	3	1606.94	0.74	0.04	ATPA_MOUSE	D6RJ16_MOUSE	ATP synthase subunit alpha, mitochondrial;	
LDMLRDAMLA	KVDSSNGFLIDGYPR	N-ter +34.06 Da, K +34.06 Da, N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.0	53.7	3	1735.05	-0.86	0.03	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
EEGSPRKDGN	KVDVVGATGQAGQSCSR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	55.1	67.8	3	1775.02	0.96	0.13	IF4B_MOUSE	Q3TDD8_MOUSE	Eukaryotic translation initiation factor 4B;	
PQKASGTAS	KVPVPAETQEVAVSSR	N-ter +28.03 Da, K +28.03 Da	38.6	60.7	3	1752.08	0.23	0.01	NACAM_MOUSE		Nascent polypeptide-associated complex subunit alpha, muscle-specific form;	Alpha-NAC, muscle-specific form; PDGF-associated protein;PDGFA-associated protein 1;
NPNRVAQTK	KVTQLDLGPKELSR	N-ter +28.03 Da, K +28.03 Da	22.4	65.9	4	1782.14	-0.43	0.04	HAP28_MOUSE		28 kDa heat- and acid-stable phosphoprotein;	
FPTDPHYEK	KYFFPVR	N-ter +28.03 Da, K +28.03 Da	16.5	73.1	2	1027.66	4.55	0.69	H65T1_MOUSE		Heparan-sulfate 6-O-sulfotransferase 1;	
RQELKARARY	LAEKYWDVAEAR	N-ter +34.06 Da, K +34.06 Da	28.3	80.7	3	1647.03	-0.45	0.02	EF2_MOUSE		Elongation factor 2;	
FDMTSKFLTA	LAQDGVINEALSVELDR	N-ter +28.03 Da	50.0	70.3	3	2099.22	0.31	0.02	PDC6I_MOUSE	B8JL8_MOUSE	Programmed cell death 6-interacting protein;	ALG-2-interacting protein 1;ALG-2-interacting protein X;E2F1-inducible protein;Eig2; Aldehyde reductase;Aldo-keto reductase family 1 member A1;
AVLQVECHPY	LAQNEUIAHCHAR	N-ter +34.06 Da, C +57.02 Da	30.0	92.2	4	1565.98	-1.32	0.10	AK1A1_MOUSE	B1AXW3_MOUSE	Alcohol dehydrogenase [NADP+];	GST 1-1;GST class-mu 1;Glutathione S-transferase G8.7;pmGT10;
AGDKVTYVDF	LAYDILDQYR	N-ter +34.06 Da	25.0	32.3	2	1302.74	0.56	0.04	GSTM1_MOUSE	GSTM4_MOUSE	Glutathione S-transferase Mu 1;	
DQAGRFHVNL	LCGEEQADAAALHFNPR	N-ter +34.06 Da, C +57.02 Da, N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	79.0	72.1	3	1918.06	1.00	0.13	LEG7_MOUSE	Q9CRB1_MOUSE	Galectin-7;	
VKKYEAQPLD	LDACSQDEGAVISKISEIPNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	28.0	64.6	4	2369.41	-2.25	0.11	TACC1_MOUSE	F8VQ95_MOUSE	Transforming acidic coiled-coil-containing protein 1;	
NRVMMVAKKF	LDAGHKLNFVAASR	N-ter +34.06 Da, K +34.06 Da, N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.3	71.0	4	1566.04	-0.76	0.09	PDIA3_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; Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
SASGTTLEA	LDCIPLPTRPTDKPLR	N-ter +34.06 Da, K +34.06 Da, N-ter +34.06 Da	26.2	64.8	3	2008.15	-0.07	0.01	SAMH1_MOUSE	E9Q0K6_MOUSE	SAM domain and HD domain-containing protein 1;	Interferon-gamma-inducible protein Mg11;
NKIAGSLFPF	LDEDRLDLGVSSLEER	N-ter +34.06 Da	26.2	64.8	3	2008.15	-0.07	0.01	SAMH1_MOUSE	E9Q0K6_MOUSE	SAM domain and HD domain-containing protein 1;	Methionine adenosyltransferase 2;
VIKAVPAKY	LDEDTIYHLQPSGR	N-ter +34.06 Da	34.0	66.0	3	1676.97	-2.94	0.68	METK2_MOUSE	Q6PE05_MOUSE	S-adenosylmethionine synthase isoform type-2;	
TYHCKNSIAY	LDEETGSLNKAVLLQGSNDVELVAEGNSR	N-ter +28.03 Da, K +28.03 Da	39.1	39.1	4	3112.71	6.37	0.41	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
KLKLNLSFLY	LDHNDLESVPPNLPESLR	N-ter +34.06 Da	30.4	66.2	3	2078.22	-0.15	0.01	MIME_MOUSE		Mimecan;	Osteoglycin;
KTNKPSRLPF	LDIAPLDIGGADQEFR	N-ter +34.06 Da	57.7	53.6	3	1763.03	-1.06	0.20	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
MAWNETADLG	LDIGAQGEALGYR	N-ter +34.06 Da	49.2	53.5	3	1395.83	0.71	0.05	CTNB1_MOUSE	F7CRC6_MOUSE	Catenin beta-1;	Beta-catenin;
PLQKRGVKL	LDISELNTVGAGR	N-ter +28.03 Da	20.9	55.0	3	1371.81	1.87	0.09	NELFA_MOUSE		Negative elongation factor A;	Wolf-Hirschhorn syndrome candidate 2 homolog;
KPKGDKQVEY	LDLDDSGKSTPPR	N-ter +34.06 Da, K +34.06 Da	21.1	64.3	3	1581.01	0.47	0.01	GAB1_MOUSE		GRB2-associated-binding protein 1;	GRB2-associated binder 1;Growth factor receptor bound protein 2-associated protein 1;
QHHDVNTYTF	LDLNLDSKFR	N-ter +28.03 Da, K +28.03 Da	21.3	82.0	3	1388.92	-0.52	0.07	Q3U422_MOUSE	NDUV3_MOUSE		
PSPGEALHL	LDLCTPPPAPIPSVR	N-ter +34.06 Da, C +57.02 Da	33.6	29.9	3	1860.09	0.01	0.00	APIG2_MOUSE		AP-1 complex subunit gamma-like 2;	Gamma2-adaptin;
GLPSSLTLY	LDNKNISNIDYEFKR	N-ter +34.06 Da, K +34.06 Da	27.7	54.0	3	2067.30	-1.52	0.09	LUM_MOUSE		Lumican;	Keratan sulfate proteoglycan lumican;
LEEKSSNLG	LDPPALLTTEVDKLER	N-ter +34.06 Da, K +34.06 Da	24.3	63.1	3	1877.23	-0.12	0.01	LMTK2_MOUSE		Serine/threonine-protein kinase LMTK2;	Brain-enriched kinase;Lemur tyrosine kinase 2; Lysosomal acid alpha-mannosidase;Mannosidase alpha class 2B member 1;Mannosidase alpha-B;
GPTSYPEPSK	LDPTSVTLKPMIEIR	N-ter +28.03 Da, K +28.03 Da	28.4	63.0	3	1655.04	0.36	0.04	MA2B1_MOUSE		Lysosomal alpha-mannosidase;	HSE-MSF;
MPTTVIAVHY	LDQTEQWEKFGIEKR	N-ter +34.06 Da, K +34.06 Da	30.7	58.3	4	2008.27	-1.09	0.09	CO3_MOUSE		Complement C3;	
SPSAKDIKI	LDSVGIEADDDR	N-ter +28.03 Da	51.2	37.3	2	1331.67	-1.03	0.06	RLA2_MOUSE		60S acidic ribosomal protein P2;	

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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
KTVMDDFQAF	LDTCKAADKDCFTSEGNLVTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	39.8	63.3	4	2842.51	-1.60	0.15	ALBU_MOUSE		Serum albumin;	
NSSSGNPLVY	LDVGADGQPLGR	N-ter +34.06 Da	20.3	21.1	2	1230.70	-0.25	0.01	PPIF_MOUSE		Peptidyl-prolyl cis-trans isomerase F, mitochondrial;	Cyclophilin F;Rotamase F;
TGTGTLILLV	LDVNDNAPIPEPR	N-ter +34.06 Da	26.4	49.3	3	1482.86	0.95	0.05	CADH1_MOUSE		Cadherin-1;	ARC-1;Epithelial cadherin;Uvomorulin;
RLSEGFQAF	LDVSHFTPDEVTVR	N-ter +34.06 Da	42.3	65.1	3	1647.98	-0.30	0.03	HSPB2_MOUSE	E9QKE3_MOUSE	Heat shock protein beta-2;	
QHRPSQQYAT	LDVYNPFENR	N-ter +28.03 Da	25.9	47.9	2	1293.70	0.21	0.01	SCAM3_MOUSE	Q3UXS0_MOUSE	Secretory carrier-associated membrane protein 3;	
YERTFMASEF	LDWLVEQEATTR	N-ter +28.03 Da	36.5	47.6	3	1544.86	-0.25	0.01	DPTOR_MOUSE	B2ZR55_MOUSE	DEP domain-containing mTOR-interacting protein;	DEP domain-containing protein 6;
HGHHPHGDF	LDYGPCDPPSNOELKGGQYHR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	25.2	64.8	4	2528.40	-0.27	0.02	HRG_MOUSE		Histidine-rich glycoprotein;	Histidine-proline-rich glycoprotein;
FRAMGVPMMG	LDYSDEINQVVEVR	N-ter +34.06 Da	39.0	56.0	3	1711.98	0.00	0.00	A2M_MOUSE	D3YW52_MOUSE	Alpha-2-macroglobulin;	Pregnancy zone protein;
KDGSASGTTL	LEALDCLPPTRPTRDKPLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	24.2	75.6	4	2260.43	0.73	0.02	EF1A1_MOUSE	D3Y268_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
KEGNASGVSL	LEALDILPPTRPTRDKPLR	N-ter +28.03 Da, K +28.03 Da	30.2	64.7	4	2201.42	0.95	0.02	EF1A2_MOUSE	B7ZBW3_MOUSE	Elongation factor 1-alpha 2;	Eukaryotic elongation factor 1 A-2;Statin-S1;
VVLDPMYSTY	LEALGKIGETPIPEYR	N-ter +34.06 Da, K +34.06 Da	23.3	49.3	3	1853.19	1.06	0.09	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;
KKKQDVLVCF	LEANKIGFEEKDIAANEENR	N-ter +34.06 Da, K +34.06 Da	20.3	74.6	4	2391.49	-0.81	0.09	SH3L1_MOUSE		SH3 domain-binding glutamic acid-rich-like protein;	
VLRPGTALVL	LEAQAATGFIDPVNRR	N-ter +28.03 Da	32.4	50.9	3	1856.07	0.03	0.00	EPIPL_MOUSE		Epiplakin;	
GPCSLEIKQF	LECAQNSQDKLCEGFNEVLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	30.0	79.9	4	2576.51	-0.69	0.12	CHCH2_MOUSE	B2RPUB_MOUSE	Coiled-coil-helix-coiled-coil domain-containing protein 2, mitochondrial;	
PLLLCEGAQA	LECYSCVQKAGDCCSPHR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	56.9	83.1	4	2249.22	0.63	0.10	LYPD3_MOUSE		Ly6/PLAUR domain-containing protein 3;	GPI-anchored metastasis-associated protein C4.4A homolog;
RTLTAVHDAI	LEDLVFSPSEIVGKR	N-ter +28.03 Da, K +28.03 Da	42.5	79.3	3	1657.08	0.39	0.07	R57_MOUSE	F6SVV1_MOUSE	40S ribosomal protein S7;	
HHKVYDLTKF	LEEHPGGEVLR	N-ter +28.03 Da	33.6	57.9	3	1391.79	-2.18	0.10	CYB5_MOUSE		Cytochrome b5;	
EGKGTIKKQF	LEELLTQCDR	N-ter +34.06 Da, C +57.02 Da	34.0	24.7	2	1410.76	-0.07	0.00	MLRS_MOUSE		Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;
LAPPEEALC	LEEVAAPPASGTR	N-ter +34.06 Da	25.9	42.9	2	1259.75	-0.15	0.02	SHLB2_MOUSE	A2AWI7_MOUSE	Endophilin-B2;	SH3 domain-containing GRB2-like protein B2;
KSPEERTIEY	LEEVAVNFAGLADR	N-ter +34.06 Da, K +34.06 Da	31.6	69.4	3	1699.11	-0.49	0.04	ECHA_MOUSE		Trifunctional enzyme subunit alpha, mitochondrial;	TP-alpha;
NDAYGPPSNF	LEIDVSNPQTGVGVR	N-ter +28.03 Da	39.8	48.2	3	1610.94	-0.92	0.09	SNX3_MOUSE	Q78ZM0_MOUSE	Sorting nexin-3;	SDP3 protein;
PKKAPVLKTL	LELIPELR	N-ter +34.06 Da	22.9	35.9	2	1015.69	0.68	0.06	LPPRC_MOUSE		Leucine-rich PPR motif-containing protein, mitochondrial;	130 kDa leucine-rich protein;
EQKKILAKYL	LETSGNLDGLYKLELHDFGYR	N-ter +28.03 Da, K +28.03 Da	28.5	105.0	4	2382.44	-1.52	0.13	NAMPT_MOUSE		Nicotinamide phosphoribosyltransferase;	Pre-B-cell colony-enhancing factor 1 homolog;Visfatin;
ASSLPPDPDW	LETSSSPAEPAPQGACR	N-ter +34.06 Da, C +57.02 Da	51.6	61.6	3	1878.02	-0.38	0.08	DLGP4_MOUSE	B7ZNS2_MOUSE	Disks large-associated protein 4;	PSD-95/SAP90-binding protein 4;SAP90/PSD-95-associated protein 4;
LWVVLGLPAH	LEVAEDSGHPWR	N-ter +34.06 Da	37.7	60.5	3	1428.81	-0.15	0.01	TXD15_MOUSE		Thioredoxin domain-containing protein 15;	
APGSINGVPL	LEVLDLDFEDKQWR	N-ter +34.06 Da, K +34.06 Da	23.0	93.2	3	1816.14	-1.69	0.33	FIP1_MOUSE	D3Z619_MOUSE	Pre-mRNA 3'-end-processing factor FIP1;	FIP1-like 1 protein;
TFLRKMHHVL	LEVVDVLEGLTQPCSEGR	N-ter +34.06 Da, C +57.02 Da	37.1	54.8	3	1935.09	-0.30	0.02	TR112_MOUSE		tRNA methyltransferase 112 homolog;	TRM112-like protein;
YVSDAFHKAF	LEVNEEGSEAAASTSVVITGR	N-ter +28.03 Da	59.3	45.8	3	2146.17	0.31	0.02	ANT3_MOUSE		Antithrombin-III;	Serpin C1;
AANCDKSLHT	LFGDKLCAIPNLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	12.7	70.3	3	1584.06	0.03	0.00	ALBU_MOUSE		Serum albumin;	
LLHLELRR	LFTMEPSKDKPEPSEQR	N-ter +34.06 Da, K +34.06 Da	9.3	22.5	4	2120.22	-1.74	0.12	FUZZY_MOUSE		Protein fuzzy homolog;	
LPEGTTPEKY	LGAEMYQSVGNMR	N-ter +28.03 Da	37.3	55.1	3	1482.78	-1.79	0.19	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
AATPKQGPRM	LGAPEEADANEQVRR	N-ter +34.06 Da	18.0	77.1	3	1746.01	0.18	0.03	CYTC_MOUSE	A2APX3_MOUSE	Cystatin-C;	Cystatin-3;
AATPKQGPRM	LGAPEEADANEQVRR	N-ter +28.03 Da	40.7	59.4	3	1583.84	0.14	0.01	CYTC_MOUSE	A2APX3_MOUSE	Cystatin-C;	Cystatin-3;
DHHHTHKTDK	LGCPPEPDKNSDRPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.2	94.9	4	1947.15	-1.52	0.13	HRG_MOUSE		Histidine-rich glycoprotein;	Histidine-proline-rich glycoprotein;
SPASHEIATN	LGDFAIISLYR	N-ter +34.06 Da	16.6	37.4	2	1187.72	1.05	0.08	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	Alpha-1 protease inhibitor 1;Alpha-1-antiprotease;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
TIGRIRFHDF	LGDSWGILFSHR	N-ter +34.06 Da	20.5	97.2	3	1517.97	-3.64	0.46	PRDX6_MOUSE	Q6GT24_MOUSE	Peroxiredoxin-6;	1-Cys peroxiredoxin;Acidic calcium-independent phospholipase A2;Antioxidant protein 2;Non-selenium glutathione peroxidase;
RPPGGGSNFS	LGDFEPAEQPVR	N-ter +34.06 Da	39.0	22.0	2	1390.76	1.32	0.12	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
QSVCVHLRR	LGTLDNPSLDETAYR	N-ter +28.03 Da	42.1	50.3	3	1908.01	0.70	0.04	FRDA_MOUSE	E9Q2P9_MOUSE	Fratxin, mitochondrial;	
EGFTQPVAVF	LGVPFAKPLGSLR	N-ter +28.03 Da, K +28.03 Da	27.3	66.4	3	1507.03	-1.09	0.07	CES3_MOUSE	EST1_MOUSE	Carboxylesterase 3;	Fatty acid ethyl ester synthase;Triacylglycerol hydrolase;
GIALNDNFVK	LISWYDNEYGYSNR	N-ter +34.06 Da	22.9	61.7	3	1812.96	-6.64	0.00	G3P_MOUSE	F8WJL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;
KHKTDLHNEN	LKGGDDLDPNVYLSR	N-ter +28.03 Da, K +28.03 Da	43.7	63.4	3	1804.05	0.20	0.01	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
GCLVLPGYEA	LKGPKEISFEGDVTSLR	N-ter +28.03 Da, K +28.03 Da	40.9	71.6	4	2016.27	-0.01	0.00	CLM9_MOUSE		CMRF35-like molecule 9;	CD300 antigen-like family member G;Nepmucin;
GKNPAEAWAKN	LKQEDFELLCPDQTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	33.8	94.7	3	1876.12	0.07	0.01	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;

Table S7, 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
PRLSISGEYN PDQAGRPHVN	LKTLMSPLGTR LLCGEEQGDAAALHFNPR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +57.02 Da	28.1 60.2	55.1 72.6	3 3	1396.99 2031.15	0.50 -0.32	0.03 0.05	A1AT1_MOUSE LEG7_MOUSE	A1AT2_MOUSE Q9CRB1_MOUSE	Alpha-1-antitrypsin 1-1; Galectin-7;	Alpha-1 protease inhibitor 1;Alpha-1- antitrypsinase;Serine protease inhibitor 1- 1;Serine protease inhibitor A1a;
LLKEASRLRS GWGVVSCAL	LLEEEKNNVALAR LLEIINIGLSVEIK	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	16.8 9.3	108.8 114.3	4 4	1680.17 1722.29	-2.94 4.69	0.00 0.63	EVPL_MOUSE Q3V494_MOUSE		Envoplakin;	210 kDa cornified envelope precursor protein;p210;
TPPCEECIVW	LLLKEPMTVSSDQMAKLR	N-ter +34.06 Da, K +34.06 Da	25.7	40.5	4	2161.39	-1.40	0.07	CAH3_MOUSE		Carbonic anhydrase 3;	Carbonate dehydratase III;Carbonic anhydrase III;
LQGGGLGPLS AFRSVPALES KKILAEERRK NMQHRVYELF KCCTLPEDQR	LLPPDLPLEPECR LMLNNALNAVYQKTVESLPNLR LNIDHLSDDKLR LNSTAGASGGAYEHR LPCVEDYLSAILNR	N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, C +57.02 Da	31.1 22.3 22.8 75.4 41.2	45.2 70.9 45.4 75.5 71.5	3 4 4 3 3	1690.94 2670.64 1505.95 1523.87 1690.00	0.67 -0.47 1.05 -1.18 3.27	0.02 0.02 0.15 0.22 0.61	OSTM1_MOUSE LRRN1_MOUSE TNRN3_MOUSE HNRH1_MOUSE ALBU_MOUSE	A2A6J0_MOUSE Q8C2Q7_MOUSE	Osteopetrosis-associated transmembrane protein 1; Leucine-rich repeat neuronal protein 1; Troponin T, fast skeletal muscle; Heterogeneous nuclear ribonucleoprotein H; Serum albumin;	Grey-lethal protein; Neuronal leucine-rich repeat protein 1; Fast skeletal muscle troponin T;
VLDQPDAAATH	LPHPPSPPLPGWEER	N-ter +28.03 Da	35.7	69.0	3	1962.14	0.60	0.03	NEDD4_MOUSE		E3 ubiquitin-protein ligase NEDD4;	Neural precursor cell expressed developmentally down-regulated protein 4; CC chemokine ILC;Cutaneous T-cell-attracting chemokine;ESKine;IL-11 R-alpha-locus chemokine;Skinkine;Small-inducible cytokine A27;
WNKTQKQKEA ALLCAGRAQG	LPLPSSTSCCTQLYR LQCCEYGVPIETSCPAVTCR	N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da, C +57.02 Da	32.1 55.3	46.8 43.9	3 3	1815.99 2590.25	0.00 0.50	0.00 0.04	CCL27_MOUSE LY6C1_MOUSE	A2AMS6_MOUSE LY6C2_MOUSE	C-C motif chemokine 27; Lymphocyte antigen 6C1;	
PRKIISLSQL	LQEDSLNVDLSSLR	N-ter +28.03 Da	39.1	47.5	3	1686.96	0.35	0.01	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; Lysosomal acid alpha- mannosidase;Mannosidase alpha class 2B member 1;Mannosidase alpha-B;
NLFQFTTINY	LQETTLAANQPLSR	N-ter +34.06 Da	32.8	59.2	3	1574.98	-1.52	0.09	MA2B1_MOUSE		Lysosomal alpha-mannosidase;	
SRDGKALEQF ARRQHLKSVM	LQEFYDGNLKR LQIAATELEKEESR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	26.1 22.8	46.9 55.0	3 3	1437.83 1672.00	0.14 0.33	0.01 0.02	PDIA3_MOUSE TNIN2_MOUSE	A2A6K0_MOUSE	Protein disulfide-isomerase A3; Troponin I, fast skeletal muscle;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER- 60;Endoplasmic reticulum resident protein 57;Endoplasmic reticulum resident protein 60; Troponin I, fast-twitch isoform;
QAKAVLSAEK	LRDEEVTGLGELLR	N-ter +34.06 Da	44.9	84.6	4	1770.13	-1.56	0.14	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6; 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;
NTFYNSKEIF	LRELISNASDALDKIR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	39.7 44.8	98.5 83.3	4 4	1881.32 2435.39	0.61 -6.64	0.06 0.00	ENPL_MOUSE ALBU_MOUSE	HS90B_MOUSE	Endoplasmic; Serum albumin; Mesencephalic astrocyte-derived neurotrophic factor;	
ALSVLPSRA	LRPGDCEVCISYLGR	N-ter +34.06 Da, C +57.02 Da	54.8	56.3	3	1828.02	1.20	0.14	MANF_MOUSE	Q3TMX5_MOUSE		Arginine-rich protein;Protein ARMET;
GAIMARIAQF	LSGIPETVPLSTVNR	N-ter +34.06 Da	31.1	33.0	3	1615.99	-1.09	0.07	THIKA_MOUSE	THIKB_MOUSE	3-ketoacyl-CoA thiolase A, peroxisomal;	Acetyl-CoA acyltransferase A;Beta-ketothiolase A;Peroxisomal 3-oxoacyl-CoA thiolase A; 2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
QDDWATWTSF RFQHVGTSVF RVAPEEHPTL LLIATGPTTA YQEDMGSLFY	LSGVDIQVGGDLTLVTNPKR LSVTGEQYGNPIR LTEAPLNPKANR LTEDEKQTMVDLHNQYR LTLVDLETCHVLSR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da	51.5 32.8 17.3 30.6 53.9	53.7 43.3 75.5 68.2 77.6	3 3 3 4 3	2195.33 1460.83 1390.96 2187.28 1804.10	-3.64 -0.52 0.16 0.38 -2.74	0.46 0.02 0.02 0.04 0.37	ENOB_MOUSE SDF2L_MOUSE ACTC_MOUSE PI16_MOUSE FETUB_MOUSE	ACTA_MOUSE D3Z6T6_MOUSE Q6YJ1_MOUSE	Beta-enolase; Stromal cell-derived factor 2-like protein 1; Actin, alpha cardiac muscle 1; Peptidase inhibitor 16; Fetuin-B;	Alpha-cardiac actin; Cysteine-rich protease inhibitor; Fetuin-like protein IRL685; Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 63 kDa subunit;Ribophorin II;Ribophorin-2;
ALTITASVQA	LTPHTYLKQDVER	N-ter +28.03 Da, K +28.03 Da	20.1	106.8	4	1756.14	0.04	0.00	RPN2_MOUSE	A2ACG7_MOUSE	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2;	
DQFSRSVNV5	LTQEELSDGLDLSVR	N-ter +28.03 Da	45.3	54.4	3	1831.02	0.50	0.03	AKAP2_MOUSE	A2API8_MOUSE	A-kinase anchor protein 2;	AKAP expressed in kidney and lung;Protein kinase A-anchoring protein 2; Proline-arginine-rich end leucine-rich repeat protein;
INGTQICPNN LEFQAQITTL STSVVRPFK GIWHNDNKS KGSVAGGAVY	LVAFHDFSSDENVPHLR LVDLGTQPAEJAR LVRPVPQVYVIEGR LWVVNEEDHLR LVYDQELGSPDKSEALR	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	26.9 32.3 31.1 51.5 59.4	92.5 31.2 50.6 55.1 62.5	4 3 3 3 3	2129.31 1409.83 1610.01 1442.85 2171.35	-0.74 0.51 0.01 -1.06 0.16	0.10 0.02 0.00 0.09 0.02	PRELP_MOUSE SYMPK_MOUSE ATPO_MOUSE KCRM_MOUSE QIL1_MOUSE	E9PVR1_MOUSE D3Z4J0_MOUSE	Prolargin; Symplekin; ATP synthase subunit O, mitochondrial; Creatine kinase M-type; Protein QIL1;	Oligomycin sensitivity conferral protein; Creatine kinase M chain;M-CK;
AGNKVTYVDF	LVYDVLQHR	N-ter +34.06 Da	38.5	55.4	3	1290.79	-0.36	0.01	GSTM2_MOUSE	GSTM6_MOUSE	Glutathione S-transferase Mu 2;	GST 5-5;GST class-mu 2;Glutathione S- transferase pmGT2;

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DSPGLHRVYW	LVYEQEQLSCDEPILNSKSGDNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	47.8	67.5	4	2858.63	-0.47	0.06	PEBP1_MOUSE	D3Z1V4_MOUSE	Phosphatidylethanolamine-binding protein 1;	HCNPPp; Proline-arginine-rich end leucine-rich repeat protein; Thioredoxin domain-containing protein 7;
VLGKPLSLAF	LYMEKNQLEEVPSALPR	N-ter +34.06 Da, K +34.06 Da	22.7	57.3	3	2084.28	-2.56	0.15	PRELP_MOUSE		Prolargin;	
SCTFFLAVSG	LYSSDDVIELTSPFNFR	N-ter +34.06 Da	52.7	55.3	3	2090.11	0.16	0.02	PDI A6_MOUSE	Q3TML0_MOUSE	Protein disulfide-isomerase A6;	
EQKIGQPTLL	LYVDAGAETMTQR	N-ter +34.06 Da	49.9	55.7	3	1487.83	-1.06	0.11	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
TARGAAVTRS	MASGGGVPTDEEQATGLER	N-ter +34.06 Da	33.9	56.7	3	1938.03	-0.45	0.03	COX5B_MOUSE	Q9D881_MOUSE	Cytochrome c oxidase subunit 5B, mitochondrial;	Cytochrome c oxidase polypeptide Vb;
TYHCKNSVAY	MDQQTGNLKKALLQGSNEIELR	N-ter +34.06 Da, K +34.06 Da	35.7	56.5	4	2700.72	-0.49	0.02	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen; C-type lectin domain family 3 member B;Plasminogen kringle 4-binding protein;
SKMFEELKNR	MDVLAQEVALLKEK	N-ter +34.06 Da, K +34.06 Da	48.5	84.1	3	1688.21	-2.94	0.23	TETN_MOUSE	Q8CFZ6_MOUSE	Tetranectin;	
TYLERHMSEF	MECNLDELVKHGLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	19.5	91.5	4	1769.06	-0.27	0.02	PSA1_MOUSE	E9Q3B7_MOUSE		Proline-arginine-rich end leucine-rich repeat protein;
GKPLSLAFLY	MEKNQLEEVPSALPR	N-ter +34.06 Da, K +34.06 Da	42.5	62.8	3	1808.13	-0.97	0.08	PRELP_MOUSE		Prolargin; Phospholysine phosphohistidine inorganic pyrophosphate phosphatase;	
QNMNRAFQVL	MELENPVLISLGGKR	N-ter +34.06 Da, K +34.06 Da	30.9	64.0	3	1723.14	0.68	0.03	LHPP_MOUSE		Apolipoprotein C-III;	Apolipoprotein C3;
SLLLGSVQGY	MEQASKTVQDALSSVQESDIAVVAR	N-ter +34.06 Da, K +34.06 Da	45.6	74.7	4	2729.66	-1.00	0.14	APOC3_MOUSE	E9QP56_MOUSE		
KTIDCDVITL	MFIQTQDTPNPNLSKIPGKPVLETR	N-ter +34.06 Da, K +34.06 Da	22.5	63.5	4	3072.95	-5.06	0.00	NFU1_MOUSE	D3Z285_MOUSE	NFU1 iron-sulfur cluster scaffold homolog, mitochondrial;	HIRA-interacting protein 5;
	MGTPSGTAEPYDGTAKAR	N-ter +34.06 Da, K +34.06 Da	48.1	67.7	3	1806.05	0.37	0.06	BSDC1_MOUSE		BSD domain-containing protein 1;	
SVILQHLRMS	MHTEAAEVLLER	N-ter +34.06 Da	40.1	48.2	3	1431.83	0.18	0.02	HIBCH_MOUSE	E0CX19_MOUSE	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial;	3-hydroxyisobutyryl-coenzyme A hydrolase; 2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
AGNKLAMQEF	MILPVGASSFKEAMR	N-ter +34.06 Da, K +34.06 Da	28.1	73.0	3	1704.10	0.23	0.03	ENOB_MOUSE	Q5SX59_MOUSE	Beta-enolase;	Nucleolar protein 1;
SEVKMKMQQEN	MKPQEQLTLEPYER	N-ter +28.03 Da, K +28.03 Da	29.8	40.7	3	1817.01	1.44	0.04	FBRI_MOUSE		rRNA 2'-O-methyltransferase fibrillar;	
	MKQLPILEPGDKPR	N-ter +28.03 Da, K +28.03 Da	37.9	52.7	4	1705.09	0.89	0.03	RABEK_MOUSE	B0R0S4_MOUSE	Rab9 effector protein with kelch motifs;	
	MKVFTVGLPAEGR	N-ter +34.06 Da, K +34.06 Da	26.8	70.0	3	1569.05	0.52	0.05	GRHPR_MOUSE	D6REG4_MOUSE	Glyoxylate reductase/hydroxypyruvate reductase;	
WAATPKQGPR	MLGAPEEADANEQGVRR	N-ter +28.03 Da	22.8	68.0	3	1871.01	0.31	0.04	CYTC_MOUSE	A2APX3_MOUSE	Cystatin-C;	Cystatin-3;
WAATPKQGPR	MLGAPEEADANEQGVRR	N-ter +28.03 Da	57.1	49.4	3	1714.87	-0.12	0.01	CYTC_MOUSE	A2APX3_MOUSE	Cystatin-C;	Cystatin-3;
TARRQHLKSV	MLQJAATELEKEESR	N-ter +34.06 Da, K +34.06 Da	21.7	65.1	3	1815.13	1.61	0.15	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform; Calgizzarin;Endothelial monocyte-activating polypeptide;Protein S100-C;S100 calcium-binding protein A11;
QLSKTEFLSF	MNTELAFTKNQDGPVLDLR	N-ter +34.06 Da, K +34.06 Da	18.0	63.1	4	2349.47	-0.11	0.01	S10AB_MOUSE	F6S135_MOUSE	Protein S100-A11;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
RLPASPVISN	MPAQVDQGVATEDR	N-ter +28.03 Da	36.7	49.6	3	1543.81	0.52	0.02	3BP1_MOUSE	A2ASV4_MOUSE	SH3 domain-binding protein 1;	Protein phosphatase 2B regulatory subunit 1;Protein phosphatase 3 regulatory subunit B alpha isoform 1;
ILAQMTGTEY	MQDPDEALRR	N-ter +28.03 Da	25.5	63.6	3	1386.74	1.27	0.13	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein 5-100E;S100 calcium-binding protein A3;
NSGSLSEEF	MSLPQLQNPVLR	N-ter +34.06 Da	35.0	46.0	3	1686.01	-0.74	0.04	CANB1_MOUSE		Calcineurin subunit B type 1;	Alpha-1 type I collagen;
EFRECDYNFK	MSVLDTNKDCVDFGEYVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.2	68.6	3	2332.23	0.63	0.07	S10A3_MOUSE		Protein S100-A3;	Tumor protein D52-like 2;
PGLGGNFASQ	MSYGYDEKSAGVSPGPMGPSGR	N-ter +28.03 Da, K +28.03 Da	42.3	72.4	4	2481.35	0.88	0.06	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
SPNKGVLSDF	MTDVPVDPGVVHR	N-ter +34.06 Da	42.8	79.5	3	1454.89	-0.94	0.05	TPD54_MOUSE	Q3TUJ9_MOUSE	Tumor protein D54;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
QSRSFRLAQ	MTGTEYMQDPDEALRR	N-ter +34.06 Da	23.7	54.7	3	2075.06	0.11	0.01	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
QSRSFRLAQ	MTGTEYMQDPDEALR	N-ter +28.03 Da	44.3	45.9	3	1912.91	-0.01	0.00	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
TTLEHSDCAF	MVDNEAIYDICR	N-ter +34.06 Da, C +57.02 Da	37.7	46.3	3	1531.79	-0.81	0.06	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;
ISKEWGFTKF	NADEFEDMVAEKR	N-ter +34.06 Da, K +34.06 Da	22.7	61.7	3	1620.91	-1.40	0.15	RL10_MOUSE		60S ribosomal protein L10;	Protein QM homolog; Brain protein H19;MH19;Membrane-associated protein HEM-2;p125Nap1;
NLPNTENLTF	NAEESYDSEMR	N-ter +34.06 Da	22.3	97.6	3	1476.81	-2.74	0.55	NCKP1_MOUSE	A2AS98_MOUSE	Nck-associated protein 1;	
TIKKRLETYY	NATEPVISFYDKR	N-ter +28.03 Da, K +28.03 Da	21.9	48.1	3	1594.91	-1.74	0.17	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
TGGRTTWART	NATLSVEPEGR	N-ter +34.06 Da	35.1	42.0	2	1205.70	0.76	0.05	ACOT2_MOUSE		Acyl-coenzyme A thioesterase 2, mitochondrial;	Acyl coenzyme A thioester hydrolase;MTE-1;Very-long-chain acyl-CoA thioesterase;
SFRPNQNTK	NCWQNYLDFHR	N-ter +28.03 Da, C +57.02 Da	27.9	56.2	3	1579.79	0.23	0.02	CX6B1_MOUSE		Cytochrome c oxidase subunit 6B1;	Cytochrome c oxidase subunit VIb isoform 1;
FSHFRFDEN	NDAAILVLEPIER	N-ter +28.03 Da	24.0	68.5	3	1593.02	0.30	0.02	TLR2_MOUSE		Toll-like receptor 2;	
PGDYSLVKY	NDQHIPSPTAR	N-ter +34.06 Da	25.4	51.8	3	1472.84	-1.25	0.03	FLNA_MOUSE	B7FAV1_MOUSE	Filamin-A;	Actin-binding protein 280;Alpha-filamin;Endothelial actin-binding protein;Filamin-1;Non-muscle filamin;
FGVCHIFASF	NDTFVHVDLSGKETICR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	27.2	65.5	4	2147.21	0.07	0.01	RS14_MOUSE	D3YVF4_MOUSE	40S ribosomal protein S14;	
RFQTTAVCK	NDVITVQTPAFAESVTEGDVR	N-ter +28.03 Da	61.8	50.0	3	2275.25	0.35	0.03	ODO2_MOUSE		Dihydrolypopylysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial;	2-oxoglutarate dehydrogenase complex component E2;Dihydrolypopylysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex;E2K;

Table S7, 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
PGDYEVSKF FKKAGHPFMW	NEEHIPSPFVVPVSPSGDAR NEHLGYLVTCPSNLGTGLR	N-ter +34.06 Da N-ter +28.03 Da, C +57.02 Da	30.6 46.3	36.5 68.3	3 3	2353.26 2128.22	-3.64 0.19	1.37 0.02	FLNA_MOUSE KCRM_MOUSE	B7FAV1_MOUSE	Filamin-A; Creatine kinase M-type;	Actin-binding protein 280;Alpha-filamin;Endothelial actin-binding protein;Filamin-1,Non-muscle filamin; Creatine kinase M chain;M-CK; 2-oxoglutarate dehydrogenase complex component E2;Dihydroliipoamide succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial; Twinfilin-1;
QNTCAMLTF AEEELRQIKI	NEVDMSNIQEMR NEVQTDVSDVTKHQLQGVAFPISR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	33.3 31.9	49.9 57.6	3 4	1498.77 2836.70	-1.22 -1.52	0.11 0.13	ODO2_MOUSE TWF1_MOUSE		Dihydroliopolysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial; Twinfilin-1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
RDKRSALOSI	NEWASQTTDQKGLPEVTKDVER	N-ter +28.03 Da, K +28.03 Da	40.4	72.0	4	2486.45	0.16	0.01	SERPH_MOUSE		Serpin H1;	
ILLWLYGADG	NIVLQSPASLAVSLGQR	N-ter +28.03 Da	54.4	45.2	3	1881.15	3.49	0.20	KV3A9_MOUSE	KV3AA_MOUSE	Ig kappa chain V-III region MOPC 63;	
	NIVMTQSPKMSMSVGER	N-ter +28.03 Da, K +28.03 Da	47.3	72.2	3	2037.15	-1.06	0.13	KV5A2_MOUSE		Ig kappa chain V-V region MOPC 21;	
YNKFMSVLDT FLPMMQAISN	NKDCEVDFGEYVR NKDQGGYDFVEGLR	N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da	42.5 45.8	57.1 40.0	3 3	1685.87 1793.99	0.99 0.49	0.10 0.09	S10A3_MOUSE MYL1_MOUSE	E9PWG4_MOUSE	Protein S100-A3; Myosin light chain 1/3, skeletal muscle isoform;	Protein S-100E;S100 calcium-binding protein A3; Myosin light chain alkali 1/2; Alpha-1 protease inhibitor 1;Alpha-1-antiprotease;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
QSPASHEIAT VPDQAGRFHV SSSLGQQLNL	NLGDFAIISLYR NLLCGEEQADAAALHFNPR NLLNWDVTLGTVSLOQER	N-ter +28.03 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da	42.6 69.1 50.0	38.8 69.0 33.3	2 3 3	1295.74 2145.20 2236.23	0.29 -2.94 -0.36	0.04 0.45 0.06	A1AT1_MOUSE LEG7_MOUSE APOA1_MOUSE	A1AT2_MOUSE Q9CRB1_MOUSE Q8BPD5_MOUSE	Alpha-1-antitrypsin 1-1; Galectin-7; Apolipoprotein A-I;	Protein S-100E;S100 calcium-binding protein A3; Myosin light chain alkali 1/2; Alpha-1 protease inhibitor 1;Alpha-1-antiprotease;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
KINGTQICPN LAACGSVTMS	NLVAHFDFSSDLENVPHLR NPGESSFDLADR	N-ter +28.03 Da N-ter +28.03 Da	28.6 48.9	98.3 42.9	4 2	2237.34 1334.67	3.14 -2.25	0.48 0.21	PRELP_MOUSE SODE_MOUSE		Prolargin; Extracellular superoxide dismutase [Cu-Zn];	
GSRRNGDQWGV	NPGGFVER	N-ter +28.03 Da	19.6	79.6	2	902.53	0.33	0.02	ANS18_MOUSE		Ankyrin repeat and sterile alpha motif domain-containing protein 1B;	Amyloid-beta protein intracellular domain-associated protein 1;E2A-PBX1-associated protein;
DDIGRNFILM	NPQNGLKIRPFMKAHLNR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	18.5	79.0	4	2217.44	4.01	0.30	UBCP1_MOUSE		Ubiquitin-like domain-containing CTD phosphatase 1;	Nuclear proteasome inhibitor UBLCP1;
GALGCAICHG IPRHEVTEIS	NPVDDICIAKPR NTDVTQPQKTVIR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	36.7 22.6	43.1 67.9	3 3	1452.84 1612.99	0.78 -0.15	0.06 0.03	ANT3_MOUSE E9QE616_MOUSE		Antithrombin-III;	Serpin C1;
QPVPKLGVEV ELRQLMEKVQ	NTHGPEPKDKNIR NVSQSMVEVLELR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	25.9 33.6	105.6 63.6	4 3	1647.01 1431.83	-1.40 3.38	0.18 0.29	NMT1_MOUSE NOE2_MOUSE		Glycolipase N-tetradecanoyltransferase 1; Noelin-2;	Myristoyl-CoA:protein N-myristoyltransferase 1;Peptide N-myristoyltransferase 1; Olfactomedin-2;
FHTNRPIKIF KRQNKDLMEL	NVWDTAGQKFKFGLR QALIDSHFEAR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	23.2 31.6	43.8 56.0	3 3	1745.03 1319.78	-0.64 -0.30	0.04 0.01	RAN_MOUSE TNNT3_MOUSE	RANT_MOUSE A2A6J0_MOUSE	GTP-binding nuclear protein Ran; Troponin T, fast skeletal muscle;	GTPase Ran;Ras-like protein TC4;Ras-related nuclear protein; Fast skeletal muscle troponin T; Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
LAVDSASPVY LLTDVELQYP	QAVIKTQSKPEDEDEWAR QDAVLALTQHR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	22.5 20.9	59.4 76.3	4 3	2302.40 1284.83	-0.79 -0.27	0.04 0.02	LDB3_MOUSE ITI1_MOUSE	E9PYJ9_MOUSE F8WJ05_MOUSE	LIM domain-binding protein 3; Inter-alpha-trypsin inhibitor heavy chain H1;	
GRKTETVCTF	QDGALVHQHQWDGKESTITR	N-ter +34.06 Da, K +34.06 Da	50.1	69.8	4	2364.41	-0.86	0.06	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;
KRNDFLQIGI ATVASSQKF	QDGYLSLLQDSGEVR QDLGVKNSEPAAR	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	38.6 32.2	63.9 72.1	3 3	1712.99 1439.88	-0.01 -0.62	0.00 0.10	IF5A1_MOUSE SEPT9_MOUSE	A2A6U3_MOUSE	Eukaryotic translation initiation factor 5A-1; Septin-9;	Eukaryotic initiation factor 5A isoform 1;eIF-4D; SL3-3 integration site 1 protein;
PRQSGSFRVL	QDLVNDGPDPRPAGTR	N-ter +34.06 Da	38.5	72.3	3	1759.00	1.19	0.15	PDLI3_MOUSE		PDZ and LIM domain protein 3;	Actinin-associated LIM protein;Alpha-actinin-2-associated LIM protein;
PTDKPLRLPL TSGVPPTTG LGATALLTHG	QDVYKIGGIGTVPVGR QEASAEHPAVAPR QEDIPVSCIHNGLR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +34.06 Da, C +57.02 Da	37.0 41.6 53.4	62.6 67.1 71.7	3 3 3	1726.15 1492.89 1800.03	-0.22 -0.47 0.25	0.01 0.06 0.02	EF1A1_MOUSE Q3U422_MOUSE CO1A1_MOUSE	EF1A2_MOUSE	Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
VFSMFDQTI HGYAAGQTW	QEFKEAFTVIDQNR QEGDKVIRPGVSQAQGEEMEQFGQGV	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	39.8 43.6	68.8 34.5	3 4	1792.10 2898.59	-0.14 0.44	0.02 0.02	MLRS_MOUSE E9QP82_MOUSE	F6ULR7_MOUSE	Collagen alpha-1(I) chain; Myosin regulatory light chain 2, skeletal muscle isoform;	Alpha-1 type I collagen;
PKQSTSFLVL	QEILESOGKGDPNKPSGFR	N-ter +28.03 Da, K +28.03 Da	21.3	60.3	4	2157.24	-4.32	0.00	PDL1_MOUSE		PDZ and LIM domain protein 1;	Fast skeletal myosin light chain 2;MLC2F;
QDQLDAVSKY RQYFYRITD QMKQDRITRY RRQHLKSVML	QEVTNLFEAKELQR QEYIYSIHR QGVNLYVKNLDDGIDDER QJAATELEKEESR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	31.3 29.5 38.0 31.7	67.5 47.0 64.2 80.1	3 3 3 3	1886.18 1342.77 2130.26 1558.95	-0.14 0.50 -2.32 -0.20	0.01 0.01 0.23 0.01	CAPR1_MOUSE MAZB2_MOUSE PABP1_MOUSE TNNI2_MOUSE	F6TMZ3_MOUSE	Caprin-1; Epididymis-specific alpha-mannosidase; Polyadenylate-binding protein 1; Troponin I, fast skeletal muscle;	C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36; Cytoplasmic activation- and proliferation-associated protein 1;GPI-anchored membrane protein 1;GPI-anchored protein p137;Membrane component chromosome 11 surface marker 1;RNA granule protein 105; Mannosidase alpha class 2B member 2;
												Troponin I, fast-twitch isoform;

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
DLVLRLRGGM RNLHASNTRL	QIFVKLTGK KQTGTAEMSSILEER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	14.9 46.5	60.2 51.9	3 3	1348.90 1747.04	0.00 0.18	0.00 0.01	RL40_MOUSE ATPA_MOUSE	RS27A_MOUSE D6RJ16_MOUSE	Ubiquitin-60S ribosomal protein L40; ATP synthase subunit alpha, mitochondrial;	Ubiquitin A-52 residue ribosomal protein fusion product 1;
LQAYVAWVNA NTEENRRFYR	QLKKRPSVKPVQDLR QLLLTADDR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	23.4 30.4	44.3 27.3	4 2	1903.29 1071.62	3.73 0.91	0.32 0.02	DIXC1_MOUSE ALDOA_MOUSE	F22453_MOUSE Q9CPQ9_MOUSE	Dixin; Fructose-bisphosphate aldolase A;	Coiled-coil protein DIX1;DIX domain-containing protein 1; Aldolase 1;Muscle-type aldolase; HECT domain and RCC1-like domain-containing protein 2;
EETRKETAPV	QLPVSGPELAAMMKIGTR	N-ter +28.03 Da, K +28.03 Da	27.4	59.3	3	1954.19	-0.14	0.00	HERC2_MOUSE	F8WJE1_MOUSE	E3 ubiquitin-protein ligase HERC2;	
LIVSQKTPRA QSLPSSHGFS HIPTSAPVYQ	QPGATTVQEQLR QPGLPAVLSSPSPPLSPR QPQQQMTSSYGGYKEPAAPVSIQR	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	19.9 21.1 56.1	38.0 77.4 77.9	2 4 4	1360.80 1827.17 2834.62	-0.45 6.34 0.43	0.03 0.56 0.09	PLD4_MOUSE CB071_MOUSE LASP1_MOUSE		Phospholipase D4; Uncharacterized protein C2orf71 homolog; LIM and SH3 domain protein 1;	Choline phosphatase 4;Phosphatidylcholine-hydrolyzing phospholipase D4;
TARKDNIGRN RSSNRDRPR LLHPTLILAQ	QSPQAGLAGPGPAGYGAARPTIPAR QSPSQSSDSQVHSGVQVEGR QSNVDELGSHLQGSYESR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da	25.0 39.2 55.4	56.4 62.5 58.3	4 3 3	2485.46 2223.19 2193.10	2.02 1.06 0.82	0.07 0.10 0.08	SYNJ1_MOUSE F7BVV1_MOUSE CO3A1_MOUSE	F7CD11_MOUSE F7BVV1_MOUSE Q5DTG2_MOUSE	Synaptotagmin-1; F7BVV1_MOUSE Collagen alpha-1(III) chain;	Metastatic lymph node gene 50 protein; Synaptic inositol-1,4,5-trisphosphate 5-phosphatase 1;
LGRFAVRDMR	QTVAVGVKAVDK	N-ter +34.06 Da, K +34.06 Da	29.5	57.7	3	1429.06	0.18	0.02	EF1A1_MOUSE		Elongation factor 1-alpha 1;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;
LGRFAVRDMR	QTVAVGVKIVVEK	N-ter +34.06 Da, K +34.06 Da	23.1	28.7	3	1486.04	-0.34	0.03	EF1A2_MOUSE	B7ZBW3_MOUSE	Elongation factor 1-alpha 2;	Eukaryotic elongation factor 1 A-2;Statin-S1; DEAD box RNA helicase DEAD1;DEAD box protein 5;RNA helicase p68;
YTFPTNNIK RRGQSSANR RRGQSSANR	QVSDLISVLR RAGSSSGVQGSAGLAADASR RAGSSSGVQGTSGAGLAADASR	N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da	31.7 86.2 68.8	31.9 64.7 67.3	2 3 3	1162.75 2104.16 2134.18	-0.30 2.59 2.14	0.02 0.44 0.21	DDX5_MOUSE E9Q019_MOUSE E9Q019_MOUSE	Q8BT50_MOUSE FILA_MOUSE	Probable ATP-dependent RNA helicase DDX5; FILA_MOUSE	
MRAAPR	RAPAAQPPAAAPSAVGSPPAAAPR	N-ter +28.03 Da	43.2	74.1	4	2180.34	-0.27	0.02	CHCH2_MOUSE	B2RPU8_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;	
AKAVLSAEKL	RDEEVHTGLGELLR	N-ter +28.03 Da	28.2	56.6	3	1650.96	-0.38	0.02	SERPH_MOUSE		Serpin H1;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor I6;
LSLMEPESEF	RDIDNPSAEAEER	N-ter +34.06 Da	35.0	75.9	3	1405.81	2.62	0.41	PLIN1_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;
DKDASVVGFF APSDNRVTSF	RDLFSDGHSEFLKAASNLR RDLIHDQDEEEEEEGQR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	18.4 32.0	99.0 99.3	4 4	2230.43 2289.25	0.29 -1.29	0.02 0.16	PDIA3_MOUSE NSF1C_MOUSE	A2AT02_MOUSE	Protein disulfide-isomerase A3; NSF1 cofactor p47; Histidine triad nucleotide-binding protein 2, mitochondrial;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER-60;Endoplasmic reticulum resident protein 57;Endoplasmic reticulum resident protein 60; p97 cofactor p47;
LYEDQQLVF KNRFQTVHFF DIKSKTYQVM SIIRNVKGPV	RDVAPQAPVHFLVIPR RDVLGMQVLR RDYEAGSAAPSVSFSR REGDVLTLLESER	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da	51.6 35.2 52.0 30.0	58.2 50.3 63.1 59.3	4 3 3 3	1848.20 1219.79 1767.97 1543.91	-2.06 -0.94 1.04 -0.79	0.09 0.05 0.08 0.08	HINT2_MOUSE GLOD4_MOUSE MSTN1_MOUSE RS28_MOUSE	E9Q055_MOUSE	Glyoxalase domain-containing protein 4; Musculoskeletal embryonic nuclear protein 1; 40S ribosomal protein S28; STE20/SPS1-related proline-alanine-rich protein kinase;	HINT-3;
QAQPNANEDY KQDFDENDIL	REGPCAVNLVLR RELEELSLEAQGIR	N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da	36.8 58.3	54.0 49.7	3 3	1410.85 1676.02	-0.38 4.04	0.02 0.38	STK39_MOUSE IF2I_MOUSE		Eukaryotic translation initiation factor 5B;	Serine/threonine-protein kinase 39; Translation initiation factor IF-2; 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;
TFYSNKEIFL PLPTFSSNL	RELISNASDALDKIR RETNLLESLPLVDTHSKR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	38.7 23.7	78.0 74.3	4 4	1768.19 2050.27	0.28 0.42	0.01 0.03	ENPL_MOUSE VIME_MOUSE	HS90B_MOUSE E9PZV5_MOUSE	Endoplasmin; Vimentin;	
KYDHQREQL GKAFRLQLPF GKALKRQLPF	REWIEGVTR RGDDGIFDDNFIEER RGDEGIFEEFSIEER	N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da	29.2 50.5 44.2	56.1 65.8 44.4	3 3 3	1229.72 1824.95 1845.98	0.01 -0.18 -0.32	0.00 0.02 0.04	CNN1_MOUSE SNX3_MOUSE SNX12_MOUSE	Q78ZM0_MOUSE Q6ZWQ5_MOUSE	Calponin-1; Sorting nexin-3; Sorting nexin-12;	Basic calponin;Calponin H1, smooth muscle; SDP3 protein; SDP8 protein;
EVSSLKNNLR SVGPVAGVGP M LVTAGVASK	RGDLFPVTR RGPSGQQGIR RGQVGLDSPQQEALAR RHLFEKELSGQNR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	25.0 41.9 43.4 19.9	72.3 21.4 42.7 92.3	3 2 3 4	1186.77 1051.61 2011.11 1669.06	0.35 6.62 -0.32 -0.09	0.02 0.46 0.04 0.00	MYH9_MOUSE CO1A2_MOUSE S14L4_MOUSE LAD1_MOUSE	E9Q6U9_MOUSE	Myosin-9; Collagen alpha-2(I) chain; SEC14-like protein 4; Ladinin-1;	Cellular myosin heavy chain, type A;Myosin heavy chain 9;Myosin heavy chain, non-muscle Ila;Non-muscle myosin heavy chain A;Non-muscle myosin heavy chain Ila; Alpha-2 type I collagen;
EQSNVNLAKF FLERPIAFV LLALAGLLQA VETQPQKTVI	RKIQHELEAEER RLAPAVLLSGLTEVPVTR RLLLPQQAQFGCECDR RLPSGSGPASPPTTGSAAVDIR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da	30.3 22.7 31.9 55.6	90.8 25.4 49.1 63.5	4 3 3 3	1722.06 2016.26 1787.00 1959.18	0.20 2.96 -1.84 -0.12	0.03 0.15 0.13 0.02	MYH1_MOUSE S4A7_MOUSE ENDD1_MOUSE E9Q616_MOUSE	MYH4_MOUSE D3Y273_MOUSE Q69ZY2_MOUSE	Myosin-1; Sodium bicarbonate cotransporter 3; Endonuclease domain-containing 1 protein;	Myosin heavy chain 1;Myosin heavy chain 2x;Myosin heavy chain, skeletal muscle, adult 1; Solute carrier family 4 member 7;

Table S7, 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
LINEHRILNG	RPPLGFLNPR	N-ter +34.06 Da	30.5	48.0	3	1199.79	-0.11	0.01	TPP1_MOUSE	Tripeptidyl-peptidase 1;	Lysosomal pepstatin-insensitive protease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase 1;	
LOAQRATFR	RQISEDVDGPDNR	N-ter +34.06 Da	48.9	64.2	3	1533.86	0.12	0.01	NEDD4_MOUSE	E3 ubiquitin-protein ligase NEDD4;	Neural precursor cell expressed developmentally down-regulated protein 4;	
KKWKEDVELY	RQKVALPLGAEQLQESAR	N-ter +34.06 Da, K +34.06 Da	27.0	87.8	4	1820.25	-2.32	0.12	APOA1_MOUSE	Apolipoprotein A-I;	Apolipoprotein A1;	
ENTEENRRFY	RQLLLTADDR	N-ter +34.06 Da	22.2	78.0	3	1233.82	-6.64	0.00	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;	
QGWWRPAADCA	RSFAGAVTLSPVEAPR	N-ter +34.06 Da	19.8	42.0	3	1691.03	0.11	0.02	Q3UN64_MOUSE			
TGTGTLILLV	RSCULPGPGLINLYCSLGFKER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	24.7	35.4	4	2730.63	-6.64	0.00	F6V339_MOUSE			
NTSIPeamER	RSPVPGQSLHKKRR	N-ter +28.03 Da, K +28.03 Da	24.3	47.7	3	1786.17	0.86	0.06	CCD79_MOUSE	E9QPF2_MOUSE	Coiled-coil domain-containing protein 79;	
MKLFQ	RSTPAITLENPDIKYPLR	N-ter +28.03 Da, K +28.03 Da	42.0	58.2	4	2139.33	1.20	0.12	NBSR3_MOUSE	F2Z3V0_MOUSE	NADH-cytochrome b5 reductase 3;	
GHKTPPEVPR	RTEITIVKQESVLR	N-ter +34.06 Da, K +34.06 Da	20.2	54.9	4	1836.25	-3.64	0.00	SEPT9_MOUSE	A2A6U3_MOUSE	Septin-9;	
PAQSAATLPA	RTLETAAQMEGLFNR	N-ter +28.03 Da	45.7	48.6	3	1861.04	-0.62	0.06	SPTB2_MOUSE	Spectrin beta chain, brain 1;		
KTVTFRSYNS	RTLPTDVTDWR	N-ter +34.06 Da	31.1	51.3	3	1291.78	0.26	0.02	CATS_MOUSE	Q3UD32_MOUSE	Cathepsin S;	
IWHHSFYNEL	RVAPPEEHPDLLTEALPNKANR	N-ter +34.06 Da, K +34.06 Da	62.9	54.5	4	2520.58	0.65	0.03	ACT5_MOUSE	ACTA_MOUSE	Actin, alpha skeletal muscle;	
TGSQGQCQTV	RVFEFMDTSTR	N-ter +34.06 Da	21.7	54.6	3	1288.70	-0.34	0.03	RS28_MOUSE	D3YVD9_MOUSE	40S ribosomal protein S28;	
NVVGARSSW	RVISSIEQKTER	N-ter +34.06 Da, K +34.06 Da	31.6	71.3	4	1513.03	-0.09	0.01	1433B_MOUSE	A2A5N1_MOUSE	14-3-3 protein beta/alpha;	
LNGKLTGMAF	RVPTPNVSVDDLTCR	N-ter +28.03 Da, C +57.02 Da	39.0	42.2	3	1740.01	-0.43	0.02	G3P_MOUSE	G3PT_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	
FYLKMGDDY	RYLAEVATGDDKRR	N-ter +34.06 Da, K +34.06 Da	33.6	80.0	4	1723.19	0.83	0.06	1433S_MOUSE		14-3-3 protein sigma;	
VQSGNLALAA	SAAAVDAGMAMAGQSPVLR	N-ter +34.06 Da	57.4	29.7	3	1836.00	-0.94	0.07	PTB1_MOUSE	Q92217_MOUSE	Polypyrimidine tract-binding protein 1;	
EGNDIELVSN	SAAIIQQATTVKNKDIR	N-ter +28.03 Da, K +28.03 Da	30.5	63.7	4	1940.27	0.90	0.05	RL9_MOUSE		60S ribosomal protein L9;	
GGGVGGPGAK	SAAQAAAQTNNSAAGKQLR	N-ter +28.03 Da, K +28.03 Da	63.2	69.3	3	1913.14	1.25	0.33	PAIRB_MOUSE		Plasminogen activator inhibitor 1 RNA-binding protein;	
YAATVARPST	SAASTVPGYSEDGGALR	N-ter +28.03 Da	39.5	55.9	3	1664.89	0.49	0.03	WIPI1_MOUSE		WD40 repeat domain phosphoinositide-interacting protein 1;	
KEALLGRVAV	SADPNVNVIVTR	N-ter +28.03 Da	33.8	46.4	3	1408.83	0.73	0.04	GDIR1_MOUSE		Rho GDP-dissociation inhibitor 1;	
LKAKLRNRN	SAEEGEGVTEKSSQKESVQR	N-ter +28.03 Da, K +28.03 Da	36.1	118.7	4	2365.44	-0.84	0.15	TB182_MOUSE		182 kDa tankyrase-1-binding protein;	
QDEGAEPMGY	SAELSSGILDDRNEEKR	N-ter +28.03 Da, K +28.03 Da	58.7	62.5	4	2103.18	0.56	0.02	EZR1_MOUSE		Ezrin;	
QDEGAEPMGY	SAELSSGILDDR	N-ter +34.06 Da	47.8	37.8	2	1424.77	0.37	0.04	EZR1_MOUSE		Ezrin;	
QMAKRLSFS	SAENEPVPLVGNWRPQVKGR	N-ter +28.03 Da, K +28.03 Da	31.2	73.1	4	2579.59	0.04	0.00	CAH3_MOUSE		Carbonic anhydrase 3;	
DWGAWQKFTA	SAGIQVVGDDTLVTNPKR	N-ter +28.03 Da, K +28.03 Da	19.4	60.6	4	1925.17	2.22	0.15	ENO4_MOUSE	Q6PHC1_MOUSE	Alpha-enolase;	
MATRSVCVSRG	SAGSAAAAGPVEAIR	N-ter +28.03 Da	56.5	26.4	2	1354.76	-0.25	0.01	ROLA1_MOUSE		Bola-like protein 1;	
SQMSYGYDEK	SAGVSVPGPMGSPGPR	N-ter +28.03 Da	51.6	56.0	3	1479.83	0.35	0.02	COL1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	
AKKGGEEKGR	SAINEVTR	N-ter +34.06 Da	33.7	24.2	2	1021.62	-0.60	0.03	RL3_MOUSE	D3YVU2_MOUSE	60S ribosomal protein L31;	
FKKHGYSLY	SAIQSDTSGDYR	N-ter +34.06 Da	52.0	44.5	2	1332.70	-1.40	0.15	ANXA3_MOUSE		Annexin A3;	
VLELKYTGNA	SALLILPDQGR	N-ter +34.06 Da	41.6	23.2	2	1215.77	3.47	0.31	SPA3K_MOUSE		Serine protease inhibitor A3K;	
PSPTLRDKAK	SALPAQSAATLPAR	N-ter +28.03 Da	57.0	29.9	2	1380.81	-0.86	0.06	SPTB2_MOUSE		Spectrin beta chain, brain 1;	
HSKINFRDKR	SALQSNINEWASQTTDGLKPEVTKDVER	N-ter +28.03 Da, K +28.03 Da	44.3	94.8	4	3085.89	-2.40	0.50	SERPH_MOUSE		Serpin H1;	
VLHIGSAHNR	SAMPFTASAPSTR	N-ter +34.06 Da	31.1	58.1	3	1453.83	-0.40	0.02	PDL1_MOUSE		PDZ and LIM domain protein 1;	
RAQDVEPKSF	SAPAAHAYGHETPLR	N-ter +34.06 Da	19.3	98.7	4	1611.00	0.29	0.03	E9Q056_MOUSE	E9Q6Y2_MOUSE		
VTLINFVPVD	SAPASSPQLSHDHTSR	N-ter +28.03 Da	55.3	96.0	4	1820.02	-0.18	0.04	DMD_MOUSE	A2A922_MOUSE	Dystrophin;	
TVLLSIQALL	SAPNPDPDLDNVAEQWKTNEAQAIETAR	N-ter +28.03 Da, K +28.03 Da	55.2	81.0	4	3206.81	1.66	0.14	UBE2N_MOUSE		Bendless-like ubiquitin-conjugating enzyme;Ubc13;Ubiquitin carrier protein N;	
VPRASMCISIR	SAPPKLASLKGVPEDAVETLAGSLGTR	N-ter +28.03 Da, K +28.03 Da	49.4	76.4	4	2846.83	-0.25	0.03	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	
KSMWEKGSVF	SAPSASGTPNKETAGLKVGVSSR	N-ter +34.06 Da, K +34.06 Da	30.8	62.2	4	2302.48	2.63	0.28	Q8WC08_MOUSE	E9Q0M9_MOUSE		
AAAQSTVYAF	SARPLTGGPEVSLGSLR	N-ter +34.06 Da	51.2	62.5	3	1730.10	-0.74	0.04	GPX1_MOUSE		Glutathione peroxidase 1;	
SLPVKDLAVD	SASPVYQAVIKTQSPKPEDEADEWAR	N-ter +28.03 Da, K +28.03 Da	24.3	50.8	4	2888.60	0.66	0.07	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	
SCLVLAARHA	SASSTNLKDVLSNLIPEQAR	N-ter +34.06 Da, K +34.06 Da	23.4	98.6	4	2372.65	-2.56	0.90	CISY_MOUSE		Citrate synthase, mitochondrial;	
IKHDPSLQPW	SASYDPGSAKTLINNGKTCR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	28.7	65.1	4	2241.37	-1.00	0.08	CAH3_MOUSE		Carbonic anhydrase 3;	
GAYGGLLKDF	SATDLTEFAAR	N-ter +34.06 Da	40.3	61.1	2	1214.71	-0.40	0.02	THIM_MOUSE		3-ketoacyl-CoA thiolase, mitochondrial;	
M	SATHHKTLPOGVR	N-ter +34.06 Da, K +34.06 Da	34.1	16.2	3	1585.96	-6.64	0.00	LEG7_MOUSE		Galectin-7;	
QPQGAPEVRR	SATISGSATNLASLTAALAKGDR	N-ter +34.06 Da, K +34.06 Da	44.2	55.7	3	2243.40	0.18	0.01	E9Q4K7_MOUSE			

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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
SLPAVVVETF AYSPASWSSR	SATVNGAVEGSAGTGR SAVDLTCSSR	N-ter +34.06 Da N-ter +34.06 Da, C +57.02 Da	52.1 30.1	60.8 39.0	3 2	1466.84 1041.57	-0.22 -0.15	0.01 0.01	BIN1_MOUSE PKP3_MOUSE	Q6P1B9_MOUSE E0CY75_MOUSE	Myc box-dependent-interacting protein 1; Plakophilin-3; Microtubule-associated serine/threonine-protein kinase 4;	Amphiphysin II;Amphiphysin-like protein;Bridging integrator 1;SH3 domain-containing protein 9;
GGSKGPVDTF	SAVLTTQKQASDVLVQGEGR	N-ter +28.03 Da, K +28.03 Da	48.7	47.6	3	2071.23	0.39	0.06	MAST4_MOUSE	E9QP84_MOUSE		Complex III subunit 7;Complex III subunit VII;Ubiquinol-cytochrome c reductase complex 14 kDa protein; Protein AF-1p;
MAGR EADPSNFANF	SAVSASSKWLDFGR SAYPSEEDMIEWAKR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	34.9 30.3	23.7 77.2	3 3	1577.92 1879.09	-1.94 -2.74	0.22 0.37	QCR7_MOUSE EPS15_MOUSE	Q9CQB4_MOUSE	Cytochrome b-c1 complex subunit 7; Epidermal growth factor receptor substrate 15;	
GTRKPKVDF	SCHLAQPNHVVVS	N-ter +34.06 Da, C +57.02 Da	54.6	87.3	4	1708.05	0.56	0.05	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
TESTVKTTVF	SCNLGEKFDETTADGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	42.6	75.5	3	1867.05	-1.60	0.39	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;
TSSGTSTTHR	SCSKTITKTVTGPDGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.1	89.1	4	1791.12	0.07	0.01	Q99K47_MOUSE	E9PV24_MOUSE		
AIGIDLGTTY	SCVGVFHGKVEIANDQGNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	57.8	63.1	4	2395.42	-1.47	0.12	H571A_MOUSE	H571B_MOUSE	Heat shock 70 kDa protein 1A;	Heat shock 70 kDa protein 3;Hsp68; Cl-SDAP;NADH-ubiquinone oxidoreductase 9.6 kDa subunit;
GTVTHLCRQY	SDAPPLTLGDIKDR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da,	46.9	46.7	3	1564.98	0.04	0.00	ACPM_MOUSE	F8WJ64_MOUSE	Acyl carrier protein, mitochondrial;	
LTSQELTFGG KIILCRERP ESQASDSEGH	SDCTGNFCLFKSTKDLLFR SDECGAGVFMGSHFDR SDFSEGGQAVGAHR	N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da	22.6 66.9 47.7	111.5 49.0 87.8	4 3 3	2511.62 1804.86 1387.77	-2.18 -0.43 0.57	0.20 0.05 0.03	TRFE_MOUSE RS27A_MOUSE E9Q019_MOUSE	E9Q035_MOUSE FILA_MOUSE	Serotransferrin; Ubiquitin-40S ribosomal protein S27a;	Beta-1 metal-binding globulin;Siderophilin; Ubiquitin carboxyl extension protein 80;
SVVGFRRDLF KAGTEETILY	SDGHSEFLKAASNLNLR SDIDLKLAIEIR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	21.8 11.2	57.4 67.0	4 4	1686.97 1502.09	-0.04 -0.97	0.00 0.08	PDIA3_MOUSE NIT2_MOUSE		Protein disulfide-isomerase A3; Omega-amidase NIT2; Pleckstrin homology domain-containing family O member 2;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER-60;Endoplasmic reticulum resident protein 60; Nitrilase homolog 2; Pleckstrin homology domain-containing family Q member 1;
DSGPPVFAPL GLTGNFAAQY	SDISEDQPQEPFR SDKGVSSGPGPMGLMGPR	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	26.4 55.2	32.4 47.5	3 3	1530.79 1784.98	0.10 0.00	0.01 0.00	PKHO2_MOUSE CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen; Complex III subunit 4;Complex III subunit IV;Cytochrome b-c1 complex subunit 4;Ubiquinol-cytochrome-c reductase complex cytochrome c1 subunit; Histone H1';Histone H1(0);MyD196; SM22-beta;
AVALHSAVSA SKKSTDPKPY KRSKENPRNF TKQQTFTTTY NVREATSEFA	SDLELHPPSPWWSHR SDMIVAAIQAEKNR SDNQLQEGKNVIGLQMGTRN SDNQPVGLVQVEGER SDPILYRPVAVALDTKGPEIR	N-ter +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 N-ter +34.06 Da, K +34.06 Da	30.7 63.5 45.3 56.2 23.3	102.9 64.5 78.6 33.2 51.9	4 3 4 3 4	1854.12 1613.03 2269.39 1837.00 2377.52	0.33 -0.07 1.55 -1.52 0.19	0.01 0.01 0.12 0.09 0.02	CY1_MOUSE H10_MOUSE TAGL2_MOUSE H571A_MOUSE KPYM_MOUSE		Cytochrome c1, heme protein, mitochondrial; Histone H1.0; Transgelin-2; Heat shock 70 kDa protein 1A; Pyruvate kinase isozymes M1/M2;	Heat shock 70 kDa protein 3;Hsp68; Pyruvate kinase muscle isozyme; Insulin receptor substrate protein of 53 kDa;Insulin receptor tyrosine kinase 53 kDa substrate;
LSASKNLVI	SDPIGAKPLPVPPELAPVGR	N-ter +34.06 Da, K +34.06 Da	34.2	37.8	3	2321.47	0.60	0.06	BAIP2_MOUSE	B1A246_MOUSE	Brain-specific angiogenesis inhibitor 1-associated protein 2;	
SGGGLLVDF	SDSASAVLAPGSEDNFAR	N-ter +28.03 Da	49.6	43.2	3	1989.03	0.08	0.01	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; DNA-binding p52/p100 complex, 100 kDa subunit;Polypyrimidine tract-binding protein-associated-splicing factor; Inhibitor of F(1)F(o)-ATPase;
GPGPRTEEKI LQTRGFVSDS RPRQSPSPQS RPRQSPSPQS MKVLQTRGFV	SDSEGFKANLSLLR SDSMDTGAGSIR SDSQVHSGVQVEAQR SDSQVHSGVQVEGR SDSSDSMDTGAGSIR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da	24.0 41.4 57.4 45.3 42.3	61.3 52.4 75.4 83.0 69.5	3 2 3 3 3	1604.02 1229.64 1653.93 1511.86 1518.77	0.08 0.82 0.67 1.98 0.56	0.01 0.05 0.09 0.31 0.06	SFPQ_MOUSE ATIF1_MOUSE F6TL02_MOUSE E9Q019_MOUSE ATIF1_MOUSE	Q9D879_MOUSE FILA_MOUSE FILA_MOUSE Q9D879_MOUSE	Splicing factor, proline- and glutamine-rich; ATPase inhibitor, mitochondrial;	ATPase inhibitor, mitochondrial;
KTPGPPPEIY	SDTQPSLQSTAKHVESR	N-ter +28.03 Da, K +28.03 Da	36.6	70.3	4	2073.19	0.30	0.01	CDV3_MOUSE	F8WGL9_MOUSE	Protein CDV3;	Inhibitor of F(1)F(o)-ATPase; Carnitine deficiency-associated protein 3;Tyrosine-phosphorylated protein 36;
A GNDISSGTVL	SDVLELTDENFESR SDYVSGPPSGTGLHR	N-ter +28.03 Da N-ter +34.06 Da	57.8 41.7	43.6 57.0	2 3	1680.86 1619.90	-0.04 -0.49	0.00 0.03	PDIA3_MOUSE PEBP1_MOUSE	F6Q404_MOUSE	Protein disulfide-isomerase A3; Phosphatidylethanolamine-binding protein 1;	58 kDa glucose-regulated protein;58 kDa microsomal protein;Disulfide isomerase ER-60;Endoplasmic reticulum resident protein 60; HCNPPp;

Table S7, 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
RILGGVISAI	SEAAAQYNPEPPPPR	N-ter +34.06 Da	34.8	55.5	3	1656.92	0.25	0.01	CPNS1_MOUSE	D3YW48_MOUSE	Calpain small subunit 1;	Calcium-activated neutral proteinase small subunit;Calcium-dependent protease small subunit 1;Calpain regulatory subunit;
GNIDDALQCY	SEAIKLDQNHVLYSNR	N-ter +34.06 Da, K +34.06 Da	28.6	64.0	4	2051.28	-0.67	0.03	STIP1_MOUSE		Stress-induced-phosphoprotein 1;	Hsc70/Hsp90-organizing protein;
RNCDSDATKA	SEDFVDPWTVTR	N-ter +28.03 Da	32.8	60.7	2	1377.74	-0.15	0.01	SYWC_MOUSE		Tryptophan--tRNA ligase, cytoplasmic;	Tryptophanyl-tRNA synthetase;
IDQDLSQNPFF	SEDKTDKGIYVTR	N-ter +28.03 Da, K +28.03 Da	20.7	94.1	4	1595.01	-0.79	0.05	TX1B3_MOUSE		Tax1-binding protein 3;	Tax interaction protein 1;
FCPEEYVSPN	SEDVGVGPKGDPGPGQPR	N-ter +28.03 Da, K +28.03 Da	29.7	68.4	3	1933.09	0.54	0.09	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
QVEEYIADLY	SEEPGEEPAWVQTER	N-ter +34.06 Da	42.9	64.8	3	1906.00	-0.79	0.07	RCN3_MOUSE	D3Z7T1_MOUSE	Reticulocalbin-3;	
RPANPNWGVF	SEFGSSSPATR	N-ter +34.06 Da	45.0	47.6	2	1273.66	1.26	0.13	Q99K47_MOUSE	E9PV24_MOUSE		
PTKETGWASF	SEFTSSLSTKESLR	N-ter +28.03 Da, K +28.03 Da	32.5	54.0	3	1626.93	-0.86	0.08	PP6R3_MOUSE		Serine/threonine-protein phosphatase 6 regulatory subunit 3;	SAPS domain family member 3; Etk4;STE20-related kinase SMAK;STE20-related serine/threonine-protein kinase;Serine/threonine-protein kinase 2;
VTGAEARALG	SEGEAAATEVDLER	N-ter +34.06 Da	32.7	56.1	3	1509.82	-0.47	0.03	SLK_MOUSE		STE20-like serine/threonine-protein kinase;	
RGVSESQASD	SEGHSDFSQAVGAHR	N-ter +28.03 Da	35.1	98.7	4	1797.98	1.50	0.18	E9Q019_MOUSE	FILA_MOUSE		Plasma selenoprotein P;
GHLESCDTTA	SEGLHLSLAQR	N-ter +28.03 Da	31.7	54.3	3	1237.75	0.89	0.02	SEPP1_MOUSE		Selenoprotein P;	
AVECHRGECCQ	SEGVLFQGNR	N-ter +28.03 Da	41.7	37.7	2	1280.70	0.98	0.06	HEMO_MOUSE		Hemopexin;	
VCLLHEKTPV	SEHVTKCCSGSLVER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	29.2	101.1	4	1816.11	0.00	0.00	ALBU_MOUSE		Serum albumin;	
PSSSGAATV	SEKPGPKAAEVGDDFLGDFVVGGER	N-ter +34.06 Da, K +34.06 Da	43.3	97.3	4	2620.68	-2.74	0.18	CLIP2_MOUSE		CAP-Gly domain-containing linker protein 2;	Cytoplasmic linker protein 115;Cytoplasmic linker protein 2;
ETFHARLASL	SEKPPAIDWAYR	N-ter +28.03 Da, K +28.03 Da	24.6	96.5	3	1651.00	-0.03	0.00	ATP5H_MOUSE	B1ASE2_MOUSE	ATP synthase subunit d, mitochondrial;	
ETVAQKQLTV	SEKTPVSEKTPVPAKR	N-ter +28.03 Da, K +28.03 Da	21.6	95.8	4	1865.28	1.28	0.14	LAD1_MOUSE		Ladinin-1;	Linear IgA disease antigen homolog;
RDRHVLGLAR	SELEEDIPEEDIISR	N-ter +34.06 Da	37.1	50.8	3	1920.08	1.71	0.12	CO3_MOUSE		Complement C3;	HSE-MSF;
KPPAKGPAKN	SEPEEVIPIR	N-ter +34.06 Da	38.8	34.9	2	1175.67	0.78	0.03	SYYC_MOUSE	A2A7S7_MOUSE	Tyrosine--tRNA ligase, cytoplasmic;	Tyrosyl-tRNA synthetase;
KRHYPKMNLA	SEPQEVLIHIGSAHR	N-ter +28.03 Da	32.8	92.1	4	1701.02	0.08	0.01	PDL1_MOUSE		PDZ and LIM domain protein 1;	C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36;
SSQPNLSTSY	SEQEYKAGGSPASYHGSTSPR	N-ter +28.03 Da, K +28.03 Da	49.2	78.8	4	2308.25	-0.20	0.04	EPN2_MOUSE	Q5NCM6_MOUSE	Epsin-2;	EPS-15-interacting protein 2;Intersectin-EH-binding protein 2;
PROPTVTSVC	SESAQELAEQR	N-ter +28.03 Da	37.9	57.5	3	1331.71	0.12	0.01	PDL5_MOUSE	E9Q8P5_MOUSE	PDZ and LIM domain protein 5;	Enigma homolog;Enigma-like PDZ and LIM domains protein;
SPLRSPPLLG	SESPYEDFLSADSKVLR	N-ter +28.03 Da, K +28.03 Da	43.1	70.5	3	2055.16	-0.84	0.09	MAP1B_MOUSE		Microtubule-associated protein 1B;	MAP1(X);MAP1.2;
SADROGRRGV	SEQASDSEGHSDFSQAVGAHR	N-ter +28.03 Da	51.4	78.8	4	2502.26	1.01	0.23	E9Q019_MOUSE	F7BVV1_MOUSE		
MEKLSKGMRF	SEVATQYSEDKAR	N-ter +28.03 Da, K +28.03 Da	51.4	92.4	3	1538.90	1.07	0.12	PIN4_MOUSE		Peptidyl-prolyl cis-trans isomerase NIMA-interacting 4;	Parvulin-14;Peptidyl-prolyl cis-trans isomerase Pin4;Rotamase Pin4;
MTTLFCINVL	SEVCGQDITTKHMLPTVLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	56.6	63.1	4	2252.37	0.88	0.09	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;
LLLLSGDAHS	SEVPGAAAEGPGGSGVLGDR	N-ter +34.06 Da	55.9	43.0	3	1873.02	0.43	0.02	CO024_MOUSE			UPF0480 protein C15orf24 homolog;
WTHEVFSSRS	SEVVLSDGDEYQR	N-ter +28.03 Da	39.8	63.3	3	1638.84	-0.81	0.07	E9Q616_MOUSE			
NAINLPLSI	SFELDPEDTLLENEVR	N-ter +34.06 Da	40.6	67.1	3	2068.14	-2.32	0.58	PARVA_MOUSE	Q3UF75_MOUSE	Alpha-parvin;	Actopaxin;
QLRKLFIGGL	SFETTDDSL	N-ter +28.03 Da	29.7	39.8	2	1197.60	-2.56	0.15	ROA3_MOUSE	A2AL12_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;	
ERDRITALKR	SFEVEIEPPNSTPPR	N-ter +34.06 Da	40.1	48.7	3	1867.02	0.42	0.01	SEPT9_MOUSE	A2AGU3_MOUSE	Septin-9;	SL3-3 integration site 1 protein;
GISLPQVELA	SFGEAGPEIVASAEAGTAGSR	N-ter +34.06 Da	47.6	46.3	3	2023.10	1.36	0.06	PRAX_MOUSE	Q6NVF7_MOUSE	Periaxin;	
ILSADSTVVG	SFSPVSSDQGPR	N-ter +34.06 Da	27.2	60.1	3	1395.80	-0.23	0.01	E9Q056_MOUSE	E9Q6V2_MOUSE		
ISKAMGIMV	SFVNDFER	N-ter +34.06 Da	27.6	39.8	2	1159.65	-0.92	0.04	H2B1B_MOUSE	H2B1C_MOUSE	Histone H2B type 1-B;	h2B-143;
VANAGTLSVI	SFVLLASYVILFHLR	N-ter +28.03 Da	19.3	33.4	4	2003.26	2.58	0.22	Q8VEZ3_MOUSE	D3Z4B7_MOUSE		
YDPGALVPSF	SGALELKLQLSAEER	N-ter +34.06 Da, K +34.06 Da	28.2	64.9	3	1840.18	-0.40	0.02	OLA1_MOUSE		Obg-like ATPase 1;	GTP-binding protein 9;
RNLHQSGLSF	SGAQIDNNIPR	N-ter +34.06 Da	25.9	95.6	3	1218.76	-0.81	0.03	DPYL2_MOUSE		Dihydropyrimidinase-related protein 2;	Unc-33-like phosphoprotein 2;
GEGLIKLNFF	SGDAEDKADAEQPLER	N-ter +34.06 Da, K +34.06 Da	40.8	72.7	3	1927.09	-0.12	0.01	RNH2C_MOUSE	F6ZDT4_MOUSE	Ribonuclease H2 subunit C;	Ribonuclease H1 subunit C;
ANFQSQSTLY	SGDDLVEALPKPCGCPGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	45.8	77.3	3	2023.14	-1.84	0.13	KNG1_MOUSE	D3YT9_MOUSE	Kininogen-1;	
NIDIRSAFRK	SGEGQEDAGELDFSGLLKR	N-ter +34.06 Da, K +34.06 Da	58.6	67.3	3	2075.22	-6.64	0.00	D3YT90_MOUSE	Q6P6L5_MOUSE		
VLDGADCIML	SGETAKGDPYLEAVR	N-ter +28.03 Da, K +28.03 Da	39.8	59.5	3	1647.94	0.37	0.03	KPYM_MOUSE		Pyruvate kinase isozymes M1/M2;	Pyruvate kinase muscle isozyme;
KVFHILDKKD	SGFIEEDGSLKGFSSDAR	N-ter +34.06 Da, K +34.06 Da	53.7	60.3	3	2324.36	-0.76	0.13	PRVA_MOUSE		Parvalbumin alpha;	
VTLHIVERYP	SGFPDASSEGPEPTOGEAR	N-ter +28.03 Da	41.6	50.7	3	1945.97	-0.92	0.04	PTRF_MOUSE	Q3U4N4_MOUSE	Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
QAPPVNRNLHQ	SGFSLGAQIDNNIPR	N-ter +34.06 Da	43.7	45.8	3	1709.96	2.87	0.20	DPYL2_MOUSE		Dihydropyrimidinase-related protein 2;	Unc-33-like phosphoprotein 2;
RGAAVTRSMA	SGGGVPTDEEQATGLER	N-ter +28.03 Da	52.2	58.7	3	1729.91	0.01	0.00	COX5B_MOUSE	Q9D881_MOUSE	Cytochrome c oxidase subunit 5B, mitochondrial;	Cytochrome c oxidase polypeptide Vb;
IREYKSKRQA	SGGPVDIGPEYQQLDR	N-ter +34.06 Da	44.8	49.3	3	1879.01	0.49	0.03	ATP5I_MOUSE	E9QAD6_MOUSE	ATP synthase-coupling factor 6, mitochondrial;	
GRTTVVMTPR	SGGSKDNLSPGLQCLTER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	37.5	38.9	3	2071.12	0.23	0.02	THRB_MOUSE		Prothrombin;	Coagulation factor II;
AIMARIAQFL	SGIPETVPLSTVNR	N-ter +28.03 Da	30.9	43.9	3	1496.89	0.20	0.01	THIKA_MOUSE	THIKB_MOUSE	3-ketoacyl-CoA thiolase A, peroxisomal;	Acetyl-CoA acyltransferase A;Beta-ketothiolase A;Peroxisomal 3-oxoacyl-CoA thiolase A;
GLSDPNLTL	SGKDGQCPLVVEQVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	43.7	68.0	3	1727.02	-0.54	0.05	LR47_MOUSE	F6YT33_MOUSE	Leucine-rich repeat-containing protein 47;	
VSVERALADE	SGLDYSLSGGGVPVILVR	N-ter +28.03 Da	46.7	44.7	3	1861.08	0.60	0.04	A2BFA6_MOUSE			
ETTALVCDNG	SGLVKAGFAGDDAPR	N-ter +34.06 Da, K +34.06 Da	32.7	66.2	3	1527.97	0.87	0.09	ACTC_MOUSE	ACTS_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;
GKTVIRLPSG	SGPASPTTGSVAIDIR	N-ter +34.06 Da	51.7	27.4	2	1448.81	1.77	0.11	E9Q616_MOUSE			

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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
MLSVAAR AAQYSDKGV5 SLSKERHQCT TGAAAGKRKA PSGVPKGDGR	SGFPFVLSATS SGPGPMGLMGR SGPIVTLQGNKSTSPDPDWSSQLER SGPPVSELTKAVAAASKER SGQPGVPGAGVR	N-ter +28.03 Da N-ter +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	40.7 38.7 35.8 23.2 40.1	33.4 52.6 68.8 26.6 49.3	2 2 4 4 3	1316.75 1183.65 2881.67 2041.32 1211.74	0.59 1.82 -0.30 -0.92 0.36	0.01 0.17 0.03 0.05 0.02	UCRI_MOUSE CO1A2_MOUSE SYNP2_MOUSE H12_MOUSE CO1A2_MOUSE	E0CXI2_MOUSE D3YV9_MOUSE H13_MOUSE E9Q6U9_MOUSE	Cytochrome b-c1 complex subunit Rieske, mitochondrial; Collagen alpha-2(I) chain; Synaptodin-2; Histone H1.2; Collagen alpha-2(I) chain;	Complex III subunit 5;Cytochrome b-c1 complex subunit 5;Rieske iron-sulfur protein;Ubiquinol-cytochrome c reductase iron-sulfur subunit; Alpha-2 type I collagen; Myopodin; H1 VAR.1;H1c; Alpha-2 type I collagen;
MYTPIQ	SGSPFASVQDPGLHIWR	N-ter +34.06 Da	55.0	82.1	3	1984.20	-2.64	0.66	CAPG_MOUSE	Q99L84_MOUSE	Macrophage-capping protein;	Actin regulatory protein CAP-G;Actin-capping protein GCAP39;Myc basic motif homolog 1;
LTSFGTEASN	SGTLSQSNVAGSAFTQDTR	N-ter +28.03 Da	46.2	74.2	3	1954.08	0.21	0.01	LS14A_MOUSE	A2BH69_MOUSE	Protein LSM14 homolog A;	Protein FAM61A;RNA-associated protein 55A;
HVVDPQLMTF	SGTNDPCALCSLHSGKIGGAQNR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	49.9	71.6	4	2568.44	-1.22	0.11	MIF_MOUSE		Macrophage migration inhibitory factor;	Delayed early response protein 6;Glycosylation-inhibiting factor;L-dopachrome isomerase;L-dopachrome tautomerase;Phenylpyruvate tautomerase;
ASSREGSPAR	SGTPVHCPSPIR	N-ter +34.06 Da, C +57.02 Da	42.8	66.5	3	1340.80	-0.58	0.01	BAG3_MOUSE		BAG family molecular chaperone regulator 3;	Bcl-2-associated athanogene 3;Bcl-2-binding protein Bis; 2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
DDWATWTSFL ERHVAHGPKL QGPPAPPNPF	SGVDIQGDDLTVTNPKR SGVGPSQPTTVGTECGFVSR SHLLEGELEYTKTIER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da	65.9 45.8 48.7	69.1 52.7 109.3	3 3 4	2082.28 2056.12 2114.38	0.91 -0.30 0.77	0.08 0.02 0.06	ENOB_MOUSE F7CKA7_MOUSE ADDG_MOUSE		Beta-enolase; Microtubule-associated protein; Gamma-adducin;	Adducin-like protein 70; Complex III subunit 5;Cytochrome b-c1 complex subunit 5;Rieske iron-sulfur protein;Ubiquinol-cytochrome c reductase iron-sulfur subunit; 3D3/LYRIC;Lysine-rich CEACAM1 co-isolated protein;Metadherin;Metastasis adhesion protein;
GLNVASVRF	SHTDVKVPDFSDYR	N-ter +28.03 Da, K +28.03 Da	35.1	49.7	4	1720.93	-0.03	0.00	UCRI_MOUSE		Cytochrome b-c1 complex subunit Rieske, mitochondrial;	47 kDa heat shock protein;Collagen-binding protein;Serine protease inhibitor J6;
KKKKKQGEDN	SHTQDTELEKDR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.8	104.3	4	1729.99	0.03	0.01	LYRIC_MOUSE	F6ZSG0_MOUSE	Protein LYRIC;	
RSTCHNQNSM ASTSQSRAA	SICEEFSQADDKGCFR SIFGAKPVDTAAR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	48.7 28.9	74.5 72.0	3 3	2132.09 1444.91	1.42 -0.30	0.19 0.02	A2M_MOUSE IF4B_MOUSE	D3YW52_MOUSE Q3TD8_MOUSE	Alpha-2-macroglobulin; Eukaryotic translation initiation factor 4B;	Pregnancy zone protein;
GLILPGILAK SGFIEDELG	SIGTSLDPCKDPTIR SILKGFSSDAR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.7 23.7	71.9 56.4	3 3	1601.92 1235.76	0.42 0.95	0.06 0.11	CDSN_MOUSE PRVA_MOUSE		Corneodesmosin; Parvalbumin alpha;	
NFRDKRSALQ LQTRFPLDY SQMEFSISL NRHIAAKDHA RTSPVPRQKR	SINEWASQTTDKGLPEVTKDVER SIPFPTPTLTGR SIQEPSAATVTSR SIQMNVAEVD SIVVSPILPENQR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da	34.2 29.6 43.7 40.7 38.8	73.8 42.2 53.0 60.0 50.2	4 3 3 2 3	2686.58 1517.93 1559.86 1288.72 1592.01	-1.18 2.06 0.93 -0.62 0.36	0.14 0.08 0.03 0.03 0.06	SERPH_MOUSE UBP2L_MOUSE CA198_MOUSE RS21_MOUSE CAD13_MOUSE		Serin H1; Ubiquitin-associated protein 2-like; Uncharacterized protein C1orf198 homolog; 40S ribosomal protein S21; Cadherin-13; Scavenger receptor cysteine-rich type 1 protein M130;	
IHQVYQEMD	SKADDLILLKSGVIQR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	48.5	53.7	4	1928.20	1.04	0.07	C163A_MOUSE			
SEAGPAGAGE	SKCLPMVKVLDVAVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	28.4	70.8	4	1699.11	1.31	0.04	TTHY_MOUSE		Transthyretin; Lamina-associated polypeptide 2, isoforms alpha/zeta;	Prealbumin;
NRPLAAGAN	SKGPPDFSSDEEREPTVLGSGASVGR	N-ter +28.03 Da, K +28.03 Da	61.8	62.3	4	2813.56	1.18	0.04	LAP2A_MOUSE	LAP2B_MOUSE		Thymopoietin isoforms alpha/zeta; Protein kinase C-like 1;Protein kinase C-like PKN;Protein-kinase C-related kinase 1;Serine-threonine protein kinase N; Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
PPPATHYSTL	SKPAPLTGLEVR	N-ter +34.06 Da, K +34.06 Da	21.2	56.6	3	1435.99	-0.49	0.04	PKN1_MOUSE	D6RH37_MOUSE	Serine/threonine-protein kinase N1;	
PVYQAVIKTQ ERSPQLSLAR	SKPEDEADEWAR SKPSPQLSAETPVAALPEFPR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da	31.0 37.7	44.6 57.9	3 4	1499.82 2289.43	-1.94 1.78	0.22 0.24	LDB3_MOUSE E9Q056_MOUSE	E9PY9_MOUSE	LIM domain-binding protein 3;	
LWSLVATLLG VRLQLQSVDF	SKWPEPVFGR SLADAINTEFKNTR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	32.7 29.0	61.8 59.6	3 3	1257.76 1647.03	0.07 -2.64	0.00 0.33	MASP2_MOUSE VIME_MOUSE	A2AKJ2_MOUSE	Mannan-binding lectin serine protease 2; Vimentin;	MBL-associated serine protease 2;Mannose-binding protein-associated serine protease 2;
ISRRLVSDG	SLAEVPEAKPVGILSGDFAR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	24.4	76.9	4	2324.49	-0.15	0.01	STEA3_MOUSE	E9QN92_MOUSE	Metalloendopeptidase STEAP3;	Dudulin-2;Protein nm1054;Six-transmembrane epithelial antigen of prostate 3;Tumor suppressor-activated pathway protein 6;
MVRY	SLDPENPTKCKSR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.0	95.9	4	1720.13	-0.30	0.02	RL17_MOUSE	Q6ZWZ7_MOUSE	60S ribosomal protein L17;	
STVHEILCKL	SIEGDHSTPSAYGSKPYTNFDAER	N-ter +28.03 Da, K +28.03 Da	32.4	59.1	4	2880.53	0.18	0.01	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;

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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
LRPPGGGSNF	SLGFDEPAEQPVR	N-ter +28.03 Da	45.9	38.1	3	1471.79	1.69	0.16	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
FEHRLGEAAR	SLGNAGNEIGR	N-ter +28.03 Da	43.7	55.4	2	1114.63	-4.06	0.00	DMKN_MOUSE	E9QLW7_MOUSE	Dermokine;	Epidermis-specific secreted protein SK30/SK89;
WYSERVLTEI	SLGSLILVIR	N-ter +28.03 Da	13.6	71.7	3	1309.96	4.39	0.18	DYM_MOUSE		Dymecilin;	Lysosomal pepstatin-insensitive protease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase 1;
RPEPQQVGTV	SLHLGVTPSVLR	N-ter +28.03 Da	30.2	52.7	3	1305.85	0.71	0.07	TPP1_MOUSE		Tripeptidyl-peptidase 1;	Delayed early response protein 6;Glycosylation-inhibiting factor;L-dopachrome isomerase;L-dopachrome tautomerase;Phenylpyruvate tautomerase;
SCRNDPCALC	SLHSIGKIGGAQNR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	21.4	76.8	4	1505.03	0.57	0.04	MIF_MOUSE		Macrophage migration inhibitory factor;	
ADESAANCDK	SLHTLFGDKLCAIPNLR	N-ter +28.03 Da, K +28.03 Da	36.8	90.6	4	2022.36	0.11	0.01	ALBU_MOUSE		Serum albumin;	
SIRSAPPKLA	SLKGVVPEDAVETLAGSLGTR	N-ter +28.03 Da, K +28.03 Da	47.9	61.4	3	2154.32	-0.23	0.04	ICAL_MOUSE	Q921U7_MOUSE	Calpastatin;	Calpain inhibitor;
DVDGVLVGGG	SLKPEFVDIINAK	N-ter +28.03 Da, K +28.03 Da	51.0	75.2	3	1685.10	1.16	0.10	TPIS_MOUSE		Triosephosphate isomerase;	Triose-phosphate isomerase;
AMKANTMSNY	SLLPASLLDHR	N-ter +34.06 Da	34.4	88.4	3	1254.86	-1.22	0.11	ST2B1_MOUSE	E9QKC1_MOUSE	Sulfotransferase family cytosolic 2B member 1;	Alcohol sulfotransferase;Hydroxysteroid sulfotransferase 2;
QLIGIQDGLY	SLIQDSGEVR	N-ter +28.03 Da	34.5	35.2	2	1130.63	0.70	0.03	IF5A1_MOUSE		Eukaryotic translation initiation factor 5A-1;	Eukaryotic initiation factor 5A isoform 1;eIF-4D;
KDYEVDAATLK	SLNNQIETLLPEGSR	N-ter +34.06 Da	59.5	37.1	3	1805.04	-1.06	0.09	CO1A2_MOUSE	E9Q6U9_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
LLGSPRRSY	SLPPHQKVLPLSLPTMQAGTIAR	N-ter +28.03 Da, K +28.03 Da	47.3	58.8	4	2581.59	-0.25	0.00	ODP2_MOUSE		Dihydrolipoylysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial;	Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex;Pyruvate dehydrogenase complex component E2;
QTPGMRRCCS	SLPPIQAPSHPPPQPTQPR	N-ter +34.06 Da	43.9	76.8	4	2175.37	1.06	0.03	RHG17_MOUSE	F8WJ58_MOUSE	Rho GTPase-activating protein 17;	Neuron-associated developmentally-regulated protein;Rho-type GTPase-activating protein 17; Embryo-dlg/synapse-associated protein 97;Synapse-associated protein 97;
VQPVTWIEIA	SLPSTAVTSETLPGSLSPVKEYR	N-ter +28.03 Da, K +28.03 Da	43.1	76.5	4	2571.58	0.58	0.02	DLG1_MOUSE	E9Q9H0_MOUSE	Disks large homolog 1;	
TALPTQQYAK	SLPVSVPVWAFKEKR	N-ter +34.06 Da, K +34.06 Da	28.8	72.9	4	1844.31	0.08	0.01	AKT1_MOUSE	F6R8S6_MOUSE	Proline-rich AKT1 substrate 1;	
PSFSLPNCNR	SLQEIQPPQATASR	N-ter +28.03 Da	38.5	16.6	3	1725.93	0.00	0.00	HRG_MOUSE		Histidine-rich glycoprotein;	Histidine-rich glycoprotein;
PVRNLHQSGF	SLSGAQIDDNIPR	N-ter +34.06 Da	31.8	52.5	3	1418.83	1.20	0.04	DPYL2_MOUSE		Dihydropyrimidinase-related protein 2;	
TRGFVSDSD	SLMDTGAGSIR	N-ter +34.06 Da	32.5	39.7	2	1027.56	0.54	0.04	ATF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(0)-ATPase;
ASGPENFQVG	SLMPPAQQTISQGMHR	N-ter +28.03 Da	46.4	80.8	3	1824.02	-0.84	0.15	TLN1_MOUSE	F8WGT0_MOUSE	Talin-1;	
NKEIFLRELI	SLNASDALDKIR	N-ter +28.03 Da, K +28.03 Da	23.4	49.6	3	1244.73	0.86	0.05	H590B_MOUSE	ENPL_MOUSE	Heat shock protein HSP 90-beta;	Heat shock 84 kDa;Tumor-specific transplantation 84 kDa antigen;
STAASRATTL	SLNAVSLASTGLSLTKVDER	N-ter +34.06 Da, K +34.06 Da	59.0	64.5	3	2102.32	-0.79	0.11	PICA_MOUSE		Phosphatidylinositol-binding clathrin assembly protein;	
TPGHACTQKF	SLNEEIAMATVTALRR	N-ter +34.06 Da	32.4	71.3	3	1695.04	-1.60	0.24	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Clathrin assembly lymphoid myeloid leukemia;
TPGHACTQKF	SLNEEIAMATVTALR	N-ter +34.06 Da	48.3	35.2	2	1538.87	-1.74	0.17	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
DRDKPAQIRF	SLNSAAKAVADAIR	N-ter +28.03 Da, K +28.03 Da	32.5	63.3	3	1441.92	0.36	0.01	TCPD_MOUSE		T-complex protein 1 subunit delta;	Aldolase 1;Muscle-type aldolase;
EQFLPMMQAI	SLNNKDGQGYEDFVEGLR	N-ter +34.06 Da, K +34.06 Da	49.5	70.1	3	1995.14	-0.04	0.00	E9PWG4_MOUSE	MYL1_MOUSE		A45;CCT-delta;
LLAACGSVTM	SLNPGESSFDLADRLDPVEKIDR	N-ter +34.06 Da, K +34.06 Da	32.8	79.4	4	2527.52	-0.25	0.03	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];	
LLAACGSVTM	SLNPGESSFDLADR	N-ter +28.03 Da	51.2	40.7	2	1421.70	0.01	0.00	SODE_MOUSE		Extracellular superoxide dismutase [Cu-Zn];	
GGEVPKRYLL	SLNQRERQYEHVVVGR	N-ter +28.03 Da	27.5	103.7	4	1912.15	0.50	0.07	S14L4_MOUSE		SEC14-like protein 4;	
MKTLI	SLNQTVDIPENVEITLTKGR	N-ter +34.06 Da, K +34.06 Da	55.3	55.7	3	2080.30	-2.25	0.21	RL9_MOUSE	D3YYQ0_MOUSE	60S ribosomal protein L9;	
ILEGNDIELV	SLNSAALIQATTVKMKDIR	N-ter +34.06 Da, K +34.06 Da	34.3	57.2	4	2159.44	3.16	0.20	RL9_MOUSE		60S ribosomal protein L9;	
KIPRHEVTEI	SLNTOVETQPQKTVIR	N-ter +28.03 Da, K +28.03 Da	47.9	71.3	3	1700.03	0.12	0.02	E9Q616_MOUSE			
RSRCFGFTY	SLNVEEADAAMAASPHAVDGNVTELKR	N-ter +28.03 Da, K +28.03 Da	84.1	64.4	4	2737.51	-0.74	0.07	Q9CX86_MOUSE			
LKLSPPVMLT	SLNVHPVQLPFR	N-ter +34.06 Da	29.3	43.5	3	1326.82	0.47	0.02	Q99M20_MOUSE			Alpha-1 protease inhibitor 1;Alpha-1-antiproteinase;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
QETDTSQKDK	SPASHEIATNLGDFAIPLYR	N-ter +34.06 Da	60.4	57.3	3	2195.27	0.03	0.01	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	
QETDTSQKDK	SPASHEIATNLGDFALR	N-ter +28.03 Da	44.2	65.6	3	1826.05	-1.56	0.14	A1AT4_MOUSE		Alpha-1-antitrypsin 1-4;	Alpha-1 protease inhibitor 4;Serine protease inhibitor 1-4;Serine protease inhibitor A1d;
NSTPHMHSRC	SLPDPGLTALLSDHR	N-ter +28.03 Da	61.2	79.0	3	1505.90	0.18	0.02	HEMO_MOUSE		Hemopexin;	
MPGVGLPELG	SLPGLPLPLPPR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	35.0	37.1	3	1354.85	-0.38	0.01	GORS2_MOUSE	A2AT9_MOUSE	Golgi reassembly-stacking protein 2;	Golgi reassembly-stacking protein of 55 kDa;
VESASGETLH	SLPKVGQPGAAGPVSPMCPGR	N-ter +28.03 Da, K +28.03 Da	67.7	70.7	3	2005.17	0.57	0.04	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertrypsin;Fetuin-A;
DSASQDNLNL	SLPNKGVLSDFMTDVPVDPGVVHR	N-ter +28.03 Da, K +28.03 Da	39.4	99.9	4	2521.55	-3.84	0.00	TPD54_MOUSE	Q3TUJ9_MOUSE	Tumor protein D54;	Tumor protein D52-like 2;
SIGMPSLMYR	SLPPGAGDTQVLPASR	N-ter +28.03 Da	28.0	30.5	3	1479.81	-0.03	0.00	F134C_MOUSE		Protein FAM134C;	
YPKRLEKELG	SLPPGISLETIDAAFSQGSRR	N-ter +34.06 Da, C +57.02 Da	68.7	50.9	3	2182.19	0.95	0.18	HEMO_MOUSE		Hemopexin;	
VGGSLSAESVG	SLPPPAATPTPTPTPR	N-ter +34.06 Da	31.4	56.5	3	1520.93	0.56	0.01	EPN1_MOUSE		Epsin-1;	EPS-15-interacting protein 1;Intersectin-EH-binding protein 1;
DRSLINQLTSL	SLPPPHGDLGAPQNPNAKAAGSR	N-ter +28.03 Da, K +28.03 Da	47.3	76.2	4	2291.35	-0.67	0.03	ITB4_MOUSE	A2A864_MOUSE	Integrin beta-4;	
RGKTKATKSC	SLPPPPPEPTSEGR	N-ter +34.06 Da	50.1	54.6	3	1477.84	0.65	0.06	BCAS1_MOUSE	A2AVX1_MOUSE	Breast carcinoma-amplified sequence 1 homolog;	Novel amplified in breast cancer 1 homolog;
SNRRDRPRQP	SLPSQSSDSQVHSGVQVEGR	N-ter +28.03 Da	35.9	68.9	3	1998.08	1.34	0.33	F7BVV1_MOUSE	FILA_MOUSE		

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
PSMWQLWNMQ QSGSGRPRR	SPTPSSNPAGTPPPSPR SPVHPESSEGEHSHVPPQR	N-ter +28.03 Da N-ter +34.06 Da	29.5 26.1	39.3 82.2	3 4	1677.90 2120.21	0.21 0.84	0.03 0.08	RHG10_MOUSE FILA2_MOUSE	FILA2_MOUSE	Rho GTPase-activating protein 10; Filaggrin-2;	PH and SH3 domain-containing rhoGAP protein;Rho-type GTPase-activating protein 10; Intermediate filament-associated protein; C-type lectin domain family 3 member B;Plasminogen kringle 4-binding protein;
TFHEASEDCI	SQGGTLGTQSELENEALFEYAR	N-ter +34.06 Da	46.9	44.9	3	2530.35	-1.79	0.12	TETN_MOUSE	Q8CF26_MOUSE	Tetranectin;	
QAVRINKEQV	SQLLPEKFAEQLIR	N-ter +34.06 Da, K +34.06 Da	33.8	69.7	3	1739.18	-0.11	0.01	SAMH1_MOUSE	Q6ZQM3_MOUSE	SAM domain and HD domain-containing protein 1;	Interferon-gamma-inducible protein Mg11; Ethylmalonic encephalopathy protein 1 homolog;Hepatoma subtracted clone one protein;
AVVRVAGRRL RRDRPRQPS	SQQSASGAPVLLR SQSSDSQVHSGVQVEGR	N-ter +28.03 Da N-ter +28.03 Da	49.0 59.8	30.3 70.3	2 3	1340.78 1813.98	0.44 -0.49	0.01 0.08	ETHE1_MOUSE F7BVV1_MOUSE	FILA_MOUSE	Protein ETHE1, mitochondrial;	
RASGPGWRSH	SSAAAEASAALKVRPER	N-ter +34.06 Da, K +34.06 Da	28.7	75.5	4	1781.18	0.26	0.01	ALAT2_MOUSE	D6RFQ8_MOUSE	Alanine aminotransferase 2;	Glutamate pyruvate transaminase 2;Glutamic--alanine transaminase 2;Glutamic--pyruvic transaminase 2; Carbonate dehydratase III;Carbonic anhydrase III;
DQMAKLRSLF	SSAENPEPVLGNWRPPQVKGR	N-ter +34.06 Da, K +34.06 Da	46.2	78.5	4	2678.70	-0.84	0.05	CAH3_MOUSE		Carbonic anhydrase 3;	
RSPGASRAAM	SSDAQWLTAEEER	N-ter +34.06 Da	51.9	25.8	2	1425.73	-0.01	0.00	PHS2_MOUSE		Pterin-4-alpha-carbinolamine dehydratase 2;	4-alpha-hydroxy-tetrahydropterin dehydratase 2;DcoH-like protein DCoHm;Dimerization cofactor of hepatocyte nuclear factor 1 from muscle;HNF-1-alpha dimerization cofactor; Proline-arginine-rich end leucine-rich repeat protein;
PNNLVAFHDF VLQTRGFVSD DRRQRPSFSQ	SSDLENVPHLR SSDSMDTGAGSIR SSDSQVHSGVQVEGR	N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da	27.3 48.8 46.4	47.3 46.3 78.4	3 2 3	1299.76 1316.67 1598.89	-1.47 0.84 0.77	0.08 0.04 0.10	PRELP_MOUSE ATIF1_MOUSE E9Q019_MOUSE	Q9D879_MOUSE FILA_MOUSE	Prolargin; ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)ATPase;
GALAPTGPSA SPRRSPVHPE TWTHEVFSSR TDEQALEDFH IIRKVVQRQVD M	SSEAPPLVNEVDKVR SSEGEHSHVPPQR SSEVLSGDDEYQVR SSFGPISEVVVKDKR SSGAIDTQQHEEVELR SSGALLPKPQMR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	55.2 41.1 41.3 52.2 52.7 27.6	68.4 74.0 57.4 68.0 77.4 60.4	3 3 3 3 3 3	1595.96 1473.84 1731.90 1674.05 1832.05 1351.91	1.00 0.77 -0.67 -0.58 -1.84 -0.23	0.07 0.05 0.06 0.03 0.26 0.02	RPN1_MOUSE FILA2_MOUSE E9Q616_MOUSE RBM3_MOUSE ANK1_MOUSE COX6C_MOUSE	FILA2_MOUSE	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1; Filaggrin-2;	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 67 kDa subunit;Ribophorin I;Ribophorin-1; Intermediate filament-associated protein;
VVLLFETALL	SSGFSLEDPQTHSNR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	51.3	48.4	3	1688.86	0.56	0.02	HS90B_MOUSE	Q71LX8_MOUSE	Heat shock protein HSP 90-beta;	
CGLSDPNLT DDGLADLFF SSSANRRAGS	SSGKDGQCPVVEQVR SSGPTMASAFTR SSGSGVQASAGGLAADASR	N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da	54.2 58.9 66.8	69.9 36.7 38.4	3 2 3	1814.06 1357.72 1732.90	0.86 1.05 1.51	0.07 0.07 0.11	LRC47_MOUSE MAP4_MOUSE E9Q019_MOUSE	F6YT33_MOUSE E9QPW8_MOUSE FILA_MOUSE	Leucine-rich repeat-containing protein 47; Microtubule-associated protein 4;	
GLVYRKVLV PLGYPPVNSV SSVATQTTL KYDMEVKVQK LRLDGNPLTQ	SSGRKSSAAGDVNLSVDIQR SSHASSPYSSVQSPGASLAQSR SSIPSHPTAGKIFR SSKELEDMNQKLFDLR SSLPPDMYECLR	N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da 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	13.6 26.0 23.5 27.0 24.0	24.9 26.3 72.5 68.8 57.3	4 3 4 4 3	2399.40 2587.34 1640.02 2054.30 1500.80	-2.25 0.26 0.07 -0.97 0.36	0.11 0.01 0.01 0.11 0.01	MRP6_MOUSE DLX1_MOUSE A2AQ82_MOUSE TNNI2_MOUSE LUM1_MOUSE	F8VPT2_MOUSE A2AQ9_MOUSE A2A6K0_MOUSE	Multidrug resistance-associated protein 6; Homeobox protein DLX-1;	ATP-binding cassette sub-family C member 6;
QAYKALKDKY ITSGDSLTV	SSLSDISLLQIEPR SSNTDFAFSLYR	N-ter +34.06 Da N-ter +28.03 Da	53.1 26.8	57.7 101.6	3 3	1678.03 1434.82	-0.67 -0.12	0.10 0.01	TOM34_MOUSE SPA3G_MOUSE		Mitochondrial import receptor subunit TOM34; Serine protease inhibitor A3G;	
PNHQKASSGK APAPLSISVF	SSPFKVSPLSFR SSPQELGASLAQLVAQR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	22.3 56.0	59.2 56.7	3 3	1463.90 1782.06	-1.18 -1.52	0.11 0.17	SDPR_MOUSE 6PGL_MOUSE	Q8CBG6_MOUSE	Serum deprivation-response protein; 6-phosphogluconolactonase;	Cavin-2;Phosphatidylserine-binding protein;
AAHVAPRRSI	SSQQTIPPSAKYGGRR	N-ter +34.06 Da, K +34.06 Da	36.1	71.4	3	1644.04	0.12	0.00	IDHG1_MOUSE		Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;	Isocitrate dehydrogenase subunit gamma;NAD(+)-specific IDH subunit gamma;
CSDGGARGAN QSSANRRAG QSSANRRAG RSRGRGFQFV LWSVLPISFF EVREAKPKLK VGSQHPVPLGH	SSGNPLVYLDVGDQGPLGR SSGSGVQASAGGLAADASR SSGSGVQGTASAGGLAADASR SSLPDICYR SSVEEMAEASR SSVETQPAEEYR SSVVTTPGSPSLGR	N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da	58.6 69.4 58.8 36.5 44.7 34.2 41.4	63.6 51.4 48.6 46.3 44.0 22.8 31.5	3 3 3 2 2 2 2	2129.21 1825.99 1849.97 1224.64 1228.64 1364.73 1377.81	0.53 2.38 0.93 0.08 -0.30 0.07 -0.64	0.01 0.32 0.12 0.01 0.02 0.00 0.08	PPIF_MOUSE FILA_MOUSE E9Q019_MOUSE CNBP_MOUSE Q3URZ6_MOUSE E41L2_MOUSE E9Q056_MOUSE	F7BVV1_MOUSE	Peptidyl-prolyl cis-trans isomerase F, mitochondrial; Filaggrin;	Cyclophilin F;Rotamase F;
SPSGKSQRV	SSVYGASVSDDELKR	N-ter +34.06 Da, K +34.06 Da	50.7	50.3	3	1679.99	-0.54	0.03	CHCH3_MOUSE	Q9D9P1_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial;	
FVPMEENSIY	SSWQEVTEFPVIVQR	N-ter +34.06 Da	47.5	67.5	3	1838.10	-0.52	0.02	DOK3_MOUSE		Docking protein 3; Basement membrane-specific heparan sulfate proteoglycan core protein;	Downstream of tyrosine kinase 3;p62(dok)-like protein;
ATLHVQVSGT	STAPVASIHPPQLTVQPQQAEFR	N-ter +28.03 Da	32.3	67.9	4	2586.53	-1.89	0.14	PGBM_MOUSE	B1B0C7_MOUSE		
LDKVKSATLS SQHQGGGSGN	STESTASGMQDEV STFGEGHSSSHPLSSGQNESSGQSSR	N-ter +28.03 Da N-ter +34.06 Da	40.5 39.0	68.9 73.8	3 4	1524.78 2908.52	-0.18 -2.18	0.02 0.60	AKA12_MOUSE FILA2_MOUSE	F8WI21_MOUSE E9QP23_MOUSE	A-kinase anchor protein 12; Filaggrin-2;	Germ cell lineage protein gercelin;Src-suppressed C kinase substrate; Intermediate filament-associated protein;

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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
LFRAAVPSGA	STGIYEALFLR	N-ter +28.03 Da	44.6	32.0	2	1278.72	-0.11	0.00	ENOA_MOUSE	ENOB_MOUSE	Alpha-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;
IHRAAAVAAM	STGTFVVSQPLNYR	N-ter +28.03 Da	38.7	39.0	3	1595.89	0.41	0.04	AL9A1_MOUSE	Q3U367_MOUSE	4-trimethylaminobutyraldehyde dehydrogenase;	Aldehyde dehydrogenase family 9 member A1;
NKSVQKSGVR	STHQAAVSKIDSR	N-ter +34.06 Da, K +34.06 Da	32.1	88.1	4	1566.05	-0.23	0.02	Q8VC08_MOUSE	E9Q0M9_MOUSE		
LCKLSLEGDH	STPPSAYGSVKPTNFDAER	N-ter +34.06 Da, K +34.06 Da	32.2	63.0	3	2254.30	-0.54	0.05	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;
QTSVAIGRSF	STPQSOFQESSPVWKLGR	N-ter +28.03 Da, K +28.03 Da	51.3	65.9	3	2117.23	0.35	0.03	MCEE_MOUSE		Methylmalonyl-CoA epimerase, mitochondrial;	DL-methylmalonyl-CoA racemase;
IQKSRHPKHL	STPSSVPEPQDPAKLR	N-ter +28.03 Da, K +28.03 Da	44.1	65.4	3	1851.10	0.01	0.00	ARHG_C_MOUSE	F8VQ6_MOUSE	Rho guanine nucleotide exchange factor 12;	Leukemia-associated RhoGEF;
IEEREGITVY	STQFGYAKEADYVAHATQLR	N-ter +34.06 Da, K +34.06 Da	41.3	59.4	4	2380.39	-1.09	0.09	HEBP1_MOUSE	E9QKH1_MOUSE	Heme-binding protein 1;	p22HBP;
MAVNVY	STSVTSDNLSR	N-ter +28.03 Da	33.5	44.8	2	1193.64	-0.69	0.11	MARE1_MOUSE		Microtubule-associated protein RP/EB family member 1;	APC-binding protein EB1;End-binding protein 1;
EKEYQPHVIV	STTGPNPNTLTDLR	N-ter +34.06 Da	54.0	28.9	2	1553.83	-0.62	0.03	ADDA_MOUSE	E9Q1K3_MOUSE	Alpha-adducin;	Erythrocyte adducin subunit alpha;
IDSLATQKY	SVAVKCATITPDEAR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	40.0	54.0	3	1685.04	1.35	0.11	IDHP_MOUSE	D6RIL6_MOUSE	Isocitrate dehydrogenase [NADP], mitochondrial;	ICD-H;IDP;NADP(+)-specific ICDH;Oxalosuccinate decarboxylase;
TAGTFKQRPY	SVAVPFSQGLDDYGAR	N-ter +34.06 Da	30.6	59.0	3	1786.02	-0.01	0.00	BAIP2_MOUSE	B1A246_MOUSE	Brain-specific angiogenesis inhibitor 1-associated protein 2;	Insulin receptor substrate protein of 53 kDa;Insulin receptor tyrosine kinase 53 kDa substrate;
SESCVLGFRY	SVDIPLDKTVNKDVR	N-ter +34.06 Da, K +34.06 Da	24.7	84.4	4	2046.43	-0.54	0.04	RL27_MOUSE	A2AAQ0_MOUSE	60S ribosomal protein L27;	
SSSSSNFHI	SVEESVDGKVVSR	N-ter +28.03 Da, K +28.03 Da	47.8	72.9	3	1532.92	1.16	0.15	K1C15_MOUSE	B1A077_MOUSE	Keratin, type I cytoskeletal 15;	Cytokeratin-15;Keratin-15;
DLRHAFSPVA	SVESASGETLHSPKVGQGAAGVPMCPGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	43.7	56.7	4	3102.70	1.74	0.12	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertryptin;Fetuin-A;
LESKSNKIVQ	SVIQTAVDQFAR	N-ter +34.06 Da	52.1	34.1	2	1367.81	-0.20	0.02	AKA12_MOUSE		A-kinase anchor protein 12;	Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;
AITARRQHLK	SVMLQIAATELEKEESR	N-ter +34.06 Da, K +34.06 Da	25.2	87.6	4	2157.40	-3.47	0.39	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;
AITARRQHLK	SVMLQIAATELEKEESR	N-ter +28.03 Da, K +28.03 Da	38.4	72.6	3	1989.19	-1.32	0.20	TNNI2_MOUSE	A2A6K0_MOUSE	Troponin I, fast skeletal muscle;	Troponin I, fast-twitch isoform;
ANAVSEAVVS	SVNTVANKTVEEAEINVTGVVVR	N-ter +34.06 Da, K +34.06 Da	49.3	70.5	4	2596.65	-0.32	0.05	SVUG_MOUSE		Gamma-synuclein;	Persyn;
LQETKRLFR	SVPAASGGDKAEAVR	N-ter +34.06 Da, K +34.06 Da	27.0	60.3	3	1481.94	-0.12	0.01	NEB2_MOUSE		Neurabin-2;	Neurabin-II;Protein phosphatase 1 regulatory subunit 9B;Spinophilin;
TDQVEAHVQN	SVPDDESKPASSNTQVEGEEAALLER	N-ter +34.06 Da, K +34.06 Da	61.4	67.8	4	2954.66	-0.27	0.04	Q8VC08_MOUSE	E9Q0M9_MOUSE		
GHPLYRKYML	SVPHGIANEDIVSR	N-ter +34.06 Da	41.8	47.5	3	1526.90	0.63	0.04	SH319_MOUSE	F8W117_MOUSE	SH3 domain-containing protein 19;	Kryn;
TKIFTASNVS	SVPLPAENVTTIAGQR	N-ter +28.03 Da	41.5	35.6	3	1679.98	-0.74	0.06	UBP2L_MOUSE	E9Q9Q3_MOUSE	Ubiquitin-associated protein 2-like;	
FQHVGTSLVFL	SVTGEQYGNPIR	N-ter +28.03 Da	30.9	74.2	3	1347.78	-0.69	0.03	SDF2L_MOUSE		Stromal cell-derived factor 2-like protein 1;	
EFEKNGKGF	SVVADTPELQR	N-ter +34.06 Da	49.2	25.0	2	1247.72	0.39	0.02	LASP1_MOUSE	A2A6G6_MOUSE	LIM and SH3 domain protein 1;	Metastatic lymph node gene 50 protein;
VYSPLAHRAY	SVVAGGPEVTLTPER	N-ter +34.06 Da	45.6	42.9	3	1544.93	0.79	0.03	D2HDH_MOUSE	E9QN44_MOUSE	D-2-hydroxyglutarate dehydrogenase, mitochondrial;	
NAALPADPPA	SVVVGPVVPR	N-ter +28.03 Da	42.3	3.4	2	1134.72	0.60	0.04	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertryptin;Fetuin-A;
ALNDNFVKLI	SWYDNEYGSNR	N-ter +34.06 Da	28.8	46.2	3	1586.76	-0.27	0.02	G3P_MOUSE	F8WJL5_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;
TAASSSLEK	SYELPDGQVITIGNER	N-ter +28.03 Da	45.9	57.8	3	1818.02	0.12	0.01	ACTB_MOUSE	ACTA_MOUSE	Actin, cytoplasmic 1;	Beta-actin;
QQPQQQMTS	SYGGYKEAAPVSIQR	N-ter +34.06 Da, K +34.06 Da	23.9	58.4	3	1790.10	0.39	0.02	LASP1_MOUSE	A2A6H0_MOUSE	LIM and SH3 domain protein 1;	Metastatic lymph node gene 50 protein;
GLGGNFASQM	SYGYDEKSAGVSPGMPGSPGR	N-ter +28.03 Da, K +28.03 Da	60.2	51.5	3	2350.25	0.76	0.11	CO1A1_MOUSE	F8WBG7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
VYLQNSHVHL	SVYSKAESTEPEIAEQR	N-ter +28.03 Da, K +28.03 Da	25.5	81.3	3	1850.09	0.01	0.00	CSN1_MOUSE	B1ATU4_MOUSE	COP9 signalosome complex subunit 1;	G protein pathway suppressor 1;JAB1-containing signalosome subunit 1;
M	SYGYSYGLGSGIR	N-ter +28.03 Da	47.7	74.3	3	1626.89	-0.60	0.03	KRAB2_MOUSE	F8VQ65_MOUSE	Keratin-associated protein 8-2;	Glycine tyrosine-rich hair protein;High-glycine tyrosine keratin type 1 alpha;
VALDFENEMA	TAASSSLEKSYELPDGQVITIGNER	N-ter +34.06 Da, K +34.06 Da	45.1	73.8	4	2819.69	0.66	0.08	ACTC_MOUSE	ACTA_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;
KLHDDLCEKR	TAATIATHDLQAVR	N-ter +34.06 Da, K +34.06 Da	48.6	54.8	3	1500.93	1.35	0.09	LRG47_MOUSE	E9PV22_MOUSE	Leucine-rich repeat-containing protein 47;	
LQKRTGTGVD	TAAVGAVDFISNADR	N-ter +28.03 Da	37.1	35.1	3	1533.83	0.20	0.01	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
VYMAAVLEYL	TAEILELAGNAAR	N-ter +34.06 Da	33.0	28.4	3	1361.81	-0.81	0.09	H2A1F_MOUSE	H2A1H_MOUSE	Histone H2A type 1-F;	
GSWEFPFSGK	TAESGELHGLTDEKFEVGVYR	N-ter +34.06 Da, K +34.06 Da	35.2	65.2	4	2505.47	0.10	0.01	TTHY_MOUSE		Transthyretin;	Prealbumin;
ASEKMMGLVG	TALEESRPGASVEGER	N-ter +34.06 Da	28.2	69.8	3	1721.00	-0.43	0.09	E9Q8T1_MOUSE			
SEGEGNMSMR	TALSDLYLEHLLQKR	N-ter +28.03 Da, K +28.03 Da	22.3	89.8	4	1855.22	-1.29	0.09	EM55_MOUSE	B7ZCM1_MOUSE	55 kDa erythrocyte membrane protein;	Membrane protein, palmitoylated 1;
MCDDEET	TALVCDNGSLVKAGFAGDDAPR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	51.1	63.3	3	2358.38	0.33	0.05	ACTC_MOUSE	ACTS_MOUSE	Actin, alpha cardiac muscle 1;	Alpha-cardiac actin;
CSRPRVGGRY	TAPVGPVTTASAR	N-ter +28.03 Da	44.7	36.4	2	1254.74	-0.18	0.02	E9Q2E9_MOUSE			
GAAAYTSGY	TAQEYAAGTGASSTASAGR	N-ter +28.03 Da	35.7	55.5	3	1947.01	1.20	0.20	DDX17_MOUSE	Q3U741_MOUSE	Probable ATP-dependent RNA helicase DDX17;	DEAD box protein 17;
AKRREMERQF	TAQNEEKGGMAGGPPALQDGLR	N-ter +34.06 Da, K +34.06 Da	51.4	76.2	4	2670.52	-0.23	0.04	SYNP2_MOUSE	D3YV9_MOUSE	Synaptopodin-2;	Myopodin;
QDDWGAWQKF	TASAGIQVVDLTVNPKR	N-ter +28.03 Da, K +28.03 Da	94.0	71.1	3	2097.29	-0.79	0.08	ENOA_MOUSE	Q6PHC1_MOUSE	Alpha-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;
NMEERKALK	TASDFSKMQYR	N-ter +34.06 Da, K +34.06 Da	21.3	70.7	3	1610.99	-1.52	0.17	GELS_MOUSE		Gelsolin;	Actin-depolymerizing factor;Brevin;
EPVWAIGTGK	TATPQQAQEVHEKLR	N-ter +34.06 Da, K +34.06 Da	27.3	90.7	4	1803.19	0.57	0.06	TPIS_MOUSE	E0CXH5_MOUSE	Triosephosphate isomerase;	Triose-phosphate isomerase;
VMDDFAQFLD	TCCKAADKTCFSTEGPNLVTR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	42.6	69.9	4	2632.50	0.35	0.04	ALBU_MOUSE		Serum albumin;	
DTCCKAADKD	TCFSTEGPNLVTR	N-ter +34.06 Da, C +57.02 Da	42.8	49.1	3	1514.84	0.35	0.03	ALBU_MOUSE		Serum albumin;	
RVSGEHMDLT	TCPLAAGGQKEKLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	24.7	69.0	3	1596.02	-1.29	0.19	Q9D1B1_MOUSE			Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain;
MVHL	TDAEKSAVSLWAKVNPDEVGGEALGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	45.8	84.4	4	2942.73	-6.64	0.00	HBB2_MOUSE		Hemoglobin subunit beta-2;	

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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
TYGTAATAAKAY	TDDLGAAGVGGACLEDEASALR	N-ter +28.03 Da, C +57.02 Da	63.7	62.4	3	2047.08	-0.45	0.04	WIPI2_MOUSE	D3YWK1_MOUSE	WD repeat domain phosphoinositide-interacting protein 2;	
ERRGFCCIFY	TDEEPVKLLESR	N-ter +28.03 Da, K +28.03 Da	17.5	42.3	4	1626.99	-0.36	0.02	HNRDL_MOUSE	F6VQH5_MOUSE	Heterogeneous nuclear ribonucleoprotein D-like;	JKT41-binding protein;
GDSLTVASSN	TDFAFSLYR	N-ter +28.03 Da	20.5	50.9	2	1146.63	2.46	0.20	SPA3G_MOUSE	D3Z450_MOUSE	Serine protease inhibitor A3G; Tubulin polymerization-promoting protein family member 3;	Serine protease inhibitor 2A;
MAAS	TDIAGLEESFR	N-ter +28.03 Da	40.9	47.3	2	1264.69	-0.79	0.03	TPPP3_MOUSE			
KTAHSFEQVL	TDITDAIKLDSGVVVKR	N-ter +34.06 Da, K +34.06 Da	25.3	53.6	4	1832.25	0.12	0.01	DCLK1_MOUSE	Q8BRN4_MOUSE	Serine/threonine-protein kinase DCLK1;	Doublecortin-like and CAM kinase-like 1; Doublecortin-like kinase 1;
INRVYKMYK	TDLEKHSISDTSGDFR	N-ter +34.06 Da, K +34.06 Da	31.7	59.6	3	1879.10	-0.40	0.04	ANXA2_MOUSE	80V2N7_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;
SRRTSQGVTL	TDLQEAETIGR	N-ter +34.06 Da, K +34.06 Da	32.0	64.9	3	1427.92	-0.03	0.00	MYPT1_MOUSE		Protein phosphatase 1 regulatory subunit 12A;	Myosin phosphatase-targeting subunit 1;
AHVDHGKSTL	TDSLVCCKAGIASAR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	35.6	60.8	3	1616.99	0.11	0.01	EF2_MOUSE		Elongation factor 2;	
PRHEVTEISN	TDVETQPKTVIR	N-ter +28.03 Da, K +28.03 Da	26.2	68.4	3	1498.94	0.33	0.03	E9Q616_MOUSE			
VSIEGYKTPY	TDVNIIVTIR	N-ter +34.06 Da	33.5	33.6	2	1063.68	1.18	0.06	IDH3A_MOUSE		Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial;	Isocitrate dehydrogenase subunit alpha; NAD(+)-specific IC DH subunit alpha;
KAVLDVAETG	TEAAAATGVIGGIR	N-ter +34.06 Da	35.3	50.6	3	1319.83	0.53	0.06	SPA3K_MOUSE		Serine protease inhibitor A3K;	Contrapsin; SPI-2;
ILQHLRMSMH	TEAAEVLLER	N-ter +34.06 Da	32.4	33.5	2	1163.70	1.43	0.14	HIBCH_MOUSE	E0CX19_MOUSE	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial;	3-hydroxyisobutyryl-coenzyme A hydrolase; Glycine- and tyrosine-rich RNA-binding protein; NS1-associated protein 1; Synaptotagmin-binding, cytoplasmic RNA-interacting protein; pp68;
LFVRNLANTV	TEEILEKFSQFGKLER	N-ter +34.06 Da, K +34.06 Da	25.4	78.3	4	2142.41	-0.23	0.02	HNRPO_MOUSE		Heterogeneous nuclear ribonucleoprotein Q;	
KDWSFYLAH	TEFTPTTETDYACR	N-ter +34.06 Da, C +57.02 Da	35.5	46.9	3	1724.86	0.51	0.05	B2MG_MOUSE	Q91XJ8_MOUSE	Beta-2-microglobulin;	
QPPVLLPQLL	TEGAELPDITR	N-ter +34.06 Da	39.5	35.7	2	1234.71	0.08	0.00	TB182_MOUSE		182 kDa tankyrase-1-binding protein;	
AGNNWAKGHY	TEGAELVDSVLDVVR	N-ter +28.03 Da	56.8	63.6	3	1628.97	-0.58	0.12	TB82A_MOUSE	TBB2B_MOUSE	Tubulin beta-2A chain;	
DAEIPLVVCI	TEGIPQQDMVR	N-ter +28.03 Da	36.8	41.3	2	1300.70	0.82	0.05	SUCA_MOUSE		Succinyl-CoA ligase [ADP/GDP-forming] subunit alpha, mitochondrial;	Succinyl-CoA synthetase subunit alpha; C1 domain-containing phosphatase and tensin homolog; Tensin-2;
SDSGHSSTLT	TEHTAESPRPPPTAAER	N-ter +34.06 Da	33.8	104.9	4	1937.19	-0.76	0.12	TENC1_MOUSE		Tensin-like C1 domain-containing phosphatase;	
GAQKLTNTSF	TEIEKQAQAVDKR	N-ter +28.03 Da, K +28.03 Da	23.7	79.3	4	1599.03	-0.12	0.01	ARFG3_MOUSE		ADP-ribosylation factor GTPase-activating protein 3;	
KLEERHTLI	TEMVALNPDFKPPADYKPPATR	N-ter +34.06 Da, K +34.06 Da	41.5	62.9	4	2559.59	0.78	0.02	SF01_MOUSE	Q3UI45_MOUSE	Splicing factor 1;	CW17; Mammalian branch point-binding protein; Transcription factor ZFM1; Zinc finger gene in MEN1 locus; Zinc finger protein 162;
REGEVEVLKA	TEMVEVGPEDDEVGAER	N-ter +34.06 Da	54.0	41.3	3	1894.95	-0.58	0.07	PTRF_MOUSE		Polymerase I and transcript release factor;	Cav-p60; Cavin-1;
ICCSEPPVVK	TEMVTISDASQR	N-ter +34.06 Da	36.5	57.5	3	1370.77	0.36	0.01	E41L2_MOUSE	Q80UE5_MOUSE	Band 4.1-like protein 2;	Generally expressed protein 4.1;
KKRLETYYNA	TEPVISFYDKR	N-ter +34.06 Da, K +34.06 Da	29.1	62.5	3	1421.91	-0.23	0.01	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1; Myokinase;
QLEEKEKLLA	TEQEDAAVAKSKLR	N-ter +28.03 Da, K +28.03 Da	25.1	94.9	4	1629.06	0.99	0.05	RRBP1_MOUSE	A2AVJ7_MOUSE	Ribosome-binding protein 1;	Ribosome receptor protein;
AAPCIYWVPL	TESQIVQKEAEQAEAR	N-ter +28.03 Da, K +28.03 Da	27.3	68.2	3	1801.04	0.50	0.07	ACINU_MOUSE	B8J93_MOUSE	Apoptotic chromatin condensation inducer in the nucleus;	
VQAPPAPVTV	TETPEPAMPVGVYRPPGAR	N-ter +28.03 Da	36.9	63.4	3	2040.14	1.28	0.06	CDV3_MOUSE	F8WGL9_MOUSE	Protein CDV3;	Carnitine deficiency-associated protein 3; Tyrosine-phosphorylated protein 36;
ESVRSVPGSSR	TEVLVTPAGVASKR	N-ter +34.06 Da, K +34.06 Da	42.4	35.0	3	1494.99	2.09	0.11	LAD1_MOUSE		Ladinin-1;	Linear IgA disease antigen homolog; Protein cypher; Protein oracle; Z-band alternatively spliced PDZ-motif protein;
SFRILAQMTG	TEYMQDPDEEALR	N-ter +28.03 Da	42.8	67.7	3	1623.82	-0.36	0.05	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Contrapsin; SPI-2;
KWKISFDPDQD	TFESEFYLDEKR	N-ter +34.06 Da, K +34.06 Da	55.6	67.5	3	1630.96	0.45	0.04	SPA3K_MOUSE	SPA3M_MOUSE	Serine protease inhibitor A3K;	
IAPSNQVIML	TFGKFDVEPDYCR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	36.4	74.1	3	1802.03	-0.94	0.13	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;
MCTSFKENPT	TFMGHLYHEVAR	N-ter +34.06 Da	25.3	36.9	4	1493.82	0.61	0.02	ALBU_MOUSE		Serum albumin;	
VVFFFYPLDF	TFVCPTEIIAIFSDR	N-ter +34.06 Da, C +57.02 Da	36.1	55.2	3	1688.96	-0.34	0.05	PRDX1_MOUSE	B1AXW6_MOUSE	Peroxioredoxin-1;	
TGLPKRNEAK	TGADTTAAGPLFQQRYPYSPGAVLR	N-ter +34.06 Da	58.1	67.5	4	2604.56	-1.03	0.06	PQBP1_MOUSE		Polyglutamine-binding protein 1;	38 kDa nuclear protein containing a WW domain; Polyglutamine tract-binding protein 1;
LIKEGDVVKR	TGAIVDVPVGEELLGR	N-ter +34.06 Da	38.1	50.9	3	1658.03	1.16	0.03	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;	
FKEAFLFDR	TGCEKITLSQVGDVLR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	49.8	59.8	3	1843.16	0.12	0.01	E9PWG4_MOUSE	MYL1_MOUSE		
SFSQFTGSDG	TGGDAAAPGAAGTQAEIPHR	N-ter +34.06 Da	67.8	74.6	3	1881.10	-0.03	0.00	LMAN1_MOUSE		Protein ERGIC-53;	ER-Golgi intermediate compartment 53 kDa protein; Lectin mannose-binding 1;p58;

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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
LTRLRLQKRG	TGGVDTAAGVAVDISNADR	N-ter +34.06 Da	74.8	50.3	3	1969.10	0.79	0.05	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK; Cysteine-rich protein 3;LIM domain protein, cardiac;Muscle LIM protein;
KVCYAKNFGP PRISVREPMQ	TGIGFGGLTQQVEK TGIKAVDSLVPIGR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da	25.7 41.7	60.2 53.5	3 3	1775.09 1480.98	-2.18 -0.15	0.20 0.01	CSR3_MOUSE ATPA_MOUSE	D3Z6F5_MOUSE	Cysteine and glycine-rich protein 3; ATP synthase subunit alpha, mitochondrial;	2-phospho-D-glycerate hydro-lyase;Enolase 1;Non-neural enolase;
FRAAVPSGAS	TGIYEALER	N-ter +28.03 Da	34.9	38.0	2	1191.70	0.36	0.02	ENOA_MOUSE	ENOB_MOUSE	Alpha-enolase;	12 kDa FK506-binding protein;FK506-binding protein 1A;Immunophilin FKBP12;Rotamase; Alpha-1 type I collagen;
KRGQTCVVHY PAGKNGDRGE HTVEKGGKHK LHASNTRLQK	TGMLEDGKFDSSR TGPAGPAGIGPAGAR TGNLHGLFGR TGTAEMSSILEER	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da	17.3 57.1 25.5 41.3	91.8 35.9 46.2 19.1	4 2 3 2	1653.99 1379.82 1201.73 1456.76	-1.00 1.97 0.53 0.85	0.02 0.30 0.03 0.05	FKB1A_MOUSE CO1A1_MOUSE CYC_MOUSE ATPA_MOUSE	F8WGB7_MOUSE D6R116_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A; Collagen alpha-1(I) chain; Cytochrome c, somatic; ATP synthase subunit alpha, mitochondrial;	Carbonate dehydratase III;Carbonic anhydrase III;
IKTKGKEAFP	THFDP5CLFPACR	N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	28.0	50.9	3	1634.82	0.20	0.00	CAH3_MOUSE		Carbonic anhydrase 3; Electron transfer flavoprotein subunit alpha, mitochondrial;	
ILETQKQFSY EVKAQNGEFM IFEVKSTAGD	THICAGASAFGNLLPR THLKLQNTAFSPSR THLGGEDFDNR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da	28.7 27.5 36.6	54.1 99.0 73.2	4 4 3	1880.17 1827.18 1293.71	-1.06 0.98 -3.06	0.02 0.08 0.51	ETFA_MOUSE Q8VCQ8_MOUSE HS71A_MOUSE	F6T2Z7_MOUSE HS71B_MOUSE	Heat shock 70 kDa protein 1A; NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial;	Heat shock 70 kDa protein 3;Hsp68; Complex I-13kD-A;NADH-ubiquinone oxidoreductase 13 kDa-A subunit; Macrophage 23 kDa stress protein;Osteoblast-specific factor 3;Thioredoxin peroxidase 2;Thioredoxin-dependent peroxide reductase 2;
VQVSPSGEKI	THTGQVYDEKDYR	N-ter +34.06 Da, K +34.06 Da	24.5	95.5	4	1679.02	-1.15	0.15	NDU5_MOUSE	D3YW32_MOUSE		
NIPUSDPKR	TIAQDYGLKADGEGISFR	N-ter +34.06 Da, K +34.06 Da	29.5	37.7	3	2050.21	-0.09	0.01	PRDX1_MOUSE	B1AXW6_MOUSE	Peroxioredoxin-1;	
DTVQIQAGLR	TIEEAAPEIHR	N-ter +28.03 Da	42.7	71.1	3	1421.82	0.36	0.04	CAC1S_MOUSE	A3KPC9_MOUSE	Voltage-dependent L-type calcium channel subunit alpha-1S;	Calcium channel, L type, alpha-1 polypeptide, isoform 3, skeletal muscle;Voltage-gated calcium channel subunit alpha Cav1.1;
GGDVAVFVXHT	TIFEVLPEKADR	N-ter +28.03 Da, K +28.03 Da	42.1	68.6	3	1472.93	0.44	0.02	TRFE_MOUSE	D3YFR8_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin; Alpha-CP1;Heterogeneous nuclear ribonucleoprotein E1;
LDAYSIQGQH VKEVTEKYTH RDAVTRQVR SLSTFQQMMWI	TISPLDLAKLNQVAR TIDAVTHAAEGLGR TIVEVQDGKVISSR TKQYEAGPSIVHR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da	30.5 39.7 52.3 45.6	65.7 66.5 61.3 80.6	3 3 3 4	1694.12 1544.94 1715.05 1797.11	0.11 -0.54 0.41 0.82	0.01 0.05 0.01 0.08	PCBP1_MOUSE FAM25_MOUSE K1C17_MOUSE ACT1_MOUSE	D3YXP7_MOUSE	Poly(rC)-binding protein 1; Protein FAM25; Keratin, type I cytoskeletal 17; Actin, alpha skeletal muscle;	Cytokeratin-17;Keratin-17; Centromere protein E;Kinesin superfamily protein 10;Motor domain of KIF10; 27 kDa craniofacial protein;Bucantaur;Protein Cp27; Nucleolar protein family A member 2;snRNP protein NHP2;
NKVSLLDERE	TKTKQELSVTVR	N-ter +28.03 Da, K +28.03 Da	20.9	70.9	3	1473.00	3.27	0.20	CENPE_MOUSE	E9QK1_MOUSE	Centromere-associated protein E;	
KPRESEKVKI	TKVDFPAGEEVR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	28.7 45.4	51.7 78.7	3 4	1452.84 2407.43	2.21 -2.25	0.11 0.43	CFDP1_MOUSE NHP2_MOUSE		Craniofacial development protein 1; H/ACA ribonucleoprotein complex subunit 2;	
M ELLSQEFLLL	TKVKAPEESEAQAEGCSEER TLEQKNIAVENEVR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	39.4 24.1	61.6 56.9	3 3	1710.10 1673.03	0.84 -0.45	0.07 0.05	ASHWN_MOUSE ALBU_MOUSE		ASHwin; Serum albumin;	
SAANCDKLSLH	TLFGDKLCAIPNLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	24.1	56.9	3	1673.03	-0.45	0.05	ALBU_MOUSE		Serum albumin;	
TGEFEKYYVA	TLGVEVHPLVFHTNR	N-ter +34.06 Da	30.0	77.8	4	1752.13	-0.43	0.02	RAN_MOUSE		GTP-binding nuclear protein Ran;	GTPase Ran;Ras-like protein TC4;Ras-related nuclear protein;
SLPSTAVTSE WDGLDPLGKLY LKNSPLVSRL CNAHYPKQSF SKIDSRLEQY	TLPGSLSPVVEKYR TLVLTDPDAPSR TLYDIAHTPGVAADLSHIETR TMVADTPENLR TNAIEGTKASKMPKPAASDLVPPAEGVVR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da 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, C +57.02 Da	41.5 48.8 38.5 45.5 25.9	67.4 36.5 75.5 37.2 58.9	3 2 3 2 4	1599.01 1311.75 2307.36 1273.68 2946.80	0.37 -1.06 0.00 -0.22 0.99	0.01 0.09 0.00 0.02 0.09	DLG1_MOUSE PEBP1_MOUSE MDHM_MOUSE LASP1_MOUSE Q8VCQ8_MOUSE	E9Q9H0_MOUSE D3Z1V4_MOUSE Q9D141_MOUSE QSSUH6_MOUSE E9QQM9_MOUSE	Disks large homolog 1; Phosphatidylethanolamine-binding protein 1; Malate dehydrogenase, mitochondrial; LIM and SH3 domain protein 1;	Embryo-dlg/synapse-associated protein 97;Synapse-associated protein 97; HCNPpp;
LVPEEKNLVK VDKGVVPLAG	TNCDLYKELGVEYGFQNALVLR TNGETTTQGLDGLSER	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +28.03 Da	46.7 36.4	72.3 58.3	4 3	2570.53 1705.91	0.07 0.60	0.02 0.06	ALBU_MOUSE ALDOA_MOUSE	Q9CPQ9_MOUSE	Serum albumin; Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase; Protein 5-100E;S100 calcium-binding protein A3;
DYNKFM5VLD	TNKCDEVDFGEYVR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	39.0	59.0	3	1786.93	-0.34	0.03	S10A3_MOUSE		Protein S100-A3;	Alpha-1 protease inhibitor 1;Alpha-1-antitrypsin 1-1;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
DQSPASHEIA	TNLGDFAI5LYR	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	57.6	38.2	2	1402.82	1.25	0.26	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	
MAANAT EDPNQFVPLN M SQSMNFSLMS WKVRELVDKA	TNPSQLLPLELVDKICGSR TNPTVELEKR TNSCCSPCCQPTCCR TNTVGLGLPMSR TNVMNYSIESKVR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da, C +57.02 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	40.4 27.5 38.2 40.3 48.0	64.5 15.5 70.1 27.5 62.1	3 3 3 2 3	2195.34 1253.78 1980.86 1272.72 1824.06	0.18 -0.54 -1.06 1.37 -0.76	0.02 0.03 0.18 0.04 0.06	LSM5_MOUSE ADDG_MOUSE Q9D3H7_MOUSE EPN4_MOUSE EPN4_MOUSE	Q9D141_MOUSE QSSUH6_MOUSE QSSUH6_MOUSE	U6 snRNA-associated Sm-like protein Lsm5; Gamma-adducin; Clathrin interactor 1; Clathrin interactor 1; Striated muscle-specific serine/threonine-protein kinase;	Adducin-like protein 70;
NPSEKVFIRG PGPYAQFSVN KLTGMAFRVP	TPDSPAQPAAPR TPLNPLNGPIYAR TPNVSVDLTCR	N-ter +34.06 Da N-ter +28.03 Da N-ter +34.06 Da, C +57.02 Da	25.4 39.8 31.6	102.7 24.9 52.7	3 3 3	1311.83 1580.91 1393.82	-5.06 -1.43 -0.60	0.00 0.12 0.03	SPEG_MOUSE CRK_MOUSE G3PT_MOUSE	E9QQ25_MOUSE F7D232_MOUSE G3PT_MOUSE	kinase; Adapter molecule crk; Glyceraldehyde-3-phosphate dehydrogenase;	Aortic preferentially expressed protein 1; Proto-oncogene c-Crk;p38; Peptidyl-cysteine S-nitrosylase GAPDH; C-type lectin domain family 3 member B;Plasminogen kringle 4-binding protein;
DCISQGGTLG	TPQSELENEALFEYAR	N-ter +34.06 Da	42.1	40.7	3	1930.03	1.63	0.03	TETN_MOUSE	Q8CFZ6_MOUSE	Tetranectin;	

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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
WRCVLKIGEH	TPSALAIMENANVLAR	N-ter +34.06 Da	48.8	45.8	3	1704.02	0.77	0.14	ALDOA_MOUSE	A6ZI44_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
IDCQVITLMG	TPSGTAEPYDGTAKR	N-ter +28.03 Da, K +28.03 Da	23.3	68.3	3	1605.91	0.77	0.09	BSDC1_MOUSE		BSD domain-containing protein 1;	
GLPGSMGPPG	TPSVDHGFLVTR	N-ter +28.03 Da	44.1	51.5	3	1355.79	1.23	0.04	CO4A1_MOUSE		Collagen alpha-1(IV) chain;	
LNRVCLLHEK	TPVSEHVKCCSGSLVER	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	24.3	75.6	4	2113.25	0.52	0.03	ALBU_MOUSE		Serum albumin;	
LLFIDNIFRF	TQAGSEVSALLGR	N-ter +34.06 Da	35.3	20.3	2	1321.77	0.43	0.01	ATPB_MOUSE		ATP synthase subunit beta, mitochondrial;	
MVKIVTVK	TQAYPDQKPGTSGLR	N-ter +28.03 Da, K +28.03 Da	24.1	74.1	3	1674.00	-0.52	0.05	PGM1_MOUSE		Phosphoglucomutase-1;	Glucose phosphomutase 1;
GFQNAILVRY	TQKAPQVSTPTLVEAARNLGR	N-ter +28.03 Da, K +28.03 Da	36.1	77.1	4	2292.47	-0.76	0.05	ALBU_MOUSE		Serum albumin;	
GFQNAILVRY	TQKAPQVSTPTLVEAAR	N-ter +28.03 Da, K +28.03 Da	59.6	66.8	3	1852.17	0.50	0.02	ALBU_MOUSE		Serum albumin;	
PNMVTGPHAC	TQKFSNEEIAMATVTLAR	N-ter +34.06 Da, K +34.06 Da	39.7	56.2	3	2077.27	0.76	0.12	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
DEESKPASSN	TQVGEDEEAALLER	N-ter +34.06 Da	52.9	38.8	3	1592.87	0.37	0.03	Q8VCQ8_MOUSE	E9QOM9_MOUSE		52 kDa phosphoprotein;Lymphocyte-specific antigen WP34;S37 protein;
PPRSTEDRLT	TQWREDEEEAAR	N-ter +34.06 Da	24.8	67.7	3	1681.89	-0.27	0.05	LSP1_MOUSE	A2A6J7_MOUSE	Lymphocyte-specific protein 1;	
DQYELLCDLN	TRKPVQDQEDCYLAR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	34.7	93.3	4	1969.16	0.61	0.04	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
TVCQPTCYQR	TSCISTPAQVTCNRR	N-ter +34.06 Da, C +57.02 Da	45.0	57.6	3	1627.88	-0.81	0.04	E9QZEE_MOUSE			La ribonucleoprotein domain family member 4B;La ribonucleoprotein domain family member 5;La-related protein 5;
M	TSDDQAKVAPEAQAQR	N-ter +28.03 Da, K +28.03 Da	33.5	72.2	3	1798.05	0.04	0.01	LAR4B_MOUSE		La-related protein 4B;	
DIGDTEVPY	TSFVKLLPLNDCR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	39.2	66.5	3	1630.06	-0.76	0.08	COF2_MOUSE		Cofilin-2;	Cofilin, muscle isoform; XP-C repair-complementing complex 58 kDa protein;
AATTTATTTT	TSGGHPLEFLR	N-ter +28.03 Da	30.9	47.0	3	1240.72	0.00	0.00	RD23B_MOUSE	Q3TJ52_MOUSE	UV excision repair protein RAD23 homolog B;	
RKAAGGAKRK	TSGPPVSELITKAAVASKER	N-ter +34.06 Da, K +34.06 Da	18.2	81.6	4	2142.49	-0.14	0.01	H14_MOUSE		Histone H1.4;	H1 VAR.2;H1e;
LIIGDRQTGK	TSIAIDTIINQKR	N-ter +34.06 Da, K +34.06 Da	30.3	53.3	3	1540.04	0.30	0.03	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;	
VGLTSLRAVS	TSSMGTLPKQVKIVEVGPR	N-ter +28.03 Da, K +28.03 Da	15.7	63.7	4	2110.35	-0.43	0.03	HMGCL_MOUSE		Hydroxymethylglutaryl-CoA lyase, mitochondrial;	3-hydroxy-3-methylglutarate-CoA lyase;
LEAWYRHGR	TSYSALSSEPSR	N-ter +28.03 Da	45.3	41.8	2	1311.69	-0.03	0.00	MECR_MOUSE	A2A845_MOUSE	Trans-2-enoyl-CoA reductase, mitochondrial;	
RGVHTSVASA	TSVATKTKEQGPPSSEYIFER	N-ter +34.06 Da, K +34.06 Da	48.1	67.0	4	2456.53	0.87	0.04	OAT_MOUSE		Ornithine aminotransferase, mitochondrial;	Ornithine-oxo-acid aminotransferase;
TRVSGEHMDL	TTCLAAAGGQEQELR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	40.7	67.3	3	1697.07	-0.32	0.02	Q9D1B1_MOUSE			
LKGWSCCKRR	TTDFSDFLSIVGCTKGR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	38.4	70.9	3	1971.18	-2.74	0.55	CHR1_MOUSE		Cysteine and histidine-rich domain-containing protein 1;	CHORD domain-containing protein 1;Protein morgana;
ADDLTPAPAP	TTFAHLDAATVLSR	N-ter +28.03 Da	42.9	74.5	3	1559.95	0.71	0.04	ATPB_MOUSE		ATP synthase subunit beta, mitochondrial;	
RTVHTTRVCL	TTFMVQDQPDFQDR	N-ter +34.06 Da	45.9	53.5	3	1672.88	0.33	0.06	THIOM_MOUSE	Q3TUS3_MOUSE	Thioredoxin, mitochondrial;	Thioredoxin-2;
LRVPHARKTG	TTIAGLVFR	N-ter +34.06 Da	30.2	45.3	2	1010.68	0.20	0.01	PSB10_MOUSE		Proteasome subunit beta type-10;	Low molecular mass protein 10;Macropain subunit MEC1-1;Multicatalytic endopeptidase complex subunit MEC1-1;Proteasome MEC1-1;Proteasome subunit beta-2;
FKLPKARKTG	TTIAGVVYKDIGVLGADTR	N-ter +28.03 Da, K +28.03 Da	49.5	71.6	3	2004.27	0.21	0.05	PSB7_MOUSE		Proteasome subunit beta type-7;	Macropain chain Z;Multicatalytic endopeptidase complex chain Z;Proteasome subunit Z;
GGGDVAVFKH	TTIFEVLPEKADR	N-ter +28.03 Da, K +28.03 Da	51.3	69.4	3	1573.98	0.20	0.02	TRFE_MOUSE	D3YR8_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
AQAVTAYIHK	TTLESTPESASAR	N-ter +34.06 Da	46.0	37.8	2	1382.76	-0.76	0.08	PPR3A_MOUSE		Protein phosphatase 1 regulatory subunit 3A;	Protein phosphatase 1 glycogen-associated regulatory subunit;Protein phosphatase type-1 glycogen targeting subunit;
VVPLAGTNGE	TTTQGLDGLSER	N-ter +34.06 Da	43.5	35.0	2	1310.73	0.52	0.05	ALDOA_MOUSE	Q9CPQ9_MOUSE	Fructose-bisphosphate aldolase A;	Aldolase 1;Muscle-type aldolase;
TIPTKQTQTF	TTYSNDQPGVLQVYEGER	N-ter +34.06 Da	60.8	35.3	3	2202.18	-1.09	0.07	HS71A_MOUSE	HS71B_MOUSE	Heat shock 70 kDa protein 1A;	Heat shock 70 kDa protein 3;Hsp68; Williams-Beuren syndrome chromosomal region 1 protein homolog;
QRPRLQKPR	TVATPLNQVANPNSAIFGARPR	N-ter +34.06 Da	35.7	74.7	4	2384.49	-0.47	0.04	IF4H_MOUSE	Q80U88_MOUSE	Eukaryotic translation initiation factor 4H;	Williams-Beuren syndrome chromosomal region 1 protein homolog;
QRPRLQKPR	TVATPLNQVANPNSAIFGGAR	N-ter +34.06 Da	64.6	50.8	3	2131.27	-1.09	0.09	IF4H_MOUSE	Q80U88_MOUSE	Eukaryotic translation initiation factor 4H;	Williams-Beuren syndrome chromosomal region 1 protein homolog;
MKM	TVDFEELCKDSPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	26.3	83.3	3	1650.93	-0.45	0.05	ACAP2_MOUSE	D4AFX6_MOUSE	Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 2;	Centaurin-beta-2;
EKAKREVCSW	TVGEDVNTDPWAGYR	N-ter +34.06 Da	44.7	46.5	3	1712.90	0.01	0.00	AMP1_MOUSE		Methionine aminopeptidase 1;	Peptidase M 1;
QTVSTKSSN	TVESTSLYMKVAAQGEVVR	N-ter +28.03 Da, K +28.03 Da	25.6	64.0	3	2106.27	1.47	0.16	SYEP_MOUSE		Bifunctional glutamate/proline-tRNA ligase;	
GCVAGDEESY	TVFKDLFDPIQDR	N-ter +34.06 Da, K +34.06 Da	47.0	74.4	3	1774.16	-0.12	0.03	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
TVKTESTVKT	TVFSCNLGEKFDETTADGR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	35.1	62.1	3	2202.16	0.51	0.07	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;
QNADCPKNSG M	TVGAVALDCR	N-ter +34.06 Da, C +57.02 Da	40.1	28.0	2	1094.63	1.26	0.11	ASGL1_MOUSE		L-asparaginase;	Asparaginase-like protein 1;L-asparagine amidohydrolase;
	TVHNLVLFDR	N-ter +28.03 Da	24.7	48.6	3	1304.75	0.31	0.02	TPPC1_MOUSE	B1ASW5_MOUSE	Trafficking protein particle complex subunit 1;	
KDVVDIYIFG	TVIQEVKTSNVAR	N-ter +28.03 Da, K +28.03 Da	33.1	74.2	3	1499.98	0.41	0.04	ECHB_MOUSE	D3YXU1_MOUSE	Trifunctional enzyme subunit beta, mitochondrial;	TP-beta;
NMKGNDISSG	TVLSDYVGSPPSGTGLHR	N-ter +34.06 Da	45.2	67.4	3	1933.14	0.10	0.01	PEBP1_MOUSE		Phosphatidylethanolamine-binding protein 1;	HcNPPp;
VDIRKDLVAN	TVLSGGTTPYGIADR	N-ter +28.03 Da	33.5	37.8	3	1665.90	0.23	0.02	ACTB_MOUSE	ACTG_MOUSE	Actin, cytoplasmic 1;	Beta-actin;

Table S7, 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
SAPRVSLAT GWQSMVHEVW SPGMKDLGA	TVSAPDLKSVR TVVIPETEAARR TWVVLGHSEK	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +34.06 Da	22.0 29.9 25.0	65.1 68.6 31.2	3 3 3	1227.80 1402.93 1216.72	2.21 0.93 -0.34	0.17 0.07 0.01	F7CK47_MOUSE COASY_MOUSE TPIS_MOUSE	MAP4_MOUSE E0CXH5_MOUSE	Microtubule-associated protein; Bifunctional coenzyme A synthase; Triosephosphate isomerase;	Triose-phosphate isomerase;
QGQGDIPTFY	TYEGLSHLTAEGQATLER	N-ter +34.06 Da	44.1	66.4	3	2138.21	-6.64	0.00	ICLN_MOUSE	Q923F1_MOUSE	Methylosome subunit pICln;	Chloride channel, nucleotide sensitive 1A;Chloride conductance regulatory protein ICln;Chloride ion current inducer protein;
NEETIKKRLE	TYNATEPVISFYDKR	N-ter +34.06 Da, K +34.06 Da	52.6	68.4	3	2034.21	0.20	0.02	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
NGTQICPNNL VNOAQKEAEK PLVPVPHQKV	VAHFDFSDLENVPHLR VAHGVQTVGNQAGKETQR VANSPPANADYQER	N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da	37.4 37.0 43.0	95.6 93.6 61.9	4 4 3	2016.22 1935.21 1461.78	-0.27 0.80 -0.52	0.02 0.14 0.07	PRELP_MOUSE SBSN_MOUSE E9PYJ9_MOUSE	E9QP82_MOUSE	Prolargin; Suprabasin;	Proline-arginine-rich end leucine-rich repeat protein;
MADEIAKAQ EERSVNCGTM	VAQPGGDTIFGKIIR VAQPKNLEGYGFANLPNQVYR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	29.3 55.5	68.3 70.9	3 4	1639.12 2532.53	-0.25 0.07	0.02 0.01	HINT1_MOUSE E9Q9F5_MOUSE	B0R1E3_MOUSE	Histidine triad nucleotide-binding protein 1;	Adenosine 5'-monophosphoramidase;Protein kinase C inhibitor 1;Protein kinase C-interacting protein 1;
AHQLFGRGFSF VHTSVASATS	VATGLMEDDGKPR VATKTEGGPPSSEYIFER	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	32.0 35.6	70.3 63.6	3 4	1455.91 2250.33	-0.12 0.85	0.01 0.01	KS6A1_MOUSE OAT_MOUSE	Q505N6_MOUSE	Ribosomal protein S6 kinase alpha-1; Ornithine aminotransferase, mitochondrial;	90 kDa ribosomal protein S6 kinase 1;MAP kinase-activated protein kinase 1a;Ribosomal S6 kinase 1; Ornithine-oxo-acid aminotransferase; GTPase Ran;Ras-like protein TC4;Ras-related nuclear kinase-like 7;
HLTGEFEKYY VGPPEPTDCF	VATLGVVEHPLVFLHTNR VAVMHGETEGTVPGNALVVDPEKPFRR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da	38.5 50.0	35.8 75.5	4 4	1922.16 2816.73	-0.30 0.00	0.05 0.00	RAN_MOUSE EHD2_MOUSE		GTP-binding nuclear protein Ran; EH domain-containing protein 2;	Biliverdin reductase B;Biliverdin-IX beta-reductase;NADPH-dependent diaphorase;NADPH-flavin reductase;
KILQESGLKY	VAVMPPHIGDQLPLTGAYTVLDGR	N-ter +34.06 Da	47.1	77.5	4	2541.55	-1.52	0.04	BLVRB_MOUSE	E9PZC4_MOUSE	Flavin reductase (NADPH);	
DDPEVQFSWF DVDEYDENKF PTLIAAQSN	VDDVEVHTAQTPQR VDEEDGGDQAGPDEGEVDSCLR VDELGCSHLGQSYESR	N-ter +28.03 Da N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, C +57.02 Da	19.0 66.2 37.5	61.5 51.9 69.5	3 3 3	1621.91 2439.15 1870.00	-0.20 -0.20 -3.47	0.01 0.02 0.77	IGH1M_MOUSE ARPC5_MOUSE CO3A1_MOUSE	IGHG1_MOUSE Q3UA72_MOUSE Q5DTG2_MOUSE	Ig gamma-1 chain C region, membrane-bound form; Actin-related protein 2/3 complex subunit 5; Collagen alpha-1(III) chain;	Arp2/3 complex 16 kDa subunit;
LTIQLIQHFF	VDEYDPTIEDSYR	N-ter +34.06 Da	32.9	51.0	3	1634.84	0.18	0.02	RASH_MOUSE	RASK_MOUSE	GTPase HRas;	H-Ras-1;Transforming protein p21;c-H-ras;p21ras;
PWFAGNKVTV GNKYVPRAIL	VDFLVYVDLQDHR VDLEPGTMDSVR	N-ter +34.06 Da N-ter +28.03 Da	58.8 35.4	85.9 33.1	3 2	1652.02 1345.70	-1.18 -0.15	0.19 0.02	GSTM2_MOUSE TBB2A_MOUSE	D3YX76_MOUSE TBB2B_MOUSE	Glutathione S-transferase Mu 2; Tubulin beta-2A chain;	GST 5-5;GST class-mu 2;Glutathione S-transferase pmGT2;
AGKHVPRAVF	VDLEPTVIDEVR	N-ter +34.06 Da	41.9	43.8	2	1417.85	-0.03	0.00	TBA1A_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain;	Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain; Protein chuzhoi;Protein-tyrosine kinase 7;Pseudo tyrosine kinase receptor 7;Tyrosine-protein kinase-like 7;
AEPHYMVLEY	VDLGDCLKQLR	N-ter +28.03 Da, K +28.03 Da	19.4	78.6	3	1358.90	-0.49	0.10	PTK7_MOUSE		Inactive tyrosine-protein kinase 7;	
SPTESKDILL	VDLNSEIDTNQNSLR	N-ter +34.06 Da	41.0	44.6	3	1750.97	-0.22	0.01	DAB2_MOUSE	E9QL31_MOUSE	Disabled homolog 2;	DOC-2;Mitogen-responsive phosphoprotein; Alpha-tubulin 1;Alpha-tubulin isotype M-alpha-1;Tubulin alpha-1 chain;
ASLRFDGLN AAGGGGGENY CTHVANFVSP	VDLTFEQTNLVPPYR VDNKEVHTAWTQPR VDPISLIVVQAKEADYIPR	N-ter +34.06 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,	40.2 24.8 19.1	44.8 73.0 49.3	3 4 4	1825.07 1736.03 2181.35	0.52 0.70 -0.79	0.03 0.09 0.07	TBA1A_MOUSE IGHG3_MOUSE CD029_MOUSE	TBA1B_MOUSE B7ZNF5_MOUSE	Tubulin alpha-1A chain; Ig gamma-3 chain C region; Uncharacterized protein C4orf29 homolog;	
PVPEDKYTAL KQSRMEKYV LRLQKRTGG EKLGGQGVQK AKDTVMVTRTF	VDQEEKEDVKSCAEFVSGSCLR VDSOTVQAHTVR VDTAAGVAVFDSINADR VDVPAADLSDQVPDQDSETR VEDQEFHSSFEER	C +57.02 Da N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da,	26.4 27.2 43.7 57.9 49.0	71.5 59.9 56.7 37.7 77.0	4 3 3 3 3	2623.47 1354.77 1754.01 2157.09 1784.98	0.36 0.20 0.37 0.49 -0.84	0.04 0.01 0.02 0.06 0.16	ATP5H_MOUSE SYNP2_MOUSE KCRM_MOUSE CO3_MOUSE TITIN_MOUSE	B1ASE2_MOUSE D3YV9_MOUSE	ATP synthase subunit d, mitochondrial; Synaptopodin-2; Creatine kinase M-type; Complement C3; Titin;	Myopodin; Creatine kinase M chain;M-CK; HSE-MSF; Connectin; C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36; CCT-eta; Cytokeratin-15;Keratin-15; Actinin-associated LIM protein;Alpha-actinin-2-associated LIM protein; Castor-related protein; Cytosolic NADP+isocitrate dehydrogenase;IDP;NADP(+)-specific ICDH;Oxalosuccinate decarboxylase;
INLQKQGHPF AEFLKQVKPY SSSSNFHIS	VEDQIQCEKHAR VEEGLHPQIIR VEESVDGKVVSSR	C +57.02 Da N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da	20.1 29.4 24.7	99.1 76.1 80.1	4 3 3	1615.01 1430.93 1445.89	0.07 4.31 0.53	0.01 0.16 0.07	PDL1_MOUSE TCPH_MOUSE K1C15_MOUSE	B1AQ77_MOUSE	PDZ and LIM domain protein 1; T-complex protein 1 subunit eta; Keratin, type I cytoskeletal 15;	
LNLKQKGVFF ICAKLSRQVV	VEGELYCETHAR VEKGAEAGSQAEQSPLHPR	N-ter +34.06 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da	45.0 59.2	61.2 85.3	3 4	1496.81 1987.25	0.51 1.27	0.07 0.10	PDL3_MOUSE CASZ1_MOUSE	B1AS47_MOUSE	PDZ and LIM domain protein 3; Zinc finger protein castor homolog 1;	
LIKEKLILPY	VELDLHSYDLGIENR	N-ter +34.06 Da	47.0	72.6	3	1806.07	-1.52	0.17	IDHC_MOUSE	F8W1Y0_MOUSE	Isocitrate dehydrogenase [NADP] cytoplasmic;	
MGVQ EVEVLKATEM EVEVLKATEM AVQGGAAAPV IDSSWELRVF	VETISPGDGR VEVGPEDDEVGAEATDLLR VEVGPEDDEVGAEAR VGAVQVPVGMPPMPQAPR VGEEDEPAQSVTLR	N-ter +28.03 Da N-ter +28.03 Da N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da	21.8 36.2 60.8 43.0 42.9	38.3 69.1 34.0 29.1 56.7	2 3 2 3 3	1057.58 2383.32 1527.76 1862.07 1556.86	0.82 -0.79 -0.40 0.51 0.54	0.05 0.15 0.06 0.04 0.03	FKB1A_MOUSE PTRF_MOUSE PTRF_MOUSE SNRPA_MOUSE URP2_MOUSE	Q1JUQ8_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A; Polymerase I and transcript release factor; Polymerase I and transcript release factor; U1 small nuclear ribonucleoprotein A; Fermitin family homolog 3;	12 kDa FK506-binding protein;FK506-binding protein 1A;Immunophilin FKBP12;Rotamase; Cav-p60;Cavin-1; Cav-p60;Cavin-1;

Table S7, 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
M	VGGEASAAVEKLVSGVR	N-ter +34.06 Da, K +34.06 Da	20.9	61.6	3	1696.12	0.10	0.01	C2AIL_MOUSE		CDKN2AIP N-terminal-like protein;	CDKN2A-interacting protein N-terminal-like protein;
GAHLVKKIF	VGGIKEDTEEHHLR	N-ter +28.03 Da, K +28.03 Da	18.3	93.5	4	1675.03	-0.27	0.03	ROA1_MOUSE	ROA2_MOUSE	Heterogeneous nuclear ribonucleoprotein A1;	HDP-1;Helix-destabilizing protein;Single-strand-binding protein;Topoisomerase-inhibitor suppressed;hnRNP core protein A1; COP9 homolog;JAB1-containing signalosome subunit 8;
SIADDFAAF	VGLPVEEAVKGVLEQGWQADSTTR	N-ter +34.06 Da, K +34.06 Da	50.8	79.8	4	2636.66	-0.23	0.05	CSN8_MOUSE		COP9 signalosome complex subunit 8;	
HVAHGPKSG	VGPSQPTTVGTECFVSR	N-ter +34.06 Da, C +57.02 Da	35.5	50.2	3	1912.05	0.82	0.03	F7CK47_MOUSE		Microtubule-associated protein;	
ASGETLHSPK	VGQPGAAGPVSPMCPGR	N-ter +34.06 Da, C +57.02 Da	54.5	52.5	3	1670.93	0.19	0.01	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertryptin;Fetuin-A;
ISSGTVLSDY	VSGGPPSGTGLHR	N-ter +34.06 Da	34.0	67.0	3	1254.77	-0.52	0.05	PEBP1_MOUSE		Phosphatidylethanolamine-binding protein 1;	HCNPPp;
LVEAARNLGR	VGTKCCTLPEDQR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	23.0	62.5	3	1618.88	0.90	0.06	ALBU_MOUSE		Serum albumin;	
M	VGVKPVGSDPDFQPELSGAGSR	N-ter +28.03 Da, K +28.03 Da	34.1	61.8	3	2254.30	0.42	0.05	TXNL1_MOUSE		Thioredoxin-like protein 1;	32 kDa thioredoxin-related protein; Acetyl-CoA acyltransferase;Beta-ketothiolase;Mitochondrial 3-oxoacyl-CoA thiolase;
AYLARHVGLR	VGVPTEGALTNR	N-ter +28.03 Da	40.6	43.5	3	1454.87	-0.14	0.01	THIM_MOUSE		3-ketoacyl-CoA thiolase, mitochondrial;	
GSGRSPRRSP	VHPESSEGEHVSVPQR	N-ter +28.03 Da	37.2	93.3	4	1930.10	0.31	0.03	FILA2_MOUSE	E9QP23_MOUSE	Filaggrin-2;	Intermediate filament-associated protein; Kidney-type arginase;Non-hepatic arginase;Type II arginase;
GQIPLVLR	VHSAIVGAPFSR	N-ter +34.06 Da	35.5	44.9	3	1372.87	-0.76	0.09	ARGI2_MOUSE		Arginase-2, mitochondrial;	
HIFASNDTF	VHVTDLSGKETICR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	19.7	80.3	4	1670.02	-0.04	0.01	RS14_MOUSE	D3YVF4_MOUSE	40S ribosomal protein S14;	
ARRQSRMEKY	VISSGHAEALAR	N-ter +34.06 Da	32.0	67.8	3	1301.80	-0.47	0.05	SYNP0_MOUSE	E9Q3E2_MOUSE	Synaptopodin;	
KRNTHTRRKR	VIGGKPANVGDYVPVQVAIKDGQR	N-ter +28.03 Da, K +28.03 Da	20.3	58.6	4	2551.54	0.10	0.00	CFAL_MOUSE		Complement factor I;	C3B/C4B inactivator;
STGAAKAVGK	VIPELNGKLTGMAFR	N-ter +28.03 Da, K +28.03 Da	25.6	60.5	3	1701.07	-1.94	0.08	E9Q9E5_MOUSE	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	
AIAEFARSL	VIPNTLAVNAAQSDTLVAKLR	N-ter +28.03 Da, K +28.03 Da	40.1	74.5	4	2364.51	0.03	0.01	TCPA_MOUSE		T-complex protein 1 subunit alpha;	CCT-alpha;Tailless complex polypeptide 1A;Tailless complex polypeptide 1B;
TKFENAFSL	VISQHSLLGNIR	N-ter +28.03 Da	26.0	29.6	3	1491.90	0.35	0.01	ATPA_MOUSE	D3Z6F5_MOUSE	ATP synthase subunit alpha, mitochondrial;	
DVDLHLKGNP	VKGEYDVTVPR	N-ter +34.06 Da, K +34.06 Da	32.2	40.2	3	1329.85	0.04	0.00	F7BRM2_MOUSE	E9Q616_MOUSE		
M	VKIVTVKTQAYPDQPKGTSGLR	N-ter +34.06 Da, K +34.06 Da	16.0	59.3	4	2521.74	-1.25	0.12	PGM1_MOUSE		Phosphoglucomutase-1;	Glucose phosphomutase 1;
E	VKLVEGGGLVQPGGSLR	N-ter +34.06 Da, K +34.06 Da	38.1	61.8	3	1949.28	-0.11	0.01	HVM17_MOUSE	HVM18_MOUSE	Ig heavy chain V region MOPC 47A;	
ITPIQTSLAY	VKTSLSKQNNR	N-ter +28.03 Da, K +28.03 Da	11.3	33.2	4	1486.90	4.40	0.10	KCNH5_MOUSE		Potassium voltage-gated channel subfamily H member 5;	Ether-a-go-go potassium channel 2;Voltage-gated potassium channel subunit Kv10.2;
N	VLASEPPIKGIK	N-ter +34.06 Da, K +34.06 Da	21.5	29.2	3	1475.98	4.69	0.43	KAD2_MOUSE	F7BP55_MOUSE	Adenylate kinase 2, mitochondrial;	ATP-AMP transphosphorylase 2; 26S proteasome regulatory subunit RPN10;26S proteasome regulatory subunit SSA;Multiubiquitin chain-binding protein;
M	VLESTMVCDNSSEYMR	N-ter +34.06 Da, C +57.02 Da	53.1	52.3	3	1966.01	0.08	0.01	PSMD4_MOUSE		26S proteasome non-ATPase regulatory subunit 4;	
M	VLLESEQFLTELTR	N-ter +28.03 Da	44.6	52.8	3	1705.02	-1.06	0.15	SRP14_MOUSE	A2AUM6_MOUSE	Signal recognition particle 14 kDa protein;	
KQVPTANLEN	VLPLAEDFTTEILSR	N-ter +34.06 Da	39.7	40.0	3	1636.00	-2.25	0.21	VTDB_MOUSE		Vitamin D-binding protein;	Gc-globulin;Group-specific component; C-terminal LIM domain protein 1;Elfin;LIM domain protein CLP-36;
EPPKQSTFL	VLQEILESDGKDPNPKSGFR	N-ter +28.03 Da, K +28.03 Da	20.5	79.0	4	2369.45	0.56	0.05	PDLI1_MOUSE		PDZ and LIM domain protein 1;	
VDPNSRNSR	VLRPPGGGSNFSLGFDEPAEQPVR	N-ter +34.06 Da	47.4	80.2	4	2559.54	-1.60	0.19	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
HRMTTLFCIN	VLSEVCGQDITTKHMLPTVLR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	43.2	69.6	4	2452.49	0.93	0.07	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;
PFMWNHGLY	VLTCPSNLGTGLR	N-ter +34.06 Da, C +57.02 Da	21.8	53.9	3	1420.87	0.16	0.01	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
LSKHNHMAK	VLTPDLYNKLR	N-ter +34.06 Da, K +34.06 Da	25.9	26.7	3	1398.92	-0.32	0.02	KCRM_MOUSE		Creatine kinase M-type;	
GFGSLGLMST	VLVCPDGKIEAAHGTVTR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	21.6	70.9	4	2279.36	0.61	0.05	IDHP_MOUSE		Isocitrate dehydrogenase [NADP], mitochondrial;	ICD-M;IDP;NADP(+)-specific
DQVIQFFIAL	VNDPOPEHPLR	N-ter +34.06 Da	27.8	58.5	3	1334.79	0.57	0.05	UB2L3_MOUSE		Ubiquitin-conjugating enzyme E2 L3;	ICDH;Oxalosuccinate decarboxylase; UbchM4;Ubiquitin carrier protein L3;Ubiquitin-protein ligase L3;
M	VNFTVDQIR	N-ter +28.03 Da	27.7	11.3	2	1118.62	1.29	0.07	EF2_MOUSE		Elongation factor 2;	
KSAVSLWAK	VNPDEVGGEALGR	N-ter +34.06 Da	34.7	29.6	2	1345.74	-0.04	0.00	HBB2_MOUSE		Hemoglobin subunit beta-2;	Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain;
M	VNPTVFDDITADDEPLGR	N-ter +28.03 Da	61.6	39.2	2	2033.09	0.53	0.12	PPIA_MOUSE	E9Q1E3_MOUSE	Peptidyl-prolyl cis-trans isomerase A;	Cyclophilin A;Cyclosporin A-binding protein;Rotamase A;SP18;
KAAVSCLWKG	VNSDEVGGEALGR	N-ter +34.06 Da	21.3	34.0	2	1335.73	-0.25	0.02	HBB1_MOUSE		Hemoglobin subunit beta-1;	Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
NGKLTGMAFR	VPTPNVSVDLTCR	N-ter +34.06 Da, C +57.02 Da	57.5	36.0	3	1589.92	-1.29	0.16	G3PT_MOUSE	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase, testis-specific;	Spermatogenic cell-specific glyceraldehyde 3-phosphate dehydrogenase 2;Spermatogenic glyceraldehyde-3-phosphate dehydrogenase; Acireductone dioxygenase (Fe(2+)-requiring);Membrane-type 1 matrix metalloproteinase cytoplasmic tail-binding protein 1;
M	VQAWYMDSTADPR	N-ter +34.06 Da	31.6	58.4	3	1701.89	0.30	0.02	MTND_MOUSE		1,2-dihydroxy-3-keto-5-methylthiopentene dioxygenase;	
QVFEMKVEK	VQKLDSEAEIQR	N-ter +34.06 Da, K +34.06 Da	25.2	82.7	4	1645.16	0.47	0.02	SEPT7_MOUSE	E9Q9F5_MOUSE	Septin-7;	CDC10 protein homolog;
SGKGTQCEKI	VQKYGYTHLSTGDLR	N-ter +34.06 Da, K +34.06 Da	20.5	66.0	4	1918.22	0.88	0.05	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokininase;
LSGTAGVQSQI	VQLQGSQALVK	N-ter +28.03 Da, K +28.03 Da	44.7	35.6	3	1483.88	0.89	0.09	HVMO0_MOUSE		Ig heavy chain V region;	Anti-arsenate antibody;

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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
MSKALPLTKV	VQNDAYTAPVLPSSVR	N-ter +28.03 Da	26.2	50.2	3	1744.00	-0.15	0.01	PDIP3_MOUSE	Q3UDD3_MOUSE	Polymerase delta-interacting protein 3;	S6K1 Aly/REF-like target; Germ cell lineage protein gercelin;Src-suppressed C kinase substrate;
LELESKSNKI	VQSVIQTAVDQFAR	N-ter +28.03 Da	26.3	47.1	3	1588.93	0.10	0.00	AKA12_MOUSE		A-kinase anchor protein 12;	
EMVAKQIPYD	VQYSIDIYMER	N-ter +34.06 Da	26.2	25.1	3	1451.72	-3.32	0.33	B5THE2_MOUSE			
RSIIRNVKGP	VREGDVLTLLESER	N-ter +34.06 Da	48.3	78.6	3	1649.05	-0.84	0.08	RS28_MOUSE		40S ribosomal protein S28;	
TSVVRPFAKL	VRPPVQVYIEGR	N-ter +28.03 Da	49.0	34.7	3	1496.90	0.45	0.02	ATPO_MOUSE	D3Z4J0_MOUSE	ATP synthase subunit O, mitochondrial;	Oligomycin sensitivity conferral protein;
FGTKGLAVTF	VSDENDAKILNDVQDR	N-ter +28.03 Da, K +28.03 Da	23.5	62.8	3	1886.06	-0.40	0.05	DX39A_MOUSE	DX39B_MOUSE	ATP-dependent RNA helicase DDX39A;	DEAD box protein 39;
SEGNELLVQF	VSDLSVTADGFSASYR	N-ter +34.06 Da	36.5	48.5	3	1707.94	0.82	0.04	PCOC1_MOUSE	D3YUE2_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;
DNGMVLGEGE	VSDNELQELSTQGSIR	N-ter +34.06 Da	49.0	58.0	3	1695.95	0.52	0.04	CLUS_MOUSE	E9Q9B8_MOUSE	Clusterin;	Apolipoprotein J;Clustrin;Sulfated glycoprotein 2;
GMKVLQTRGF	VSDSSDSMDTGAGSIR	N-ter +34.06 Da	69.5	34.3	2	1617.79	0.65	0.10	ATIF1_MOUSE	Q9D879_MOUSE	ATPase inhibitor, mitochondrial;	Inhibitor of F(1)F(o)-ATPase; RNA exonuclease 2 homolog;Small fragment nuclease;
GRRQGFGARG	VSEGSAAAMAGESMAQR	N-ter +28.03 Da	60.1	62.8	3	1679.87	0.03	0.00	ORN_MOUSE		Oligoribonuclease, mitochondrial;	
IESTECRKR	VSGEHMDLTTCLPAAGGQQEKLK	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	58.0	68.9	4	2553.44	0.37	0.04	Q9D1B1_MOUSE			
VWAAVPGKTF	VSITPAEVGLVGVKDR	N-ter +34.06 Da, K +34.06 Da	33.0	58.9	3	1707.16	-1.43	0.12	PROF1_MOUSE	Q5SX49_MOUSE	Profilin-1;	Profilin I; Lysosomal pepstatin-insensitive pretease;Tripeptidyl aminopeptidase;Tripeptidyl-peptidase I; DNA-binding p52/p100 complex, 100 kDa subunit;Polypyrimidine tract-binding protein-associated-splicing factor; 63 kDa FK506-binding protein;FK506-binding protein 9;FKBP65R;Rotamase;
QRPEPQQVGT	VSLHLGVTPSVLR	N-ter +34.06 Da	34.8	54.4	3	1410.95	0.19	0.04	TPP1_MOUSE		Tripeptidyl-peptidase 1;	
ALSVRNLSPY	VSNELLEAFSQFGPIER	N-ter +28.03 Da	45.0	59.0	3	2092.17	0.94	0.20	SFPQ_MOUSE		Splicing factor, proline- and glutamine-rich;	
GQAAAPVLGLA	VSSELQIQSQVFPDECPR	N-ter +34.06 Da, C +57.02 Da	41.5	22.6	3	2152.12	-0.32	0.03	FKBP9_MOUSE		Peptidyl-prolyl cis-trans isomerase FKBP9;	
FSFVGEACKK	VTFHVPSTLEVDKIIGR	N-ter +28.03 Da, K +28.03 Da	22.4	99.1	4	1966.32	1.14	0.06	DSC3_MOUSE		Desmocollin-3;	
SLAGNTFSAK	VTGKEASCHDAVAGCPR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	25.8	105.8	4	1870.08	-0.07	0.02	ISK3_MOUSE		Serine protease inhibitor Kazal-type 3;	P12;Prostatic secretory glycoprotein;
ARQSRRTQGG	VTLTDLQEAETIGR	N-ter +34.06 Da, K +34.06 Da	22.4	67.3	3	1741.14	-0.11	0.01	MYPT1_MOUSE		Protein phosphatase 1 regulatory subunit 12A;	Myosin phosphatase-targeting subunit 1;
YSPLAHRAYS	VWAGGPEVLTLPER	N-ter +34.06 Da	41.1	44.4	3	1457.89	0.08	0.00	D2HDH_MOUSE	E9QN44_MOUSE	D-2-hydroxyglutarate dehydrogenase, mitochondrial;	
SPLPVIPIHQK	VWANSAPANADYQER	N-ter +34.06 Da	37.0	76.8	3	1566.91	-0.81	0.09	E9PVJ9_MOUSE			Myopodin;
STSQLVACTK	VVAPTSSPVCQQLVEAGR	N-ter +28.03 Da, C +57.02 Da	49.2	26.4	3	2167.19	1.14	0.12	TLN1_MOUSE	F8WGT0_MOUSE	Talin-1;	Cold shock domain-containing protein A;Y-box protein 3;
AKRQSRMEKY	VVSDSTVQAHTVR	N-ter +34.06 Da	47.4	70.8	3	1459.89	0.60	0.08	SNYP2_MOUSE	D3YVY9_MOUSE	Synaptopodin-2;	Chromosome region maintenance 1 protein homolog;
VGDGETVEFD	VVEGEGAEAAVNTGPDGVPVEGSR	N-ter +28.03 Da, K +28.03 Da	49.2	68.9	4	2479.43	0.80	0.09	DBPA_MOUSE	F6TIF5_MOUSE	DNA-binding protein A;	
SRMAKPEEVL	VVENDQGEVVR	N-ter +34.06 Da	23.8	26.7	2	1276.72	1.14	0.10	XPO1_MOUSE		Exportin-1;	
LIATEEGFKA	VVGDEYLHFFHHR	N-ter +28.03 Da	36.4	94.3	4	1650.95	1.02	0.11	LEG7_MOUSE	Q9CRB1_MOUSE	Galectin-7;	
DGVHNLKVPF	VVQLSGHLAQETER	N-ter +34.06 Da	38.5	55.3	3	1599.97	1.49	0.11	APDAA4_MOUSE		Apolipoprotein A-IV;	Apolipoprotein A4;
PKFLTPLMDR	VVVAGYTAALNCAVR	N-ter +34.06 Da, C +57.02 Da	43.2	31.6	3	1596.94	-1.60	0.10	MYPC2_MOUSE	F8W134_MOUSE	Myosin-binding protein C, fast-type;	C-protein, skeletal muscle fast isoform;
AALPADPPAS	VVVGPPVVPR	N-ter +34.06 Da	26.8	26.7	2	1053.74	0.42	0.02	FETUA_MOUSE		Alpha-2-HS-glycoprotein;	Countertrypin;Fetuin-A; Serine-rich spermatocytes and round spermatid 59 kDa protein;p59scr; MMGL;Macrophage galactose/N-acetylgalactosamine-specific lectin;
RCTVSLARYR	VVVKEEMDASIKMKK	N-ter +28.03 Da, K +28.03 Da	28.6	18.3	3	1874.13	1.91	0.37	SPAS2_MOUSE		Spermatogenesis-associated serine-rich protein 2;	
FSLGLSLLLL	VVVSVIGSQNSQLR	N-ter +34.06 Da	36.7	29.4	3	1518.94	0.18	0.01	MMGL_MOUSE	F8WHB7_MOUSE	Macrophage asialoglycoprotein-binding protein 1;	
YSDSPGLHRY	VWLVYEQEQPLSCDEPILSNKSGDNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	55.7	75.0	4	3143.82	4.27	0.29	PEBP1_MOUSE	D3Z1V4_MOUSE	Phosphatidylethanolamine-binding protein 1;	HCNPPp;
IWHNDKNSFL	VWVNEEDHLR	N-ter +28.03 Da	35.8	50.4	3	1323.72	-0.22	0.00	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
GSVAGGAVYL	VYDQELGSPDKSEAAALR	N-ter +28.03 Da, K +28.03 Da	31.8	58.0	3	2046.18	0.50	0.09	QIL1_MOUSE		Protein QIL1;	
SPGLHRYVWL	VVEEQEQPLSCDEPILSNKSGDNR	N-ter +34.06 Da, K +34.06 Da, C +57.02 Da	46.0	76.6	4	2745.57	-2.74	0.55	PEBP1_MOUSE	D3Z1V4_MOUSE	Phosphatidylethanolamine-binding protein 1;	HCNPPp;
KIKGLVRAPQ	VVILPPPAEQLSR	N-ter +28.03 Da	37.9	38.3	3	1509.91	-0.74	0.03	IGG2B_MOUSE		Ig gamma-2B chain C region;	
DAEKAVSCL	WAKVNPDEVGGEALGR	N-ter +34.06 Da, K +34.06 Da	37.0	53.0	3	1765.07	-3.06	0.26	HBB2_MOUSE		Hemoglobin subunit beta-2;	Beta-2-globin;Hemoglobin beta-2 chain;Hemoglobin beta-minor chain;
VSLYGNPURY	WEIFPNTR	N-ter +28.03 Da	24.0	46.3	2	1236.69	-1.89	0.21	PGS2_MOUSE		Decorin;	Bone proteoglycan II;PG-S2;PG40;
LLPQWPAASA	WELTILHTNDVHSR	N-ter +34.06 Da	25.5	93.0	4	1754.10	0.58	0.03	SNTD_MOUSE		5'-nucleotidase;	Ecto-5'-nucleotidase;
GVAGSLMAVA	WFIITQEILTPFR	N-ter +34.06 Da	19.6	72.5	4	1907.25	0.04	0.00	DOPP1_MOUSE		Dolichyl pyrophosphatase 1;	Dolichyl pyrophosphatase 1;Protein 2-23;
DAEKAASVCL	WGKVNDSDEGGEALGR	N-ter +28.03 Da, K +28.03 Da	32.5	70.4	3	1729.00	-0.27	0.03	HBB1_MOUSE		Hemoglobin subunit beta-1;	Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
LASLTFQQM	WISKQYDESGPSIVHR	N-ter +34.06 Da, K +34.06 Da	42.1	75.3	4	2098.27	0.36	0.05	ACTB_MOUSE	ACTG_MOUSE	Actin, cytoplasmic 1;	Beta-actin;
LASLTFQQM	WITKQYDEAGPSIVHR	N-ter +34.06 Da, K +34.06 Da	35.3	52.9	4	2096.24	0.35	0.03	ACTS_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;
KDTIARLPF	WNEEIIAPKIKAGQR	N-ter +34.06 Da, K +34.06 Da	26.1	83.0	4	1741.22	-0.97	0.10	PGAM2_MOUSE		Phosphoglycerate mutase 2;	BPG-dependent PGAM 2;Muscle-specific phosphoglycerate mutase;Phosphoglycerate mutase isozyme M;
LAHFDRVMT	WVFEEDIGGR	N-ter +34.06 Da	31.0	57.1	2	1240.70	3.12	0.10	GPDA_MOUSE	E0CXN5_MOUSE	Glycerol-3-phosphate dehydrogenase [NAD+], cytoplasmic;	

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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
SAAVLRPGLG SNQGRYYEYP	WYTVNSAYGDTIVMPCR YAAGPSYGGR	N-ter +28.03 Da, C +57.02 Da N-ter +28.03 Da	32.9 23.5	58.6 46.6	3 2	2060.07 1025.54	0.72 -0.03	0.11 0.01	CD166_MOUSE LPP_MOUSE	Q5MPX5_MOUSE	CD166 antigen; Lipoma-preferred partner homolog;	Activated leukocyte cell adhesion molecule;Protein DM-GRASP; Myc-induced SUN domain-containing protein;NOL1/NOP2/Sun domain family member 2; Thioredoxin domain-containing protein 7;
DPLFPPIEK QSDGLWLVF NSPLVRLTL	YALDPSFPR YAPWCGHCQR YDIAHTPGVAADLSHIETR	N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da	30.1 22.6 27.1	48.6 66.9 58.8	2 3 4	1092.61 1361.67 2099.21	-2.06 -0.69 -0.67	0.00 0.10 0.09	NSUN2_MOUSE PDIAG_MOUSE MDHM_MOUSE	Q3TML0_MOUSE	tRNA (cytosine(34)-C(5))-methyltransferase; Protein disulfide-isomerase A6; Malate dehydrogenase, mitochondrial; Electron transfer flavoprotein subunit alpha, mitochondrial; Glyceraldehyde-3-phosphate dehydrogenase; Pleckstrin;	
LKSGENFKLL NDFVFKLSW LREDPAYLHW VKCAQIEAKF VNIIGGAGSYI TWSFSEWQMA PPLNPLISAN	YDLADQLHAAVGASR YDNEYGYSNR YDPAGGEDPLGAVHLR YEEVHDLER YEPQTEAPQVTGPIEVPVVR YEPQGGSSYDYSYAGGR YERPVLHLVALINTPVAGDIR	N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da N-ter +34.06 Da	52.1 28.3 75.3 22.2 56.3 47.6 42.6	72.3 66.2 69.1 71.7 72.6 53.8 58.8	3 3 3 3 4 3 4	1619.96 1313.66 1699.99 1222.69 2392.47 1859.92 2266.48	-0.60 -1.29 0.50 -3.47 0.89 -0.49 1.39	0.05 0.09 0.06 0.39 0.09 0.06 0.11	ETFA_MOUSE G3P_MOUSE PLEK_MOUSE NP1L1_MOUSE CRIP2_MOUSE HNRPK_MOUSE COFA1_MOUSE	G3PT_MOUSE Q8CAG6_MOUSE NP1L4_MOUSE E9Q8D6_MOUSE A2AIJ7_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase; Nucleosome assembly protein 1-like 1; Cysteine-rich protein 2; Heterogeneous nuclear ribonucleoprotein K; Collagen alpha-1(XV) chain;	Peptidyl-cysteine S-nitrosylase GAPDH; Brain protein DN38;NAP-1-related protein; Heart LIM protein;
LGLAAADPAI	YFKEQFLDGDWATNR	N-ter +28.03 Da, K +28.03 Da N-ter +28.03 Da, K +28.03 Da, C +57.02 Da	43.1 19.7	64.6 70.4	3 3	1945.06 1910.99	1.64 0.12	0.22 0.02	CALR_MOUSE ALBU_MOUSE		Calreticulin; Serum albumin;	CRP55;Calregulin;Endoplasmic reticulum resident protein 60;HACBP;
LCAIPNLREN QPQQQMTSS	YELADCCTKQEPER YGGYKEPAAPVSIQR	N-ter +28.03 Da, K +28.03 Da, C +57.02 Da N-ter +34.06 Da, K +34.06 Da	19.7 22.6	70.4 55.6	3 3	1910.99 1703.06	0.12 -0.25	0.02 0.02	ALBU_MOUSE LASP1_MOUSE	A2A6H0_MOUSE	LIM and SH3 domain protein 1; Swi5-dependent recombination DNA repair protein 1 homolog;	Metastatic lymph node gene 50 protein;
KLTLTLDIF YEEALCLATH AMGEPGRGP LGGNFASQMS	YGIDDDLLHYNR YGLDIDLVIQR YGLPGKDGEPGLDGFPGPR YGYDEKSAGVSPVPMGPGSGPR	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	35.4 21.7 30.3 59.4	43.4 44.8 45.9 56.4	3 2 3 3	1519.81 1369.75 1984.10 2275.29	-0.34 3.30 1.56 1.24	0.03 0.15 0.13 0.19	SFR1_MOUSE E9Q411_MOUSE COP1A_MOUSE CO1A1_MOUSE	D3Z3G9_MOUSE F8WGB7_MOUSE	Collagen alpha-1(XIV) chain; Collagen alpha-1(I) chain;	CLAC-P; Alpha-1 type I collagen;
GTQCEKIVQK	YGYTHLSTGDLR	N-ter +34.06 Da	38.8	50.0	3	1528.89	-1.32	0.10	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase;
KAIMTYVSSF AKVNDLVATA	YHAFSGAQKAETAANR YKTIKTKLPLTLR	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	29.9 14.5	98.0 85.6	4 4	1789.13 1710.39	-1.60 -0.86	0.15 0.03	ACTN1_MOUSE COG3_MOUSE	ACTN4_MOUSE E9QL65_MOUSE	Alpha-actinin-1; Conserved oligomeric Golgi complex subunit 3;	Alpha-actinin cytoskeletal isoform;F-actin cross-linking protein;Non-muscle alpha-actinin-1; Component of oligomeric Golgi complex 3;
VSADTRCHSC AGLPTSLTL KYQLVAGIKY	YKVPVLGCVDR YLDNKNKINPDEYFKR YLTLDIESTECR	N-ter +28.03 Da N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, C +57.02 Da	30.9 41.1 35.0	47.4 60.5 40.8	3 4 3	1360.82 2212.29 1532.82	0.77 1.55 -1.25	0.01 0.06 0.15	LY66C_MOUSE LUM_MOUSE Q9D181_MOUSE		Lymphocyte antigen 6 complex locus protein G6c; Lumican;	Keratan sulfate proteoglycan lumican;
LGKLPFLAF	YMEKNQLEEVPSALPR	N-ter +34.06 Da, K +34.06 Da	39.5	61.8	3	1971.20	0.28	0.02	PRELP_MOUSE		Prolargin;	Proline-arginine-rich end leucine-rich repeat protein;
ETIKRLETY	YNATEPVISFYDKR	N-ter +34.06 Da, K +34.06 Da	29.1	63.6	3	1770.08	-1.03	0.11	KAD1_MOUSE		Adenylate kinase isoenzyme 1; WD repeat domain phosphoinositide-interacting protein 2;	ATP-AMP transphosphorylase 1;Myokinase;
VGASDGYLYM	YNLDPQEGGECALMR	N-ter +28.03 Da, C +57.02 Da	43.1	54.4	3	1779.89	0.85	0.09	WIPI2_MOUSE	D3YWK1_MOUSE		
DLAVDSASPV DKAKELWDTL	YQAVIKTQSKPEDEADEWAR YQLETDKFEGEKLR	N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da, K +28.03 Da	16.1 19.5	59.9 77.3	4 4	2465.48 2142.34	0.00 2.04	0.00 0.21	LDB3_MOUSE TNNT3_MOUSE	E9PYJ9_MOUSE A2A6J0_MOUSE	LIM domain-binding protein 3; Troponin T, fast skeletal muscle;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein; Fast skeletal muscle troponin T; NFAT pre-existing subunit;T-cell transcription factor NFAT1;
SKSLSPGLLG PGLTGNFAAQ SPRRSQVHPE	YQQPSSLAAPGLADADR YSDKGVSSGPGMGLMGPR YSEGEAHSEVSQR	N-ter +34.06 Da N-ter +34.06 Da, K +34.06 Da N-ter +34.06 Da	45.9 67.9 42.1	54.2 58.4 69.1	3 3 3	1954.19 1960.13 1511.81	-1.22 1.98 1.01	0.06 0.07 0.24	NFAC2_MOUSE CO1A2_MOUSE FILA2_MOUSE	B5B2Q6_MOUSE E0CX12_MOUSE E9QPZ3_MOUSE	Nuclear factor of activated T-cells, cytoplasmic 2; Collagen alpha-2(I) chain; Filaggrin-2;	Alpha-2 type I collagen; Intermediate filament-associated protein;
PAAAVCSIRC	YSHGSHETDEEFDR	N-ter +34.06 Da	20.4	113.2	4	1812.98	-0.09	0.01	COX5A_MOUSE		Cytochrome c oxidase subunit 5A, mitochondrial;	Cytochrome c oxidase polypeptide Va; Alcohol sulfotransferase;Hydroxysteroid sulfotransferase 2;
AAMKANTMSN CTFFLAVSGL	YSLLPASLLDHR YSSDDVIELTPSNFNR	N-ter +28.03 Da N-ter +34.06 Da	45.5 49.0	78.0 39.0	3 3	1411.89 1977.03	0.66 0.60	0.08 0.05	ST2B1_MOUSE PDIAG_MOUSE	E9QKC1_MOUSE Q3TML0_MOUSE	Sulfotransferase family cytosolic 2B member 1; Protein disulfide-isomerase A6;	Thioredoxin domain-containing protein 7; Sterile alpha motif domain-containing protein 4B; Protein FAM121B;
QIIHPIKA SYMKIDELSL NCCSRPVGGR GAGNNAKAGH YGFQNAILVR	YSVLQATPTAKDEGR YSPVEGQSKYVEEPR YTAPVGPVTTASAR YTEGAEALVDSVLDVVR YTQKAPQVSTPLVEAAR	N-ter +28.03 Da, K +28.03 Da N-ter +34.06 Da, K +34.06 Da N-ter +28.03 Da N-ter +34.06 Da N-ter +28.03 Da, K +28.03 Da	36.4 22.7 42.0 63.2 53.4	65.8 67.4 44.5 59.1 60.6	3 3 3 3 3	1691.00 1835.10 1417.82 1798.06 2015.23	0.12 -0.07 -0.22 -0.27 1.18	0.01 0.01 0.03 0.03 0.14	SMAG2_MOUSE APOO_MOUSE E9Q2E9_MOUSE TBB2B_MOUSE ALBU_MOUSE	B1ASQ2_MOUSE	Protein Smaug homolog 2; Apolipoprotein O; Tubulin beta-2A chain; Serum albumin;	
QKIGQPTLLL	YVDAGAETMTQR	N-ter +28.03 Da	31.1	70.5	3	1368.73	0.64	0.03	KAD1_MOUSE		Adenylate kinase isoenzyme 1;	ATP-AMP transphosphorylase 1;Myokinase; Alpha-tubulin 1;Alpha-tubulin isoform M-alpha-1;Tubulin alpha-1 chain;
MYAKRAFVHW HPFMWNEHLG KAPEGEETF DPALKYNVTVW	YVGEEMEEGFSEAR YVLTCPNSLGTGLR YVSPDELEAQLQSDER YVSSSPCAACADR	N-ter +28.03 Da N-ter +28.03 Da, C +57.02 Da N-ter +34.06 Da N-ter +34.06 Da, C +57.02 Da	42.0 26.8 47.7 32.7	67.8 49.8 46.0 67.4	3 3 3 3	1716.85 1577.90 1912.02 1476.75	0.10 -1.18 0.77 -0.11	0.02 0.08 0.06 0.03	TBA1A_MOUSE KCRM_MOUSE DNIC5_MOUSE ABEC2_MOUSE	TBA1B_MOUSE	Tubulin alpha-1A chain; Creatine kinase M-type; DnaJ homolog subfamily C member 5; Probable C->U-editing enzyme APOBEC-2;	Creatine kinase M chain;M-CK; Cysteine string protein;
SLWKFETSKY LQKRPKPDEK	YVTIIDAPGHR YVSSSIWGTPCGLDR	N-ter +34.06 Da N-ter +34.06 Da, C +57.02 Da	41.5 23.3	50.5 88.1	3 4	1274.78 1910.04	0.41 -6.64	0.01 0.00	EF1A1_MOUSE DCOR_MOUSE	D3Z3I8_MOUSE Q8CIC5_MOUSE	Elongation factor 1-alpha 1; Ornithine decarboxylase;	Elongation factor Tu;Eukaryotic elongation factor 1 A-1;

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
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