Table S15: Acetylated N-termini identified in the TAILS experiment comparing wild-type and *Ctsb*$^{-/-}$ skin (replicate 1). 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
MAA	AAAAAAAAGAAGGRGSGPGRR	N-ter + 42.01 Da	44.8	48.8	3	1764.99	n.d.	n.d.	PABP2_MOUSE		Polyadenylate-binding protein 2;	Nuclear poly(A)-binding protein 1;Poly(A)-binding protein II;Polyadenylate-binding nuclear protein 1;
AAAAAAVAAA	AAAAAAAEPYPASGTTKR	N-ter + 42.01 Da, K +34.06 Da	37.8	29.7	3	1778.99	-2.74	0.37	ALKB5_MOUSE		Probable alpha-ketoglutarate-dependent dioxygenase ABH5;	Alkylated DNA repair protein alkB homolog 5;
M	AAAAAASHLNLDALR	N-ter + 42.01 Da	46.4	51.6	3	1505.87	n.d.	n.d.	TRI32_MOUSE	A2AGS1_MOUSE	E3 ubiquitin-protein ligase TRIM32;	Tripartite motif-containing protein 32;
M	AAAAGAVVASAASGPAEGKKITELR	N-ter + 42.01 Da, K +34.06 Da	65.2	37.3	3	2405.48	0.32	0.01	SLTM_MOUSE		SAFB-like transcription modulator;	Modulator of estrogen-induced transcription;SAF-like transcription modulator;
M	AAAKDGCGLETAAGNGR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	54.0	57.4	3	1687.89	-0.27	0.02	PFD3_MOUSE	Q3TIR6_MOUSE	Prefoldin subunit 3;	Von Hippel-Lindau-binding protein 1;
M	AAAMDVDTPSGTNSGAGKKR	N-ter + 42.01 Da, K +28.03 Da	42.4	66.0	3	2031.14	-0.03	0.01	RBX1_MOUSE		E3 ubiquitin-protein ligase RBX1;	RING finger protein 75;RING-box protein 1;
M	AAAPATLALDPQPQEKQKDASESSELSR	N-ter + 42.01 Da, K +28.03 Da	31.7	74.5	4	3035.77	-0.43	0.06	RABE2_MOUSE		Rab GTPase-binding effector protein 2;	Rabaptin-5beta;
M	AADDKVAILTDDEEEQKR	N-ter + 42.01 Da, K +28.03 Da	26.3	64.6	3	2143.20	0.52	0.05	MFSD6_MOUSE	D3Z183_MOUSE	Major facilitator superfamily domain-containing protein 6;	Macrophage MHC class I receptor 2;
M	AADISQWAGPLCLQEVDEPPQHALR	N-ter + 42.01 Da, C +57.02 Da	54.6	55.7	3	2842.53	n.d.	n.d.	PEBP1_MOUSE	D3Z1V4_MOUSE	Phosphatidylethanolamine-binding protein 1;	HCNPpp;
M	AAGFKTVEPLEYYR	N-ter + 42.01 Da, K +28.03 Da	42.2	53.1	3	1712.97	-0.74	0.04	EXOS8_MOUSE	D3YYN3_MOUSE	Exosome complex component RRP43;	Exosome component 8;Ribosomal RNA-processing protein 43;
CQKEEAGPGP	AAGPGTQPGLYSYIR	N-ter + 42.01 Da	31.3	80.1	3	1591.93	n.d.	n.d.	TRM2A_MOUSE	Q3UYU2_MOUSE	tRNA (uracil-5-)-methyltransferase homolog A;	HpaII tiny fragments locus 9c protein;
M	AAIPSSGSLVATHDYYR	N-ter + 42.01 Da	27.3	55.3	3	1849.00	n.d.	n.d.	PPDPF_MOUSE		Pancreatic progenitor cell differentiation and proliferation factor;	Exocrine differentiation and proliferation factor;
M	AAKPKLYYFNGR	N-ter + 42.01 Da, K +28.03 Da	32.8	52.0	3	1524.93	-0.52	0.04	GSTA4_MOUSE		Glutathione S-transferase A4;	GST A4-4;GST class-alpha member 4;Glutathione S-transferase 5.7;
M	AANATTNPSQLLPLELVDKCIGSR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	57.8	42.8	3	2643.53	-0.07	0.03	LSM5_MOUSE		U6 snRNA-associated Sm-like protein LSm5;	
ADTSKQESNM	AAPAKGENLSLVVHGPGDIR	N-ter + 42.01 Da, K +28.03 Da	56.7	62.2	3	2070.25	-0.04	0.01	DHSO_MOUSE		Sorbitol dehydrogenase;	L-iditol 2-dehydrogenase;
M	AAPSVPTPLYGHVGR	N-ter + 42.01 Da	40.8	34.4	3	1562.87	n.d.	n.d.	D3Z6J0_MOUSE	Q6PRU9_MOUSE		
M	AAQVAPAAASSLGNPPPPPSELKKAEQQQR	N-ter + 42.01 Da, K +28.03 Da	40.4	72.6	4	3135.90	0.14	0.01	ARI1A_MOUSE	E9QAQ7_MOUSE	AT-rich interactive domain-containing protein 1A;	BRG1-associated factor 250;BRG1-associated factor 250a;Osa homolog 1;SWI-like protein;SWI/SNF complex protein p270;SWI/SNF-related, matrix-associated, actin-dependent regulator of chromatin subfamily F member 1;
M	AASAIKGLSALR	N-ter + 42.01 Da, K +34.06 Da	60.5	21.1	2	1232.79	0.72	0.04	SLIRP_MOUSE		SRA stem-loop-interacting RNA-binding protein, mitochondrial;	
M	AASKVKQDMPPPGGYGPIDYKR	N-ter + 42.01 Da, K +34.06 Da	51.3	55.7	4	2518.55	0.10	0.00	NDUAD_MOUSE		NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13;	Cell death regulatory protein GRIM-19;Complex I-B16.6;Gene associated with retinoic and interferon-induced mortality 19 protein;NADH-ubiquinone oxidoreductase B16.6 subunit;
M	AASPSKTEIQTIFKR	N-ter + 42.01 Da, K +28.03 Da	29.8	66.4	3	1774.12	0.39	0.04	ARFG2_MOUSE		ADP-ribosylation factor GTPase-activating protein 2;	GTPase-activating protein ZNF289;Zinc finger protein 289;
M	AASSSQVSEMKGVEDSSKTQTEGPR	N-ter + 42.01 Da, K +34.06 Da	39.7	69.5	4	2705.53	0.31	0.04	E9PUL5_MOUSE			
M	AATFFGEVVKAPCR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	30.8	59.6	3	1621.93	0.37	0.07	PSMG1_MOUSE	D3Z795_MOUSE	Proteasome assembly chaperone 1;	Down syndrome critical region protein 2 homolog;
M	AATTGSGVKVPR	N-ter + 42.01 Da, K +28.03 Da	68.2	35.5	2	1212.73	0.75	0.07	UB2V1_MOUSE	D3Z1I3_MOUSE	Ubiquitin-conjugating enzyme E2 variant 1;	CROC-1;
M	AAYKLVLIR	N-ter + 42.01 Da, K +34.06 Da	44.3	58.1	2	1121.80	0.42	0.04	PGAM1_MOUSE		Phosphoglycerate mutase 1;	BPG-dependent PGAM 1;Phosphoglycerate mutase isozyme B;
M	ACGLVASNLNLKPGECLKVR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	52.2	79.2	4	2296.42	-0.12	0.01	LEG1_MOUSE		Galectin-1;	14 kDa lectin;Beta-galactoside-binding lectin L-14-I;Galaptin;Lactose-binding lectin 1;Lectin galactoside-binding soluble 1;S-Lac lectin 1;
M	ADAAASPVGKR	N-ter + 42.01 Da, K +34.06 Da	56.8	39.5	2	1117.67	0.39	0.04	KDM3B_MOUSE	B9EKS2_MOUSE	Lysine-specific demethylase 3B;	JmjC domain-containing histone demethylation protein 2B;Jumonji domain-containing protein 1B;
IQNLHSFDPF	ADASKGDDLLPAGTEDYIHIR	N-ter + 42.01 Da, K +28.03 Da	39.5	96.5	4	2326.37	2.33	0.13	EIF1_MOUSE		Eukaryotic translation initiation factor 1;	Protein translation factor SUI1 homolog;
M	ADEDGEGIHPSAPHR	N-ter + 42.01 Da	43.5	76.5	3	1628.84	n.d.	n.d.	SNX27_MOUSE	D6RE54_MOUSE	Sorting nexin-27;	
M	ADEEKLPPGWEKR	N-ter + 42.01 Da, K +34.06 Da	53.7	69.2	3	1664.04	-0.18	0.01	PIN1_MOUSE		Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1;	Peptidyl-prolyl cis-trans isomerase Pin1;
M	ADEIAKAQVAQPGGDTIFGKIIR	N-ter + 42.01 Da, K +34.06 Da	59.0	87.0	4	2507.66	-0.20	0.05	HINT1_MOUSE	B0R1E3_MOUSE	Histidine triad nucleotide-binding protein 1;	Adenosine 5'-monophosphoramidase;Protein kinase C inhibitor 1;Protein kinase C-interacting protein 1;
NIYKPNNKAM	ADEVTEKQVYDAHTKEIDLVNR	N-ter + 42.01 Da, K +34.06 Da	40.1	44.0	4	2682.53	-0.18	0.03	CAV1_MOUSE	D3Z148_MOUSE	Caveolin-1;	
M	ADKEAAFDDAVEER	N-ter + 42.01 Da, K +28.03 Da	51.5	49.8	3	1634.82	0.06	0.01	RBBP4_MOUSE	E9PYH8_MOUSE	Histone-binding protein RBBP4;	Chromatin assembly factor 1 subunit C;Chromatin assembly factor I p48 subunit;Nucleosome-remodeling factor subunit RBAP48;Retinoblastoma-binding protein 4;Retinoblastoma-binding protein p48;
M	ADKMDMSLDDIIKLNR	N-ter + 42.01 Da, K +28.03 Da	67.5	61.9	3	1975.13	1.01	0.17	REFP2_MOUSE	THOC4_MOUSE	RNA and export factor-binding protein 2;	
M	ADLEEQLSDEEKVR	N-ter + 42.01 Da, K +34.06 Da	54.6	40.7	3	1735.94	-0.20	0.05	CAZA2_MOUSE	D6RCW7_MOUSE	F-actin-capping protein subunit alpha-2;	CapZ alpha-2;
M	ADLSLVDALTEPPPEIEGEIKR	N-ter + 42.01 Da, K +34.06 Da	37.6	60.9	3	2467.48	-0.09	0.03	MAP4_MOUSE	Q78TF3_MOUSE	Microtubule-associated protein 4;	
M	ADTAPQLKR	N-ter + 42.01 Da, K +28.03 Da	39.0	41.6	2	1068.64	0.41	0.04	DCPS_MOUSE	Q3TBW9_MOUSE	Scavenger mRNA-decapping enzyme DcpS;	DCS-1;Hint-related 7meGMP-directed hydrolase;Histidine triad protein member 5;
IQTQQLHAAM	ADTFLEHMCR	N-ter + 42.01 Da, C +57.02 Da	49.6	43.2	2	1320.62	n.d.	n.d.	KPYM_MOUSE		Pyruvate kinase isozymes M1/M2;	Pyruvate kinase muscle isozyme;
SVPAPPTLPM	ADTYAVVQKR	N-ter + 42.01 Da, K +34.06 Da	45.3	38.8	2	1225.74	0.32	0.03	PTN18_MOUSE	Q3V441_MOUSE	Tyrosine-protein phosphatase non-receptor type 18;	Fetal liver phosphatase 1;PTP-K1;

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	ADVSVDQSKLPGVKEVCR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	38.5	55.8	3	2096.27	1.49	0.15	CCD50_MOUSE		Coiled-coil domain-containing protein 50;	Protein Ymer;
M	AEAEAAQLKEEGNR	N-ter + 42.01 Da, K +28.03 Da	33.6	54.9	3	1584.86	0.08	0.01	UN45B_MOUSE		Protein unc-45 homolog B;	
M	AEEQPQVELFVKAGSDGAKIGNCPFSQR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	20.5	73.9	4	3171.86	-0.01	0.00	CLIC1_MOUSE		Chloride intracellular channel protein 1;	Nuclear chloride ion channel 27;
M	AEFPSKVSTR	N-ter + 42.01 Da, K +34.06 Da	35.2	20.1	2	1196.69	0.16	0.01	PLLP_MOUSE		Plasmolipin;	Plasma membrane proteolipid;
M	AEKTQKSVKIAPGAVVCVESEIR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	40.7	64.9	4	2642.72	-0.11	0.02	DCTN6_MOUSE	D3Z6A1_MOUSE	Dynactin subunit 6;	Dynactin subunit p27;Protein WS-3;
M	AELDIGQHCQVQHCR	N-ter + 42.01 Da, C +57.02 Da	37.7	53.4	3	1891.94	n.d.	n.d.	ZFAN1_MOUSE	D3Z7G5_MOUSE	AN1-type zinc finger protein 1;	
GTDPSTSRKM	AELEEVTLDGKPLQALR	N-ter + 42.01 Da, K +34.06 Da	51.9	53.6	3	1957.20	0.39	0.10	ACINU_MOUSE	E9Q9R4_MOUSE	Apoptotic chromatin condensation inducer in the nucleus;	
M	AELQEVQITEEKPLLPGQTPETAKEAELAAR	N-ter + 42.01 Da, K +28.03 Da	45.8	67.5	4	3487.08	-0.22	0.05	NDRG2_MOUSE		Protein NDRG2;	Protein Ndr2;
M	AELQMLLEEEIPSGKR	N-ter + 42.01 Da, K +28.03 Da	56.9	57.6	3	1912.11	-0.06	0.01	ABI1_MOUSE	B7ZCU5_MOUSE	Abl interactor 1;	Abelson interactor 1;Ablphilin-1;Eps8 SH3 domain-binding protein;Spectrin SH3 domain-binding protein 1;e3B1;
M	AELVQGQSAPVGMKAEGFVDALHR	N-ter + 42.01 Da, K +34.06 Da	37.1	79.3	4	2585.55	-0.38	0.06	A2AJ72_MOUSE	Q3TIX6_MOUSE		
CPAGGAEVEM	AELYVKPGNKER	N-ter + 42.01 Da, K +34.06 Da	27.9	49.1	3	1512.97	0.71	0.10	SRA1_MOUSE		Steroid receptor RNA activator 1;	Steroid receptor RNA activator protein;
M	AENGESSGPPRPSR	N-ter + 42.01 Da	28.8	78.7	3	1481.80	n.d.	n.d.	UBQL2_MOUSE		Ubiquilin-2;	Chap1;DSK2 homolog;Protein linking IAP with cytoskeleton 2;Ubiquitin-like product Chap1/Dsk2;
M	AENLLDGPPNPKR	N-ter + 42.01 Da, K +28.03 Da	29.2	36.4	3	1489.84	-0.15	0.01	CBP_MOUSE	F8VPR5_MOUSE	CREB-binding protein;	
M	AENNAQNKAKLISETR	N-ter + 42.01 Da, K +34.06 Da	42.9	58.4	3	1896.18	0.35	0.07	MSPD2_MOUSE	B1AU74_MOUSE	Motile sperm domain-containing protein 2;	
M	AENPGLENHR	N-ter + 42.01 Da	48.1	44.8	2	1177.60	n.d.	n.d.	IMA3_MOUSE	E9Q1R3_MOUSE	Importin subunit alpha-3;	Importin alpha Q2;Karyopherin subunit alpha-3;
M	AERPEDLNLPNAVITR	N-ter + 42.01 Da	39.2	39.7	3	1849.04	n.d.	n.d.	DPOE3_MOUSE	D6RDT4_MOUSE	DNA polymerase epsilon subunit 3;	DNA polymerase II subunit 3;DNA polymerase epsilon subunit p17;NF-YB-like protein;YB-like protein 1;
M	AETLSGLGDASAAGAAAVSSAASETGTRR	N-ter + 42.01 Da	47.2	51.5	3	2676.43	n.d.	n.d.	D3YXK2_MOUSE	E9PZM6_MOUSE		
MAFPPPLWE	AEVEETLKR	N-ter + 42.01 Da, K +28.03 Da	52.1	34.2	2	1143.65	1.26	0.14	DLRB1_MOUSE	A2AVR9_MOUSE	Dynein light chain roadblock-type 1;	Dynein light chain 2A, cytoplasmic;
M	AEVGSKSVLFVCLGNICR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	52.5	55.2	3	2078.18	-1.18	0.27	PPAC_MOUSE	Q561M1_MOUSE	Low molecular weight phosphotyrosine protein phosphatase;	Low molecular weight cytosolic acid phosphatase;
M	AFASEDNVYHSSNAVYR	N-ter + 42.01 Da	56.7	51.9	3	1970.98	n.d.	n.d.	S29A3_MOUSE	D6RI95_MOUSE	Equilibrative nucleoside transporter 3;	Solute carrier family 29 member 3;
M	AFCAPPAYLTHQQKVLR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	30.7	63.5	3	2075.25	-1.36	0.14	NDUB9_MOUSE		NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 9;	Complex I-B22;NADH-ubiquinone oxidoreductase B22 subunit;
M	AFKDTGKTPVEPEVAIHR	N-ter + 42.01 Da, K +34.06 Da	38.6	66.7	4	2104.34	1.32	0.15	RS20_MOUSE		40S ribosomal protein S20;	
DPVIYQRLAD	AFNKLTASSTPPALDR	N-ter + 42.01 Da, K +34.06 Da	30.2	62.7	3	1764.07	-2.84	0.20	XPO4_MOUSE		Exportin-4;	
M	AGGEAGVTLGQPHLSR	N-ter + 42.01 Da	53.9	54.6	3	1590.90	n.d.	n.d.	IF2H_MOUSE		Eukaryotic translation initiation factor 2 subunit 3, Y-linked;	Eukaryotic translation initiation factor 2 subunit gamma, Y-linked;
M	AGGEGGVTLGQPHLSR	N-ter + 42.01 Da	68.4	31.5	2	1576.85	n.d.	n.d.	IF2G_MOUSE	A2AAW9_MOUSE	Eukaryotic translation initiation factor 2 subunit 3, X-linked;	Eukaryotic translation initiation factor 2 subunit gamma, X-linked;
M	AGGPPKALPSTGPQSLR	N-ter + 42.01 Da, K +34.06 Da	44.6	60.5	3	1709.07	0.14	0.02	SNX30_MOUSE		Sorting nexin-30;	
M	AGKPVLHYFDGR	N-ter + 42.01 Da, K +28.03 Da	42.2	47.7	3	1428.82	-0.15	0.02	GSTA3_MOUSE		Glutathione S-transferase A3;	GST class-alpha member 3;Glutathione S-transferase Ya3;Glutathione S-transferase Yc;
M	AGKPVLHYFNAR	N-ter + 42.01 Da, K +28.03 Da	31.4	48.7	3	1441.85	-0.52	0.04	GSTA1_MOUSE	GSTA2_MOUSE	Glutathione S-transferase A1;	GST class-alpha member 1;Glutathione S-transferase Ya;Glutathione S-transferase Ya1;
M	AGLGHPSAFGR	N-ter + 42.01 Da	50.3	58.7	2	1110.62	n.d.	n.d.	DDAH1_MOUSE		N(G),N(G)-dimethylarginine dimethylaminohydrolase 1;	DDAHI;Dimethylargininase-1;
M	AGLLKKTTGLVGLAVCDTPHER	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	49.5	93.7	4	2433.57	-3.18	0.29	NDUA5_MOUSE		NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5;	Complex I subunit B13;Complex I-13kD-B;NADH-ubiquinone oxidoreductase 13 kDa-B subunit;
M	AGLNSLEAVKR	N-ter + 42.01 Da, K +34.06 Da	58.5	26.4	2	1232.76	-0.06	0.01	TPM4_MOUSE		Tropomyosin alpha-4 chain;	Tropomyosin-4;
M	AGSAWVSKVSR	N-ter + 42.01 Da, K +28.03 Da	48.2	29.8	2	1216.69	-1.03	0.11	IDH3A_MOUSE		Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial;	Isocitric dehydrogenase subunit alpha;NAD(+)-specific ICDH subunit alpha;
M	AGTTTIEAVKR	N-ter + 42.01 Da, K +28.03 Da	53.7	30.2	2	1215.72	-0.42	0.04	Q8C7C3_MOUSE	D3Z6I8_MOUSE		
M	AGVDQHEGTIQVQGQNLFFR	N-ter + 42.01 Da	47.4	52.9	3	2285.24	n.d.	n.d.	ABHEB_MOUSE		Abhydrolase domain-containing protein 14B;	CCG1-interacting factor B;
LLADAYSGRM	AGVRPDNVAEVVAGAR	N-ter + 42.01 Da	52.3	34.3	3	1621.91	n.d.	n.d.	KBTBB_MOUSE		Kelch repeat and BTB domain-containing protein 11;	
M	AHATPPSALEQGGPIR	N-ter + 42.01 Da	41.9	50.9	3	1642.93	n.d.	n.d.	GTL3B_MOUSE		Protein GTLF3B;	Gene trap locus protein F3-2;Gene trap locus protein F3b;
M	AKDILGEAGLHFDELNKLR	N-ter + 42.01 Da, K +34.06 Da	54.4	92.1	4	2248.49	-0.34	0.02	IFT20_MOUSE		Intraflagellar transport protein 20 homolog;	
M	AKIAKTHEDIEAQIR	N-ter + 42.01 Da, K +34.06 Da	26.5	64.0	4	1832.20	0.08	0.01	SF3B1_MOUSE		Splicing factor 3B subunit 1;	Pre-mRNA-splicing factor SF3b 155 kDa subunit;Spliceosome-associated protein 155;
M	AKIAQGAMYR	N-ter + 42.01 Da, K +28.03 Da	44.6	39.2	2	1177.67	1.38	0.05	ANXA6_MOUSE	F8WIT2_MOUSE	Annexin A6;	67 kDa calelectrin;Annexin VI;Annexin-6;Calphobindin-II;Chromobindin-20;Lipocortin VI;Protein III;p68;p70;
EVSSVPTNGM	AKNGSEADIDESLYSR	N-ter + 42.01 Da, K +34.06 Da	56.5	52.6	3	1829.98	0.28	0.03	UBA1_MOUSE		Ubiquitin-like modifier-activating enzyme 1;	Ubiquitin-activating enzyme E1;Ubiquitin-activating enzyme E1 X;Ubiquitin-like modifier-activating enzyme 1 X;
M	AKTEEMVQTEEMETPR	N-ter + 42.01 Da, K +28.03 Da	44.9	48.2	3	1978.00	-0.43	0.02	BAG1_MOUSE	F6TCF9_MOUSE	BAG family molecular chaperone regulator 1;	Bcl-2-associated athanogene 1;
M	AKVEQVLSLEPQHELKFR	N-ter + 42.01 Da, K +34.06 Da	35.2	44.7	3	2260.42	-1.09	0.12	VAPB_MOUSE	Q8BH80_MOUSE	Vesicle-associated membrane protein-associated protein B;	VAMP-associated protein 33b;
M	ALDGPEQMELEEGKAGSGLR	N-ter + 42.01 Da, K +34.06 Da	65.3	29.6	3	2162.14	-0.17	0.03	PRS8_MOUSE		26S protease regulatory subunit 8;	26S proteasome AAA-ATPase subunit RPT6;Proteasome 26S subunit ATPase 5;Proteasome subunit p45;p45/SUG;
M	ALDPAEQHLR	N-ter + 42.01 Da	37.0	42.0	2	1190.65	n.d.	n.d.	COXAM_MOUSE		COX assembly mitochondrial protein homolog;	

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M	ALETVPKDLR	N-ter + 42.01 Da, K +34.06 Da	43.1	28.6	2	1216.76	-0.54	0.03	SPT41_MOUSE	SPT42_MOUSE	Transcription elongation factor SPT4 1;	DRB sensitivity-inducing factor small subunit 1;
GRVYLEENNG	ALHISNVR	N-ter + 42.01 Da	9.3	25.5	2	950.55	n.d.	n.d.	CD48_MOUSE	F8WHM0_MOUSE	CD48 antigen;	BCM1 surface antigen;BLAST-1;HM48-1;MRC OX-45 surface antigen;sgp-60;
KMS	ALKAVFQYIDENQDR	N-ter + 42.01 Da, K +28.03 Da	29.6	85.4	3	1879.11	-0.22	0.04	CNDP2_MOUSE	F6XEL6_MOUSE	Cytosolic non-specific dipeptidase;	CNDP dipeptidase 2;Glutamate carboxypeptidase-like protein 1;
M	ALKQISSNR	N-ter + 42.01 Da, K +28.03 Da	32.9	28.4	2	1085.65	0.64	0.05	ESTD_MOUSE		S-formylglutathione hydrolase;	Esterase 10;Esterase D;Sid 478;
M	ALLAEHLLKPLPADR	N-ter + 42.01 Da, K +28.03 Da	39.5	78.5	3	1726.15	0.19	0.06	GLTP_MOUSE	D3Z1H9_MOUSE	Glycolipid transfer protein;	
EESPGSAQPN	ALPEAHR	N-ter + 42.01 Da	24.2	81.1	2	834.50	n.d.	n.d.	K0649_MOUSE		Protein phosphatase 1 regulatory subunit 26;	
M	ALQALHSSGVGLR	N-ter + 42.01 Da	57.7	24.6	2	1349.77	n.d.	n.d.	MMP37_MOUSE	D6RGT1_MOUSE	Mitochondrial translocator assembly and maintenance protein 41 homolog;	MMP37-like protein, mitochondrial;
M	AMNYSAKDEVDGGPAGPPGGAAKTR	N-ter + 42.01 Da, K +28.03 Da	44.7	81.2	4	2514.42	0.38	0.05	CC50A_MOUSE	D3YVV1_MOUSE	Cell cycle control protein 50A;	Transmembrane protein 30A;
M	AMQKIFAR	N-ter + 42.01 Da, K +28.03 Da	41.4	35.1	2	1033.61	0.81	0.01	ENOB_MOUSE	Q5SX59_MOUSE	Beta-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
M	AMVSEFLKQAR	N-ter + 42.01 Da, K +28.03 Da	57.7	35.7	2	1348.77	-0.30	0.02	ANXA1_MOUSE	E9QA30_MOUSE	Annexin A1;	Annexin I;Annexin-1;Calpactin II;Calpactin-2;Chromobindin-9;Lipocortin I;Phospholipase A2 inhibitory protein;p35;
M	ANEVQVLPSPLKGR	N-ter + 42.01 Da, K +28.03 Da	32.6	34.5	3	1576.95	0.36	0.04	DAPL1_MOUSE		Death-associated protein-like 1;	Early epithelial differentiation-associated protein;
M	ANHAPFETDISTLTR	N-ter + 42.01 Da	47.9	51.5	3	1713.92	n.d.	n.d.	F16P1_MOUSE	E9Q0T7_MOUSE	Fructose-1,6-bisphosphatase 1;	D-fructose-1,6-bisphosphate 1-phosphohydrolase 1;
M	ANKGPSYGMSR	N-ter + 42.01 Da, K +34.06 Da	58.9	43.5	2	1242.68	-0.23	0.04	TAGL_MOUSE		Transgelin;	Actin-associated protein p27;Smooth muscle protein 22-alpha;
M	ANRGPSYGLSR	N-ter + 42.01 Da	47.1	38.2	2	1218.66	n.d.	n.d.	TAGL2_MOUSE	TAGL3_MOUSE	Transgelin-2;	SM22-beta;
M	ANVADTKLYDILGVPPGASENELKKAYR	N-ter + 42.01 Da, K +34.06 Da	26.0	76.1	4	3176.04	-0.22	0.01	DNJA2_MOUSE		DnaJ homolog subfamily A member 2;	mDj3;
M	APKVSDSVEQLR	N-ter + 42.01 Da, K +34.06 Da	24.6	73.7	3	1403.89	0.26	0.03	TOM34_MOUSE		Mitochondrial import receptor subunit TOM34;	Translocase of outer membrane 34 kDa subunit;
SASKNEKGQM	AQAEGAYHRPLATSR	N-ter + 42.01 Da	29.0	64.2	3	1668.94	n.d.	n.d.	USE1_MOUSE	D3Z6D3_MOUSE	Vesicle transport protein USE1;	Protein D12;USE1-like protein;
M	AQAPAKCPSYPGSGDGEMGKLR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	32.8	80.0	4	2386.40	0.23	0.04	GMDS_MOUSE		GDP-mannose 4,6 dehydratase;	GDP-D-mannose dehydratase;
M	AQDGVELEKSVR	N-ter + 42.01 Da, K +28.03 Da	49.2	31.9	2	1399.78	-1.00	0.08	CS066_MOUSE		UPF0515 protein C19orf66 homolog;	
M	AQDLSEKELLR	N-ter + 42.01 Da, K +34.06 Da	50.6	19.4	2	1376.80	0.59	0.03	GBGT2_MOUSE		Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-T2;	G gamma-C;G-gamma-8;
M	AQDQGEKENPMR	N-ter + 42.01 Da, K +28.03 Da	28.0	56.5	3	1471.76	0.20	0.03	RL11_MOUSE	D3Z3K1_MOUSE	60S ribosomal protein L11;	
M	AQELQHPEFAR	N-ter + 42.01 Da	41.9	47.3	3	1366.73	n.d.	n.d.	ADSV_MOUSE	E9QM03_MOUSE	Adseverin;	Gelsolin-like protein;Scinderin;
M	AQERPSCAVEPEHVQR	N-ter + 42.01 Da, C +57.02 Da	54.8	63.2	3	1934.03	n.d.	n.d.	CDD_MOUSE		Cytidine deaminase;	Cytidine aminohydrolase;
M	AQGSHQIDFQVLHDLR	N-ter + 42.01 Da	51.8	68.8	3	1905.08	n.d.	n.d.	TAB2_MOUSE	D3Z216_MOUSE	TGF-beta-activated kinase 1 and MAP3K7-binding protein 2;	Mitogen-activated protein kinase kinase kinase 7-interacting protein 2;TAK1-binding protein 2;TGF-beta-activated kinase 1-binding protein 2;
SALARETRAM	AQKPDGGAGLR	N-ter + 42.01 Da, K +34.06 Da	43.1	40.1	2	1144.69	0.15	0.03	MAGD1_MOUSE	F6YTL0_MOUSE	Melanoma-associated antigen D1;	Dlxin-1;MAGE-D1 antigen;Neurotrophin receptor-interacting MAGE homolog;
M	AQNLKDLAGR	N-ter + 42.01 Da, K +28.03 Da	43.5	27.4	2	1154.67	0.25	0.03	PHB2_MOUSE	E9Q313_MOUSE	Prohibitin-2;	B-cell receptor-associated protein BAP37;Repressor of estrogen receptor activity;
EERSVNCGTM	AQPKNLEGYVGFANLPNQVYR	N-ter + 42.01 Da, K +34.06 Da	69.6	51.9	3	2453.42	-0.29	0.07	SEPT7_MOUSE	E9Q9F5_MOUSE	Septin-7;	CDC10 protein homolog;
M	ASASYHISNLLEKMTSSDKDFR	N-ter + 42.01 Da, K +34.06 Da	32.9	98.6	4	2609.60	-0.54	0.09	CAND1_MOUSE		Cullin-associated NEDD8-dissociated protein 1;	Cullin-associated and neddylation-dissociated protein 1;p120 CAND1;
M	ASCASIDIEDATQHLR	N-ter + 42.01 Da, C +57.02 Da	48.6	65.3	3	1827.96	n.d.	n.d.	EDC4_MOUSE	D6RE33_MOUSE	Enhancer of mRNA-decapping protein 4;	
M	ASCDEIKEHPR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	27.2	76.5	3	1410.76	-0.17	0.02	SEP10_MOUSE		Septin-10;	
M	ASDTPGFYMDKLNKYR	N-ter + 42.01 Da, K +34.06 Da	31.9	75.5	3	2015.20	0.53	0.08	E2AK2_MOUSE		Interferon-induced, double-stranded RNA-activated protein kinase;	Eukaryotic translation initiation factor 2-alpha kinase 2;Interferon-inducible RNA-dependent protein kinase;P1/eIF-2A protein kinase;Protein kinase RNA-activated;Serine/threonine-protein kinase TIK;Tyrosine-protein kinase EIF2AK2;p68 kinase;
M	ASESGKLWGGR	N-ter + 42.01 Da, K +28.03 Da	48.7	25.5	2	1216.65	0.81	0.06	ARLY_MOUSE	E0CY49_MOUSE	Argininosuccinate lyase;	Arginosuccinase;
M	ASGADSKGDDLSTAILKQKNRPNR	N-ter + 42.01 Da, K +28.03 Da	44.0	76.4	4	2667.63	-0.38	0.06	TERA_MOUSE		Transitional endoplasmic reticulum ATPase;	15S Mg(2+)-ATPase p97 subunit;Valosin-containing protein;
M	ASGCKIGPSILNSDLANLGAECLR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	62.3	49.4	3	2585.42	0.11	0.03	RPE_MOUSE	B2KGF0_MOUSE	Ribulose-phosphate 3-epimerase;	Ribulose-5-phosphate-epimerase;
AMLATGTARM	ASGRPEELWEAVVGAAER	N-ter + 42.01 Da	54.7	45.6	3	1968.06	n.d.	n.d.	AKTS1_MOUSE	D3YWZ1_MOUSE	Proline-rich AKT1 substrate 1;	
M	ASGVAVSDGVIKVFNDMKVR	N-ter + 42.01 Da, K +28.03 Da	48.0	77.7	3	2189.36	0.11	0.04	COF1_MOUSE	E9Q1T2_MOUSE	Cofilin-1;	Cofilin, non-muscle isoform;
M	ASGVTVNDEVIKVFNDMKVR	N-ter + 42.01 Da, K +28.03 Da	54.9	66.1	3	2318.38	-0.12	0.04	COF2_MOUSE		Cofilin-2;	Cofilin, muscle isoform;
M	ASKEMFEDTVEER	N-ter + 42.01 Da, K +28.03 Da	55.7	33.1	2	1639.79	0.49	0.06	RBBP7_MOUSE	A2AFI9_MOUSE	Histone-binding protein RBBP7;	Histone acetyltransferase type B subunit 2;Nucleosome-remodeling factor subunit RBAP46;Retinoblastoma-binding protein 7;Retinoblastoma-binding protein p46;
M	ASLKDLEGKWR	N-ter + 42.01 Da, K +28.03 Da	54.1	37.0	2	1399.83	0.84	0.06	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;
M	ASLPPHAGPATPLSPTR	N-ter + 42.01 Da	35.9	41.2	3	1710.98	n.d.	n.d.	LMNB2_MOUSE		Lamin-B2;	
M	ASLSLAPVNIFKAGADEER	N-ter + 42.01 Da, K +34.06 Da	52.1	45.8	3	2063.21	0.58	0.17	TCPB_MOUSE		T-complex protein 1 subunit beta;	CCT-beta;

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	ASNFKKTTMASSAQR	N-ter + 42.01 Da, K +28.03 Da	38.0	66.2	3	1725.00	0.06	0.01	CETN2_MOUSE		Centrin-2;	Caltractin isoform 1;
M	ASNPDRGEILLTELQGDSR	N-ter + 42.01 Da	36.9	43.7	3	2112.14	n.d.	n.d.	PKN2_MOUSE	E9QAV1_MOUSE	Serine/threonine-protein kinase N2;	PKN gamma;Protein kinase C-like 2;Protein-kinase C-related kinase 2;
M	ASQNRDPAAASVAAVR	N-ter + 42.01 Da	39.6	64.6	3	1624.93	n.d.	n.d.	UBE2C_MOUSE	A2A4Z1_MOUSE	Ubiquitin-conjugating enzyme E2 C;	UbcH10;Ubiquitin carrier protein C;Ubiquitin-protein ligase C;
M	ASQSQGIQQLLQAEKR	N-ter + 42.01 Da, K +28.03 Da	49.4	32.3	3	1854.06	-0.42	0.06	VATG1_MOUSE		V-type proton ATPase subunit G 1;	V-ATPase 13 kDa subunit 1;Vacuolar proton pump subunit G 1;
DDFFRAKPRS	ASRPAAEPPGAR	N-ter + 42.01 Da	28.3	106.5	3	1220.76	n.d.	n.d.	F1712_MOUSE		Protein FAM171A2;	
M	ASSDIQVKELEKR	N-ter + 42.01 Da, K +28.03 Da	40.9	62.9	3	1599.98	1.16	0.12	STMN1_MOUSE	D3Z1Z8_MOUSE	Stathmin;	Leukemia-associated gene protein;Leukemia-associated phosphoprotein p18;Metablastin;Oncoprotein 18;Phosphoprotein p19;Prosolin;Protein Pr22;pp17;
M	ASSHTVLMR	N-ter + 42.01 Da	48.2	41.0	2	1042.57	n.d.	n.d.	BPNT1_MOUSE	D3Z5X0_MOUSE	3'(2'),5'-bisphosphate nucleotidase 1;	Bisphosphate 3'-nucleotidase 1;PAP-inositol-1,4-phosphatase;
M	ASSKKVTLSVLSR	N-ter + 42.01 Da, K +34.06 Da	23.3	52.7	3	1485.04	-0.27	0.03	PIR_MOUSE	A2AIH8_MOUSE	Pirin;	Probable quercetin 2,3-dioxygenase PIR;
M	ASYFDEHDCEPLNPER	N-ter + 42.01 Da, C +57.02 Da	34.9	76.1	3	2019.98	n.d.	n.d.	RN181_MOUSE	D3YUJ1_MOUSE	E3 ubiquitin-protein ligase RNF181;	RING finger protein 181;
SPWFSDLRPM	ATCPVLQKETLFR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	19.9	49.3	3	1637.98	-0.18	0.02	NEUR2_MOUSE	E9Q2Z0_MOUSE	Sialidase-2;	Cytosolic sialidase;Mouse skeletal muscle sialidase;Murine thymic sialidase;N-acetyl-alpha-neuraminidase 2;
M	ATDDKSSPTLDSANDLPR	N-ter + 42.01 Da, K +28.03 Da	37.8	62.3	3	1972.06	0.04	0.00	FYV1_MOUSE	D3Z5N5_MOUSE	1-phosphatidylinositol-3-phosphate 5-kinase;	FYVE finger-containing phosphoinositide kinase;PIKfyve;Phosphatidylinositol-3-phosphate 5-kinase type III;p235;
M	ATDELASKLSR	N-ter + 42.01 Da, K +28.03 Da	63.7	30.4	2	1259.71	-0.36	0.05	EFHD2_MOUSE	Q8C845_MOUSE	EF-hand domain-containing protein D2;	Swiprosin-1;
M	ATDISESSGADCKGDTKNSAKLDADYPLR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	39.8	59.0	4	3228.82	-0.03	0.00	DENR_MOUSE	E9Q0G1_MOUSE	Density-regulated protein;	
MRRRGEIEM	ATEGDVELELETETSGPERPPEKPR	N-ter + 42.01 Da, K +28.03 Da	51.0	51.4	3	2835.52	-0.07	0.01	HYPK_MOUSE		Huntingtin-interacting protein K;	Huntingtin yeast partner K;
M	ATEGMILTNHDHQIR	N-ter + 42.01 Da	43.4	57.4	3	1776.96	n.d.	n.d.	GEPH_MOUSE	A0JNY3_MOUSE	Gephyrin;	
M	ATESSPLTTHVLDTASGLPAQGLCLR	N-ter + 42.01 Da, C +57.02 Da	43.4	50.4	3	2736.51	n.d.	n.d.	HIUH_MOUSE		5-hydroxyisourate hydrolase;	Transthyretin-related protein;
M	ATGANATPLDFPSKKR	N-ter + 42.01 Da, K +34.06 Da	40.8	56.9	3	1783.13	0.77	0.06	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;
M	ATIGPSGLHPGER	N-ter + 42.01 Da	60.0	23.2	2	1332.71	n.d.	n.d.	HXK3_MOUSE	D6RCV7_MOUSE	Hexokinase-3;	Hexokinase type III;
M	ATKCTKCGPGYSTPLEAMKGPR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	64.0	75.3	4	2535.46	0.84	0.07	SBP1_MOUSE	D6RHN2_MOUSE	Selenium-binding protein 1;	56 kDa selenium-binding protein;
M	ATKIDKEACR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	27.0	73.3	3	1288.78	0.07	0.02	COTL1_MOUSE		Coactosin-like protein;	
MFLCRFWGKM	ATNDAVLKR	N-ter + 42.01 Da, K +28.03 Da	39.3	38.6	2	1056.63	0.00	0.00	AIMP1_MOUSE	Q3UZG4_MOUSE	Aminoacyl tRNA synthase complex-interacting multifunctional protein 1;	Multisynthase complex auxiliary component p43;
M	ATPDSLALFTGLGLSENKAR	N-ter + 42.01 Da, K +28.03 Da	68.4	40.7	3	2130.22	-0.20	0.06	Q8BML9_MOUSE	D3Z158_MOUSE		
M	ATPEASGSGEKVEGSEPSVTYYR	N-ter + 42.01 Da, K +34.06 Da	47.6	48.5	3	2476.30	0.21	0.03	CYB5B_MOUSE		Cytochrome b5 type B;	Cytochrome b5 outer mitochondrial membrane isoform;
MS	ATQHKTSLPQGVR	N-ter + 42.01 Da, K +34.06 Da	29.8	52.0	3	1497.93	-0.45	0.05	Q9CRB1_MOUSE	D3Z141_MOUSE		
M	ATTAQQSPQPVAGKR	N-ter + 42.01 Da, K +34.06 Da	38.5	62.3	3	1614.99	1.08	0.30	THUM1_MOUSE		THUMP domain-containing protein 1;	
M	ATVAATTKVPEIR	N-ter + 42.01 Da, K +28.03 Da	60.5	28.8	2	1425.86	-3.06	0.26	RUVB2_MOUSE	D3YXQ8_MOUSE	RuvB-like 2;	p47 protein;
M	ATVDLEKLR	N-ter + 42.01 Da, K +28.03 Da	47.9	15.8	2	1113.66	0.52	0.08	K6PL_MOUSE		6-phosphofructokinase, liver type;	Phosphofructo-1-kinase isozyme B;Phosphofructokinase 1;Phosphohexokinase;
M	AVAVGRPSNEELR	N-ter + 42.01 Da	40.1	29.2	2	1438.79	n.d.	n.d.	SEP11_MOUSE		Septin-11;	
M	AVPPTYADLGKSAR	N-ter + 42.01 Da, K +34.06 Da	43.4	15.0	2	1520.86	-0.79	0.01	VDAC1_MOUSE	F2Z471_MOUSE	Voltage-dependent anion-selective channel protein 1;	Outer mitochondrial membrane protein porin 1;Plasmalemmal porin;Voltage-dependent anion-selective channel protein 5;
M	AVSTGVKVPR	N-ter + 42.01 Da, K +28.03 Da	51.4	30.4	2	1082.68	0.67	0.05	UB2V2_MOUSE		Ubiquitin-conjugating enzyme E2 variant 2;	Ubc-like protein MMS2;
M	AWKSGGASHSELIHNLR	N-ter + 42.01 Da, K +34.06 Da	48.4	49.3	4	1938.12	0.14	0.02	PIMT_MOUSE	E9PWE0_MOUSE	Protein-L-isoaspartate(D-aspartate) O-methyltransferase;	L-isoaspartyl protein carboxyl methyltransferase;Protein L-isoaspartyl/D-aspartyl methyltransferase;Protein-beta-aspartate methyltransferase;
M	AYHSFLVEPISCHAWNKDR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	44.3	89.9	4	2405.40	0.30	0.02	ARC1B_MOUSE	D3Z6S0_MOUSE	Actin-related protein 2/3 complex subunit 1B;	Arp2/3 complex 41 kDa subunit;p41-ARC;
MA	AYKLVLIR	N-ter + 42.01 Da, K +34.06 Da	41.3	43.4	2	1050.75	-0.11	0.01	PGAM1_MOUSE		Phosphoglycerate mutase 1;	BPG-dependent PGAM 1;Phosphoglycerate mutase isozyme B;
M	DADKDNIKQACDER	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	37.5	71.8	3	1905.99	-0.29	0.08	NMI_MOUSE	B7ZD13_MOUSE	N-myc-interactor;	N-myc and STAT interactor;
M	DDDIAALVVDNGSGMCKAGFAGDDAPR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	70.7	47.0	3	2806.39	-0.18	0.05	ACTB_MOUSE	E9Q1F2_MOUSE	Actin, cytoplasmic 1;	Beta-actin;
M	DDREDLVYQAKLAEQAER	N-ter + 42.01 Da, K +34.06 Da	57.2	63.7	3	2355.31	1.14	0.19	1433E_MOUSE	D6REF3_MOUSE	14-3-3 protein epsilon;	
M	DDREDLVYQAK	N-ter + 42.01 Da, K +28.03 Da	31.4	62.5	3	1551.82	0.38	0.04	1433E_MOUSE	D6REF3_MOUSE	14-3-3 protein epsilon;	
MC	DEDETTALVCDNGSGLVKAGFAGDDAPR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	67.8	43.3	3	2949.46	-0.29	0.04	ACTS_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;
M	DFSKLPKIR	N-ter + 42.01 Da, K +34.06 Da	21.0	75.4	3	1343.93	0.43	0.06	VATA_MOUSE	D3YWH3_MOUSE	V-type proton ATPase catalytic subunit A;	V-ATPase 69 kDa subunit;Vacuolar proton pump subunit alpha;

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	DFSKLPK	N-ter + 42.01 Da, K +34.06 Da	42.6	11.6	2	1074.65	-0.54	0.03	VATA_MOUSE	D3YWH3_MOUSE	V-type proton ATPase catalytic subunit A;	V-ATPase 69 kDa subunit;Vacuolar proton pump subunit alpha;
M	DGEDDSNLVIKKR	N-ter + 42.01 Da, K +34.06 Da	25.0	61.3	3	1729.04	0.06	0.01	F192A_MOUSE		Protein FAM192A;	NEFA-interacting nuclear protein NIP30;
M	DGIVPDIAVGTKR	N-ter + 42.01 Da, K +34.06 Da	45.7	17.9	2	1546.89	1.33	0.20	PTBP1_MOUSE	Q922I7_MOUSE	Polypyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;
IGEFVKYSIR	DGKEINFLR	N-ter + 42.01 Da, K +28.03 Da	9.2	46.8	2	1160.67	2.62	0.23	ALPK2_MOUSE	F6ZZL0_MOUSE	Alpha-protein kinase 2;	Heart alpha-protein kinase;
M	DIAIHHPWIR	N-ter + 42.01 Da	29.9	66.6	3	1429.82	n.d.	n.d.	CRYAB_MOUSE		Alpha-crystallin B chain;	Alpha(B)-crystallin;P23;
M	DKNELVQKAKLAEQAER	N-ter + 42.01 Da, K +34.06 Da	50.1	45.1	3	2244.40	0.21	0.02	1433Z_MOUSE	D3YXF4_MOUSE	14-3-3 protein zeta/delta;	Protein kinase C inhibitor protein 1;SEZ-2;
M	DKNELVQKAK	N-ter + 42.01 Da, K +28.03 Da	27.7	73.6	3	1428.91	0.19	0.03	1433Z_MOUSE	D3YXF4_MOUSE	14-3-3 protein zeta/delta;	Protein kinase C inhibitor protein 1;SEZ-2;
M	DKNELVQK	N-ter + 42.01 Da, K +34.06 Da	42.8	37.6	2	1213.75	0.28	0.04	1433Z_MOUSE	D3YXF4_MOUSE	14-3-3 protein zeta/delta;	Protein kinase C inhibitor protein 1;SEZ-2;
M	DLAAAAEPGAGSQHPEVR	N-ter + 42.01 Da	50.7	59.8	3	1948.03	n.d.	n.d.	MCM6_MOUSE	Q3ULG5_MOUSE	DNA replication licensing factor MCM6;	Mis5 homolog;
M	DLEAVCKR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	48.6	40.2	2	1190.63	0.79	0.11	AGM1_MOUSE	Q8BWW3_MOUSE	Phosphoacetylglucosamine mutase;	Acetylglucosamine phosphomutase;N-acetylglucosamine-phosphate mutase;Phosphoglucomutase-3;
M	DMGNQHPSISR	N-ter + 42.01 Da	39.2	44.4	2	1413.68	n.d.	n.d.	BAG5_MOUSE	E0CX76_MOUSE	BAG family molecular chaperone regulator 5;	Bcl-2-associated athanogene 5;
M	DNLSDTLKKLKITAADR	N-ter + 42.01 Da, K +28.03 Da	27.1	98.0	4	2158.41	-0.52	0.13	E9Q912_MOUSE	E9Q6Q4_MOUSE		
M	DNSGKQAEAMALLAEAER	N-ter + 42.01 Da, K +34.06 Da	60.6	57.3	3	2110.15	-0.29	0.02	SNAA_MOUSE		Alpha-soluble NSF attachment protein;	N-ethylmaleimide-sensitive factor attachment protein alpha;
M	DPNCSCASDGSCSCAGACKCK	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	55.9	47.7	3	2580.05	2.11	0.63	MT2_MOUSE		Metallothionein-2;	Metallothionein-II;
M	DPSGVKVLETAEDIQER	N-ter + 42.01 Da, K +34.06 Da	47.1	57.4	3	2092.18	-0.11	0.01	SPTA2_MOUSE	A3KGU7_MOUSE	Spectrin alpha chain, brain;	Alpha-II spectrin;Fodrin alpha chain;Spectrin, non-erythroid alpha chain;
M	DPSWATQESEAVAEKVLR	N-ter + 42.01 Da, K +28.03 Da	55.3	60.0	3	2216.21	-0.30	0.09	STAR5_MOUSE	D3YU00_MOUSE	StAR-related lipid transfer protein 5;	START domain-containing protein 5;
M	DSEAFQHAR	N-ter + 42.01 Da	55.1	48.7	2	1232.58	n.d.	n.d.	IASPP_MOUSE	D3YXE7_MOUSE	RelA-associated inhibitor;	Inhibitor of ASPP protein;NFkB-interacting protein 1;PPP1R13B-like protein;
M	DSFEDKLQQLR	N-ter + 42.01 Da, K +34.06 Da	23.7	66.1	3	1584.91	0.83	0.06	AL3B1_MOUSE		Aldehyde dehydrogenase family 3 member B1;	Aldehyde dehydrogenase 7;
M	DSKESLAPPGRDEVPSSLLGR	N-ter + 42.01 Da, K +28.03 Da	42.1	64.2	3	2410.37	-0.58	0.06	GCR_MOUSE	E9PUR6_MOUSE	Glucocorticoid receptor;	Nuclear receptor subfamily 3 group C member 1;
M	DSKESLAPPGR	N-ter + 42.01 Da, K +34.06 Da	40.4	47.7	3	1362.77	-0.15	0.01	GCR_MOUSE	E9PUR6_MOUSE	Glucocorticoid receptor;	Nuclear receptor subfamily 3 group C member 1;
M	DSSAVITQISKEEAR	N-ter + 42.01 Da, K +34.06 Da	39.3	44.8	3	1840.03	1.68	0.14	CTDS1_MOUSE		Carboxy-terminal domain RNA polymerase II polypeptide A small phosphatase 1;	Golli-interacting protein;Nuclear LIM interactor-interacting factor 3;Small C-terminal domain phosphatase 1;
LVLILKGVQC	DVQLVESGGGLVQPGGSR	N-ter + 42.01 Da	61.3	63.1	3	1796.02	n.d.	n.d.	HVM16_MOUSE		Ig heavy chain V region MOPC 21;	
M	EAAHSKSTEECLSYFGVSETTGLTPDQVKR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	82.3	60.9	4	3555.90	0.08	0.01	AT2A1_MOUSE		Sarcoplasmic/endoplasmic reticulum calcium ATPase 1;	Calcium pump 1;Calcium-transporting ATPase sarcoplasmic reticulum type, fast twitch skeletal muscle isoform;Endoplasmic reticulum class 1/2 Ca(2+) ATPase;
M	EAKGGTVKAASGFNATEDAQTLR	N-ter + 42.01 Da, K +28.03 Da	56.3	74.5	4	2550.47	-0.18	0.04	ANXA4_MOUSE	E9Q073_MOUSE	Annexin A4;	Annexin IV;Annexin-4;
M	EDEMPKTLYVGNLSR	N-ter + 42.01 Da, K +34.06 Da	49.2	51.7	3	1958.07	0.16	0.01	TIA1_MOUSE	Q80ZW7_MOUSE	Nucleolysin TIA-1;	RNA-binding protein TIA-1;T-cell-restricted intracellular antigen-1;
M	EDIMQLPKAR	N-ter + 42.01 Da, K +28.03 Da	54.0	35.2	2	1400.77	-0.84	0.06	RFA3_MOUSE		Replication protein A 14 kDa subunit;	Replication factor A protein 3;
M	EDKPLVVSK	N-ter + 42.01 Da, K +34.06 Da	39.2	6.9	2	1254.76	0.45	0.02	PSMG3_MOUSE		Proteasome assembly chaperone 3;	
M	EDVTLHIVER	N-ter + 42.01 Da	49.1	40.0	2	1382.74	n.d.	n.d.	PTRF_MOUSE	Q3U4N4_MOUSE	Polymerase I and transcript release factor;	Cav-p60;Cavin-1;
M	EEAELVKGR	N-ter + 42.01 Da, K +34.06 Da	55.3	33.7	2	1236.70	-0.06	0.01	PALMD_MOUSE	Q3UVT7_MOUSE	Palmdelphin;	
M	EEAPHGCPGADSAQAGR	N-ter + 42.01 Da, C +57.02 Da	70.3	54.9	3	1881.88	n.d.	n.d.	NUBP1_MOUSE		Cytosolic Fe-S cluster assembly factor NUBP1;	Nucleotide-binding protein 1;
M	EEESIKEGSEKPR	N-ter + 42.01 Da, K +28.03 Da	37.5	85.3	3	1746.00	-0.60	0.07	PKHO2_MOUSE		Pleckstrin homology domain-containing family O member 2;	Pleckstrin homology domain-containing family Q member 1;
M	EEIYAKFVSQKISKTR	N-ter + 42.01 Da, K +28.03 Da	25.3	106.0	4	2183.43	-0.27	0.01	NUP43_MOUSE		Nucleoporin Nup43;	Nup107-160 subcomplex subunit Nup43;
M	EERPSETNSNVDSSAQPSVAQLAGR	N-ter + 42.01 Da	24.0	58.6	4	2801.45	n.d.	n.d.	CPZIP_MOUSE		CapZ-interacting protein;	Protein kinase substrate CapZIP;
M	EESEYESVLCVKPEVHVYR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	54.0	53.8	3	2552.33	-0.25	0.05	NECP2_MOUSE	D6RFU1_MOUSE	Adaptin ear-binding coat-associated protein 2;	NECAP endocytosis-associated protein 2;
M	EFPDLGAHCSEPSCQR	N-ter + 42.01 Da, C +57.02 Da	45.0	53.8	3	2061.95	n.d.	n.d.	ZFN2B_MOUSE	E0CY18_MOUSE	AN1-type zinc finger protein 2B;	Arsenite-inducible RNA-associated protein-like protein;
M	EGYHKPDQQKLQALKDTANR	N-ter + 42.01 Da, K +28.03 Da	40.8	79.3	4	2596.55	0.59	0.09	TKT_MOUSE	E0CY51_MOUSE	Transketolase;	P68;
M	EIPPTHYAASR	N-ter + 42.01 Da	29.4	36.2	2	1413.72	n.d.	n.d.	LXN_MOUSE		Latexin;	Endogenous carboxypeptidase inhibitor;Tissue carboxypeptidase inhibitor;
FAPEQSPAKM	EKEEETTR	N-ter + 42.01 Da, K +28.03 Da	39.9	43.3	2	1221.61	-0.40	0.06	Q8R2L7_MOUSE	E9Q616_MOUSE		
M	EKPAASTEPQGSRPALGR	N-ter + 42.01 Da, K +34.06 Da	27.9	69.7	3	2058.22	0.16	0.03	PCTL_MOUSE	Q66JR2_MOUSE	PCTP-like protein;	START domain-containing protein 10;Serologically defined colon cancer antigen 28 homolog;StAR-related lipid transfer protein 10;
M	EKPAASTEPQGSR	N-ter + 42.01 Da, K +34.06 Da	35.1	52.1	3	1563.86	0.21	0.04	PCTL_MOUSE		PCTP-like protein;	START domain-containing protein 10;Serologically defined colon cancer antigen 28 homolog;StAR-related lipid transfer protein 10;
PARRSPSLAM	EKTELIQKAKLAEQAER	N-ter + 42.01 Da, K +34.06 Da	39.5	51.0	4	2259.45	1.23	0.11	1433T_MOUSE	F6VW30_MOUSE	14-3-3 protein theta;	14-3-3 protein tau;
PARRSPSLAM	EKTELIQK	N-ter + 42.01 Da, K +34.06 Da	29.9	13.5	2	1228.75	-3.06	0.26	1433T_MOUSE		14-3-3 protein theta;	14-3-3 protein tau;
M	EKTLETVPLER	N-ter + 42.01 Da, K +28.03 Da	52.2	15.7	2	1514.83	1.14	0.14	ROA2_MOUSE		Heterogeneous nuclear ribonucleoproteins A2/B1;	
M	EKVPGDMEIERR	N-ter + 42.01 Da, K +34.06 Da	33.0	75.1	3	1664.97	-0.47	0.02	CYGB_MOUSE		Cytoglobin;	Histoglobin;
M	EKVPGDMEIER	N-ter + 42.01 Da, K +34.06 Da	43.6	36.3	2	1508.80	-0.29	0.02	CYGB_MOUSE		Cytoglobin;	Histoglobin;
M	ELGELLYNKSEYIETASGNKVSR	N-ter + 42.01 Da, K +28.03 Da	29.4	75.0	4	2828.64	-0.79	0.16	DCTN5_MOUSE		Dynactin subunit 5;	Dynactin subunit p25;
MQMRM	ELVEVLKR	N-ter + 42.01 Da, K +34.06 Da	57.1	29.2	2	1191.75	-0.64	0.17	NDUAC_MOUSE		NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12;	Complex I-B17.2;NADH-ubiquinone oxidoreductase subunit B17.2;
M	EMTSTSLKR	N-ter + 42.01 Da, K +34.06 Da	47.7	31.6	2	1258.69	0.24	0.03	B7ZNL8_MOUSE	Q3ULP8_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
M	ENEYKR	N-ter + 42.01 Da, K +28.03 Da	40.2	47.9	2	1038.53	-0.25	0.02	IFI5A_MOUSE		Interferon-activable protein 205-A;	Interferon-inducible protein p205-A;Protein D3';
M	ENQLTKSVEER	N-ter + 42.01 Da, K +28.03 Da	49.1	24.8	2	1532.79	0.43	0.06	OCTC_MOUSE		Peroxisomal carnitine O-octanoyltransferase;	
M	EPGPAAPSSGAPRPAR	N-ter + 42.01 Da	29.2	42.1	3	1689.90	n.d.	n.d.	E9QM38_MOUSE			
ACPKNMLGER	EPPKKKEKKKKRK	N-ter + 42.01 Da, K +34.06 Da, K +28.03 Da	11.9	104.4	3	1947.69	n.d.	n.d.	ZCRB1_MOUSE		Zinc finger CCHC-type and RNA-binding motif-containing protein 1;	MADP-1;U11/U12 small nuclear ribonucleoprotein 31 kDa protein;
M	EPSPDAEEAHTVR	N-ter + 42.01 Da	36.8	65.5	3	1609.81	n.d.	n.d.	SMTL2_MOUSE		Smoothelin-like protein 2;	
M	ETASTPEATGTGKYIASTQRPDGTWR	N-ter + 42.01 Da, K +34.06 Da	26.5	68.8	4	2987.66	0.29	0.06	WIBG_MOUSE		Partner of Y14 and mago;	Protein wibg homolog;
PPSDSQRTVY	ETLLKR	N-ter + 42.01 Da, K +34.06 Da	33.7	36.8	2	965.61	0.08	0.00	KT3K_MOUSE		Ketosamine-3-kinase;	Fructosamine-3-kinase-related protein;
M	ETPKPR	N-ter + 42.01 Da, K +28.03 Da	35.2	42.9	2	927.52	-1.43	0.16	IRF3_MOUSE		Interferon regulatory factor 3;	
M	EVHELFR	N-ter + 42.01 Da	45.7	34.1	2	1101.57	n.d.	n.d.	ACSL1_MOUSE	D3Z041_MOUSE	Long-chain-fatty-acid--CoA ligase 1;	Long-chain acyl-CoA synthetase 1;
M	EVKPPPGRPQPDSGR	N-ter + 42.01 Da, K +28.03 Da	24.9	75.5	3	1817.06	0.88	0.05	ROA3_MOUSE	A2AL12_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;	
AHCHYVTVKV	FADKLPKIQDR	N-ter + 42.01 Da, K +28.03 Da	28.0	54.1	3	1427.89	8.49	0.31	ACOX1_MOUSE	Q8BYC3_MOUSE	Peroxisomal acyl-coenzyme A oxidase 1;	Palmitoyl-CoA oxidase;
M	FAKAFR	N-ter + 42.01 Da, K +28.03 Da	20.7	22.9	2	939.52	0.59	0.03	EIF2D_MOUSE	Q8C8I3_MOUSE	Eukaryotic translation initiation factor 2D;	Ligatin;
EDVGVAILVR	FFVNFPSAK	N-ter + 42.01 Da, K +34.06 Da	19.3	81.5	3	1131.71	-5.06	0.00	CYGB_MOUSE		Cytoglobin;	Histoglobin;
PMYFFLQNFS	FLEIIFTSVSIPR	N-ter + 42.01 Da	28.2	21.0	3	1562.90	n.d.	n.d.	Q7TRI5_MOUSE	Q7TRI3_MOUSE		
M	FQGADSQAGKSGSR	N-ter + 42.01 Da, K +28.03 Da	58.0	37.5	2	1595.80	0.71	0.09	HN1L_MOUSE		Hematological and neurological expressed 1-like protein;	
M	FQPAGHGQDWAMEGPR	N-ter + 42.01 Da	39.0	49.9	3	1955.94	n.d.	n.d.	IKBA_MOUSE		NF-kappa-B inhibitor alpha;	I-kappa-B-alpha;
VAASPVSGIM	FSWVSKDAR	N-ter + 42.01 Da, K +28.03 Da	42.9	46.2	2	1295.69	-0.34	0.03	EHD1_MOUSE	F6Y7R7_MOUSE	EH domain-containing protein 1;	PAST homolog 1;
M	FVQEEKIFAGKVLR	N-ter + 42.01 Da, K +34.06 Da	39.7	55.0	3	1904.23	-0.69	0.13	UBAC1_MOUSE		Ubiquitin-associated domain-containing protein 1;	E3 ubiquitin-protein ligase subunit KPC2;Kip1 ubiquitination-promoting complex protein 2;
PGSTPLDLFK	FYVEELKAR	N-ter + 42.01 Da, K +34.06 Da	23.7	63.3	3	1229.76	2.36	0.24	PR40B_MOUSE	D3Z4N6_MOUSE	Pre-mRNA-processing factor 40 homolog B;	Huntingtin yeast partner C;Huntingtin-interacting protein C;
RNLHKTAVHN	GAGGALFVHR	N-ter + 42.01 Da	49.8	34.4	2	1025.58	n.d.	n.d.	NDUV2_MOUSE		NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial;	NADH-ubiquinone oxidoreductase 24 kDa subunit;
SAGNRDSGAM	GDAPSPEEKLHLITR	N-ter + 42.01 Da, K +28.03 Da	24.5	68.1	3	1732.03	-0.32	0.03	SYYC_MOUSE	A2A7S7_MOUSE	Tyrosine--tRNA ligase, cytoplasmic;	Tyrosyl-tRNA synthetase;
RVSTQDLTFE	GDLSHIER	N-ter + 42.01 Da	40.1	24.7	2	967.50	n.d.	n.d.	POTE1_MOUSE	Q3UXR7_MOUSE	Protection of telomeres protein 1;	POT1-like telomere end-binding protein;
LSSANPVRRM	GDSASKVISAEEALPGR	N-ter + 42.01 Da, K +28.03 Da	36.7	46.7	3	1755.98	-1.03	0.08	MSRA_MOUSE		Mitochondrial peptide methionine sulfoxide reductase;	Peptide-methionine (S)-S-oxide reductase;Protein-methionine-S-oxide reductase;
VGPAGKNGDR	GETGPAGPAGPIGPAGAR	N-ter + 42.01 Da	53.5	63.2	3	1573.88	n.d.	n.d.	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
AEKAAVSCLW	GKVNSDEVGGEALGR	N-ter + 42.01 Da, K +34.06 Da	30.9	35.4	3	1562.87	0.38	0.04	HBB1_MOUSE		Hemoglobin subunit beta-1;	Beta-1-globin;Hemoglobin beta-1 chain;Hemoglobin beta-major chain;
FTAEEKTLIN	GLWSKVNVEEVGGEALGR	N-ter + 42.01 Da, K +34.06 Da	28.8	33.5	3	1975.13	-0.71	0.07	HBE_MOUSE	Q9CR49_MOUSE	Hemoglobin subunit epsilon-Y2;	Epsilon-Y2-globin;Hemoglobin epsilon-Y2 chain;
SKTVTAPSDP	GQPSQVPEEAPLR	N-ter + 42.01 Da	30.7	49.7	3	1448.80	n.d.	n.d.	A2ADM8_MOUSE			
LAGAGAAWHH	GRVKAAAREGSR	N-ter + 42.01 Da, K +28.03 Da	27.8	51.9	3	1326.82	2.40	0.41	EFHA1_MOUSE		EF-hand domain-containing family member A1;	
M	GSEAAQLLEAADFAAHKHR	N-ter + 42.01 Da, K +34.06 Da	33.9	92.6	4	2097.28	-0.62	0.05	MESH1_MOUSE		Guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase MESH1;	HD domain-containing protein 3;Metazoan SpoT homolog 1;Penta-phosphate guanosine-3'-pyrophosphohydrolase;
ILTRLRLQKR	GTGGVDTAAVGAVFDISNADR	N-ter + 42.01 Da	55.6	71.4	3	2034.11	n.d.	n.d.	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
SLRAVSTSSM	GTLPKQVKIVEVGPR	N-ter + 42.01 Da, K +34.06 Da	36.1	57.1	3	1730.21	-0.92	0.10	HMGCL_MOUSE		Hydroxymethylglutaryl-CoA lyase, mitochondrial;	3-hydroxy-3-methylglutarate-CoA lyase;
M	GVQVETISPGDGR	N-ter + 42.01 Da	46.1	63.3	2	1355.75	n.d.	n.d.	FKB1A_MOUSE	Q1JUQ8_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A;	12 kDa FK506-binding protein;FK506-binding protein 1A;Immunophilin FKBP12;Rotamase;
M	HATGLAAPAGTPR	N-ter + 42.01 Da	28.3	48.5	3	1391.77	n.d.	n.d.	YIF1B_MOUSE	D3Z5F9_MOUSE	Protein YIF1B;	YIP1-interacting factor homolog B;
TSQKDQSPAS	HEIATNLGDFAISLYR	N-ter + 42.01 Da	40.2	38.6	2	1861.01	n.d.	n.d.	A1AT1_MOUSE	A1AT2_MOUSE	Alpha-1-antitrypsin 1-1;	Alpha-1 protease inhibitor 1;Alpha-1-antiproteinase;Serine protease inhibitor 1-1;Serine protease inhibitor A1a;
EPEVRYVAGM	HGNEALGR	N-ter + 42.01 Da	32.3	93.6	2	894.51	n.d.	n.d.	CPXM1_MOUSE		Probable carboxypeptidase X1;	Metallocarboxypeptidase CPX-1;
M	HQPPESTAAAAAAADISAR	N-ter + 42.01 Da	54.2	36.5	3	2007.02	n.d.	n.d.	T22D1_MOUSE	D3Z0V7_MOUSE	TSC22 domain family protein 1;	Regulatory protein TSC-22;TGFB-stimulated clone 22 homolog;TSC22-related inducible leucine zipper 1b;Transforming growth factor beta-1-induced transcript 4 protein;
M	HSLATAAPVPTALAQVDR	N-ter + 42.01 Da	46.0	45.2	3	1990.12	n.d.	n.d.	RCD1_MOUSE		Cell differentiation protein RCD1 homolog;	CCR4-NOT transcription complex subunit 9;EPO-induced protein FL10;
D	IQMTQSTSSLSASLGDR	N-ter + 42.01 Da	43.4	74.5	3	1938.04	n.d.	n.d.	KV5AD_MOUSE		Ig kappa chain V-V region HP 123E6;	
D	IQMTQTTSSLSASLGDR	N-ter + 42.01 Da	33.3	38.7	3	1951.99	n.d.	n.d.	KV5AA_MOUSE	KV5AB_MOUSE	Ig kappa chain V-V region MOPC 173;	
AGDEESYTVF	KDLFDPIIQDR	N-ter + 42.01 Da, K +34.06 Da	33.4	65.1	3	1434.89	-3.32	0.33	KCRM_MOUSE		Creatine kinase M-type;	Creatine kinase M chain;M-CK;
MFDQTQIQEF	KEAFTVIDQNR	N-ter + 42.01 Da, K +34.06 Da	25.9	71.7	3	1395.86	-2.56	0.30	MLRS_MOUSE	F6ULR7_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;
PHLDSVGEIT	KEDLIQKSLGACQDCKVR	N-ter + 42.01 Da, K +34.06 Da, K +28.03 Da, C +57.02 Da	30.4	41.4	4	2285.35	n.d.	n.d.	UBP33_MOUSE	D6RES0_MOUSE	Ubiquitin carboxyl-terminal hydrolase 33;	Deubiquitinating enzyme 33;Ubiquitin thiolesterase 33;Ubiquitin-specific-processing protease 33;VHL-interacting deubiquitinating enzyme 1;
VTCPICLELL	KESVSADCNHSFCR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	23.9	38.4	3	1771.85	-0.54	0.05	E9PWL0_MOUSE			
M	KLNFSGLR	N-ter + 42.01 Da, K +28.03 Da	39.6	42.2	2	1134.67	-0.07	0.01	CBR2_MOUSE		Carbonyl reductase [NADPH] 2;	Adipocyte protein P27;Lung carbonyl reductase;NADPH-dependent carbonyl reductase 2;
VPPGPTNEMS	KNKEMDIDESLYSR	N-ter + 42.01 Da, K +28.03 Da	43.7	27.5	3	1824.94	0.91	0.06	UBA1Y_MOUSE		Ubiquitin-like modifier-activating enzyme 1 Y;	Ubiquitin-activating enzyme E1;Ubiquitin-activating enzyme E1 Y;
YELLCLDNTR	KPVDQYEDCYLAR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	38.3	76.0	3	1731.97	0.72	0.09	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
M	KQPKNLEGYVGFANLPNQVYR	N-ter + 42.01 Da, K +28.03 Da	55.5	70.9	4	2532.53	-0.30	0.05	E9Q1G8_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
GLPTSLLTLY	LDNNKISNIPDEYFKR	N-ter + 42.01 Da, K +34.06 Da, K +28.03 Da	27.0	57.9	4	2069.22	n.d.	n.d.	LUM_MOUSE		Lumican;	Keratan sulfate proteoglycan lumican;
M	LGGLGKLAAEGLAHR	N-ter + 42.01 Da, K +28.03 Da	74.7	75.1	3	1663.05	-0.38	0.11	FAM25_MOUSE		Protein FAM25;	
M	LGSGFKAER	N-ter + 42.01 Da, K +34.06 Da	45.4	36.2	2	1170.67	-0.60	0.12	IST1_MOUSE	Q8BHC2_MOUSE	IST1 homolog;	
M	LNMWKVR	N-ter + 42.01 Da, K +34.06 Da	38.3	34.1	2	1152.68	0.48	0.03	Q5SUH6_MOUSE	Q5SUH7_MOUSE		
TATHAGTARE	LPAEFDKAAEEVKR	N-ter + 42.01 Da, K +28.03 Da	26.2	52.6	3	1700.00	1.90	0.10	Q4VWZ5_MOUSE	F6ZM12_MOUSE		
KCCTLPEDQR	LPCVEDYLSAILNR	N-ter + 42.01 Da, C +57.02 Da	42.8	85.1	3	1704.00	n.d.	n.d.	ALBU_MOUSE		Serum albumin;	
LRVPPRMDYR	LYLGHNYVTAIR	N-ter + 42.01 Da	34.0	88.1	3	1460.91	n.d.	n.d.	TRFE_MOUSE	E9Q035_MOUSE	Serotransferrin;	Beta-1 metal-binding globulin;Siderophilin;
	MDKSELVQKAKLAEQAER	N-ter + 42.01 Da, K +34.06 Da	27.0	57.4	4	2217.42	-0.18	0.02	1433B_MOUSE	A2A5N1_MOUSE	14-3-3 protein beta/alpha;	Protein kinase C inhibitor protein 1;
MAE	MDLVAELPRPAGAAR	N-ter + 42.01 Da	32.4	67.8	3	1607.95	n.d.	n.d.	PPCS_MOUSE		Phosphopantothenate--cysteine ligase;	Phosphopantothenoylcysteine synthetase;
VAIDNKIEQA	MDLVKSHLMYAVR	N-ter + 42.01 Da, K +28.03 Da	49.0	87.5	3	1632.00	-0.45	0.06	T22D1_MOUSE	D3Z0V7_MOUSE	TSC22 domain family protein 1;	Regulatory protein TSC-22;TGFB-stimulated clone 22 homolog;TSC22-related inducible leucine zipper 1b;Transforming growth factor beta-1-induced transcript 4 protein;
MSA	MEAADVFHR	N-ter + 42.01 Da	41.8	48.2	2	1116.56	n.d.	n.d.	CPPED_MOUSE	D3Z7F7_MOUSE	Calcineurin-like phosphoesterase domain-containing protein 1;	
MV	MEKPSPLLVGR	N-ter + 42.01 Da, K +34.06 Da	25.8	27.4	2	1301.79	-0.40	0.06	G3BP1_MOUSE	G3BP2_MOUSE	Ras GTPase-activating protein-binding protein 1;	ATP-dependent DNA helicase VIII;GAP SH3 domain-binding protein 1;HDH-VIII;
IEKRLNRGDK	MEMLPDTTGKGALMFAKR	N-ter + 42.01 Da, K +28.03 Da	31.4	70.1	3	2094.21	-0.49	0.08	SYNP2_MOUSE	D3YVV9_MOUSE	Synaptopodin-2;	Myopodin;
MTIGS	MENVEVFTSEGKGR	N-ter + 42.01 Da, K +34.06 Da	49.8	17.2	2	1657.85	-1.18	0.35	SMYD1_MOUSE		SET and MYND domain-containing protein 1;	CD8b-opposite;Zinc finger protein BOP;
LLLCDMVINI	MFWKMGGTTAKR	N-ter + 42.01 Da, K +34.06 Da	9.2	22.6	3	1522.88	-1.74	0.06	PK1L3_MOUSE	A2A258_MOUSE	Polycystic kidney disease protein 1-like 3;	PC1-like 3 protein;Polycystin-1L3;
	MKVFVTGPLPAEGR	N-ter + 42.01 Da, K +28.03 Da	23.6	56.5	3	1570.94	-0.36	0.05	GRHPR_MOUSE	D6REG4_MOUSE	Glyoxylate reductase/hydroxypyruvate reductase;	
M	MLGAEGGEGFVVKVR	N-ter + 42.01 Da, K +34.06 Da	67.5	27.3	2	1623.93	-0.74	0.10	HNRH1_MOUSE	Q8C2Q7_MOUSE	Heterogeneous nuclear ribonucleoprotein H;	
M	MLGPEGGEGYVVKLR	N-ter + 42.01 Da, K +34.06 Da	40.7	45.3	3	1679.99	-0.54	0.09	HNRPF_MOUSE		Heterogeneous nuclear ribonucleoprotein F;	
VAEEGEDAVT	MLSAPEALTEEEQEELRR	N-ter + 42.01 Da	32.3	66.1	3	2172.18	n.d.	n.d.	TPD52_MOUSE	D3Z637_MOUSE	Tumor protein D52;	
ILAQMTGTEY	MQDPDEEALR	N-ter + 42.01 Da	30.4	83.1	2	1244.64	n.d.	n.d.	LDB3_MOUSE	E9PYJ9_MOUSE	LIM domain-binding protein 3;	Protein cypher;Protein oracle;Z-band alternatively spliced PDZ-motif protein;
MA	MQKIFAR	N-ter + 42.01 Da, K +34.06 Da	36.9	20.7	2	968.59	0.07	0.02	ENOB_MOUSE	Q5SX59_MOUSE	Beta-enolase;	2-phospho-D-glycerate hydro-lyase;Enolase 3;Muscle-specific enolase;Skeletal muscle enolase;
M	MTEEHTDLEAR	N-ter + 42.01 Da	58.3	36.0	2	1503.69	n.d.	n.d.	CAV3_MOUSE		Caveolin-3;	M-caveolin;
PEPSIRPQIM	NGPLHPR	N-ter + 42.01 Da	27.8	62.8	2	962.54	n.d.	n.d.	Q91YZ2_MOUSE			
M	NHTSQAFITAASGGQPPNYER	N-ter + 42.01 Da	50.8	38.8	3	2418.20	n.d.	n.d.	IFM3_MOUSE		Interferon-induced transmembrane protein 3;	Fragilis protein;Interferon-inducible protein 15;Mouse ifitm-like protein 1;
M	NKAPQPTGPPPAR	N-ter + 42.01 Da, K +34.06 Da	38.7	48.6	3	1536.90	0.54	0.04	IF4G1_MOUSE	D3YWC6_MOUSE	Eukaryotic translation initiation factor 4 gamma 1;	
EQKQMKETIM	NQEKLAKLQAQVR	N-ter + 42.01 Da, K +28.03 Da	24.5	60.0	3	1754.09	0.98	0.07	BT3L4_MOUSE	BTF3_MOUSE	Transcription factor BTF3 homolog 4;	Basic transcription factor 3-like 4;
M	NRPAPVEISYENMR	N-ter + 42.01 Da	36.6	64.1	3	1847.98	n.d.	n.d.	TP4A2_MOUSE		Protein tyrosine phosphatase type IVA 2;	Protein-tyrosine phosphatase 4a2;Protein-tyrosine phosphatase of regenerating liver 2;
M	NSVGEACTDMKR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	59.8	28.0	2	1573.75	-0.32	0.06	TRIA1_MOUSE		TP53-regulated inhibitor of apoptosis 1;	Protein 15E1.1;WF-1;p53-inducible cell-survival factor;
M	NTLGKTITCR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	56.2	34.0	2	1363.74	0.10	0.00	E9Q5Z6_MOUSE	E9Q4Y1_MOUSE		
M	NVEHEVNLLVEEIHR	N-ter + 42.01 Da	65.1	82.6	3	2002.16	n.d.	n.d.	CF115_MOUSE	E9QMV2_MOUSE	Costars family protein C6orf115 homolog;	
M	NVNDLKQR	N-ter + 42.01 Da, K +34.06 Da	39.3	58.8	2	1192.71	0.15	0.02	UAP1_MOUSE	Q3UHZ7_MOUSE	UDP-N-acetylhexosamine pyrophosphorylase;	
VFSMFDQTQI	QEFKEAFTVIDQNR	N-ter + 42.01 Da, K +28.03 Da	35.9	92.4	3	1794.06	7.93	1.06	MLRS_MOUSE	F6ULR7_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;	Fast skeletal myosin light chain 2;MLC2F;
EQEDGVEDLQ	QNGKTLLIMNIDMEPGAVDPQLR	N-ter + 42.01 Da, K +28.03 Da	26.3	48.9	4	2622.48	2.68	0.40	E9Q777_MOUSE	E9Q774_MOUSE		
M	QNVINTVKGK	N-ter + 42.01 Da, K +28.03 Da	54.5	10.4	2	1328.76	-0.32	0.03	ATG3_MOUSE		Ubiquitin-like-conjugating enzyme ATG3;	Autophagy-related protein 3;
M	QPASAKWYDR	N-ter + 42.01 Da, K +34.06 Da	43.7	32.9	2	1427.75	-0.14	0.02	TEBP_MOUSE	D3Z7C6_MOUSE	Prostaglandin E synthase 3;	Cytosolic prostaglandin E2 synthase;Hsp90 co-chaperone;Progesterone receptor complex p23;Sid 3177;Telomerase-binding protein p23;
SQPRVSEVAM	QSAPLEQPAKRPR	N-ter + 42.01 Da, K +34.06 Da	25.4	52.3	3	1684.02	0.29	0.05	SAMH1_MOUSE	E9Q0K6_MOUSE	SAM domain and HD domain-containing protein 1;	Interferon-gamma-inducible protein Mg11;
M	QTAHTGLSHTADGADGQTSR	N-ter + 42.01 Da	58.2	73.1	3	2183.13	n.d.	n.d.	LAGE3_MOUSE		L antigen family member 3;	ITBA2 protein homolog;
QWLPGAAYLR	RPAPPPRER	N-ter + 42.01 Da	37.4	41.6	2	1116.66	n.d.	n.d.	FUT11_MOUSE		Alpha-(1,3)-fucosyltransferase 11;	Fucosyltransferase XI;Galactoside 3-L-fucosyltransferase 11;
M	SAAEEVDGLGVVRPHYGSVLDNER	N-ter + 42.01 Da	53.8	48.0	3	2610.39	n.d.	n.d.	IQGA1_MOUSE	F6ZJB0_MOUSE	Ras GTPase-activating-like protein IQGAP1;	
M	SAAETGSEPSQGAGPSEATLHSLR	N-ter + 42.01 Da	56.2	53.8	3	2381.24	n.d.	n.d.	E9Q3E1_MOUSE		Aldehyde dehydrogenase;	
M	SAFNLLHLVTKSQPVAPR	N-ter + 42.01 Da, K +34.06 Da	63.0	61.9	3	2053.32	-0.42	0.12	MSRB3_MOUSE	D3YUC9_MOUSE	Methionine-R-sulfoxide reductase B3, mitochondrial;	
M	SAHLQWMVVR	N-ter + 42.01 Da	44.0	42.8	2	1267.70	n.d.	n.d.	RL28_MOUSE		60S ribosomal protein L28;	
M	SAKAISEQTGKELLYKYICTTSAIQNR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	38.1	83.9	4	3198.96	0.26	0.05	ACLY_MOUSE	Q3TS02_MOUSE	ATP-citrate synthase;	ATP-citrate (pro-S-)-lyase;Citrate cleavage enzyme;
M	SAKSAISKEIFAPLDER	N-ter + 42.01 Da, K +28.03 Da	34.3	71.9	3	1959.21	0.42	0.04	STXB6_MOUSE	Q3TYA4_MOUSE	Syntaxin-binding protein 6;	
KM	SALKAVFQYIDENQDR	N-ter + 42.01 Da, K +28.03 Da	53.7	72.0	3	1966.12	0.25	0.10	CNDP2_MOUSE	F6XEL6_MOUSE	Cytosolic non-specific dipeptidase;	CNDP dipeptidase 2;Glutamate carboxypeptidase-like protein 1;
M	SALLEQKEQQER	N-ter + 42.01 Da, K +28.03 Da	35.1	42.5	3	1527.85	-0.06	0.00	ANR40_MOUSE		Ankyrin repeat domain-containing protein 40;	
M	SAMEAADVFHR	N-ter + 42.01 Da	54.6	44.2	2	1274.63	n.d.	n.d.	CPPED_MOUSE	D3Z7F7_MOUSE	Calcineurin-like phosphoesterase domain-containing protein 1;	
M	SAPAGSPHPAAGAR	N-ter + 42.01 Da	54.7	38.7	2	1287.68	n.d.	n.d.	Q80ZX0_MOUSE			
M	SATQHKTSLPQGVR	N-ter + 42.01 Da, K +34.06 Da	64.8	57.4	3	1584.97	0.77	0.05	Q9CRB1_MOUSE	D3Z141_MOUSE		
VQSTASTKNA	SCYFDIEWCDR	N-ter + 42.01 Da, C +57.02 Da	23.3	47.0	3	1591.68	n.d.	n.d.	FSCN1_MOUSE	F7BDR1_MOUSE	Fascin;	Singed-like protein;
M	SDAAVDTSSEITTKDLKEKKEVVEEAENGR	N-ter + 42.01 Da, K +34.06 Da	39.0	80.2	4	3456.16	-0.45	0.08	PTMA_MOUSE		Prothymosin alpha;	

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	SDDKPFLCTAPGCGQR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	37.0	51.7	3	1877.94	-0.01	0.00	ATF2_MOUSE	A2AQE9_MOUSE	Cyclic AMP-dependent transcription factor ATF-2;	Activating transcription factor 2;MXBP protein;cAMP response element-binding protein CRE-BP1;
M	SDKLPYKVADIGLAAWGR	N-ter + 42.01 Da, K +34.06 Da	48.9	58.1	3	2069.32	0.50	0.14	SAHH_MOUSE	A2ALT5_MOUSE	Adenosylhomocysteinase;	CUBP;Liver copper-binding protein;S-adenosyl-L-homocysteine hydrolase;
M	SDNGELEDKPPAPPVR	N-ter + 42.01 Da, K +34.06 Da	44.0	49.7	3	1796.01	0.88	0.13	PAK2_MOUSE		Serine/threonine-protein kinase PAK 2;	Gamma-PAK;p21-activated kinase 2;
KKSKENPRNF	SDNQLQEGKNVIGLQMGTNR	N-ter + 42.01 Da, K +28.03 Da	34.5	38.8	3	2271.22	0.44	0.06	TAGL2_MOUSE		Transgelin-2;	SM22-beta;
M	SDSEKLNLDSIIGR	N-ter + 42.01 Da, K +34.06 Da	57.3	34.1	2	1621.93	0.61	0.09	PP1A_MOUSE		Serine/threonine-protein phosphatase PP1-alpha catalytic subunit;	
M	SDSFDRAPEQTKPQR	N-ter + 42.01 Da, K +28.03 Da	35.4	73.0	3	1831.02	0.24	0.04	PAIP1_MOUSE		Polyadenylate-binding protein-interacting protein 1;	
M	SDSLDNEEKPPAPPLR	N-ter + 42.01 Da, K +34.06 Da	40.4	43.8	3	1840.02	0.53	0.03	PAK3_MOUSE	A3KGC2_MOUSE	Serine/threonine-protein kinase PAK 3;	Beta-PAK;CDC42/RAC effector kinase PAK-B;p21-activated kinase 3;
NKLHHHHHHQ	SDSLVVCEVDPELKETLR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	32.8	52.3	3	2164.23	-0.42	0.06	GMFG_MOUSE		Glia maturation factor gamma;	
M	SEAFDCAKCNESLYGR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	42.2	49.5	3	1975.94	-1.00	0.14	FHL3_MOUSE	A6H6N4_MOUSE	Four and a half LIM domains protein 3;	Skeletal muscle LIM-protein 2;
M	SEDEEKVKLR	N-ter + 42.01 Da, K +28.03 Da	23.3	71.4	3	1329.81	0.21	0.02	STX17_MOUSE	B1AVI2_MOUSE	Syntaxin-17;	
M	SEGDSVGDSVHGKPSVVYR	N-ter + 42.01 Da, K +34.06 Da	53.5	66.8	3	2050.15	-0.17	0.03	RER1_MOUSE		Protein RER1;	
GPSSYKVGTM	SEKFDCHYCR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	25.5	70.8	3	1476.74	0.04	0.01	FHL1_MOUSE	A2AEX8_MOUSE	Four and a half LIM domains protein 1;	KyoT;RBP-associated molecule 14-1;Skeletal muscle LIM-protein 1;
LPASPGPGTM	SEKSVEAAAELSAKDLKEKKDKVEEKAGR	N-ter + 42.01 Da, K +28.03 Da	35.6	67.6	4	3411.15	0.28	0.02	PTMS_MOUSE	F7AXC4_MOUSE	Parathymosin;	
M	SELEQLRQEAEQLR	N-ter + 42.01 Da	39.6	70.7	3	1770.02	n.d.	n.d.	GBB2_MOUSE	GBB4_MOUSE	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2;	G protein subunit beta-2;Transducin beta chain 2;
M	SEPELKLVAR	N-ter + 42.01 Da, K +28.03 Da	36.8	35.1	2	1210.73	0.93	0.09	APT_MOUSE	Q6PK77_MOUSE	Adenine phosphoribosyltransferase;	
M	SESLVVCDVAEDLVEKLR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	55.3	64.9	3	2136.26	-0.58	0.19	GMFB_MOUSE		Glia maturation factor beta;	
M	SETAPAAPAAPAPAEKTPVKKKAR	N-ter + 42.01 Da, K +34.06 Da	26.7	96.0	4	2564.84	-1.64	0.15	H14_MOUSE		Histone H1.4;	H1 VAR.2;H1e;
MQSELVPVSM	SETEHIASISSDATTEKTSELR	N-ter + 42.01 Da, K +34.06 Da	55.3	59.9	3	2467.36	-0.40	0.09	CJ118_MOUSE		Uncharacterized protein C10orf118 homolog;	Oocyte-testis gene 1 protein;
MLSPAM	SFLKSFPPPGSADGLR	N-ter + 42.01 Da, K +34.06 Da	28.3	25.1	3	1750.99	-1.69	0.00	ICLN_MOUSE	Q923F1_MOUSE	Methylosome subunit pICln;	Chloride channel, nucleotide sensitive 1A;Chloride conductance regulatory protein ICln;Chloride ion current inducer protein;
M	SGEDEQQEQTIAEDLVVTKYKMGGDIANR	N-ter + 42.01 Da, K +34.06 Da	39.5	80.0	4	3333.93	0.58	0.15	PA2G4_MOUSE	D3YVH7_MOUSE	Proliferation-associated protein 2G4;	IRES-specific cellular trans-acting factor 45 kDa;Mpp1;Proliferation-associated protein 1;Protein p38-2G4;
M	SGEGENPASKPTPVQDVQGDGR	N-ter + 42.01 Da, K +34.06 Da	66.8	55.6	3	2300.24	0.16	0.03	PA1B3_MOUSE	Q8CA83_MOUSE	Platelet-activating factor acetylhydrolase IB subunit gamma;	PAF acetylhydrolase 29 kDa subunit;PAF-AH subunit gamma;
M	SGEMDKPLISR	N-ter + 42.01 Da, K +28.03 Da	33.0	37.7	2	1301.71	0.20	0.01	STEA3_MOUSE	E9QN92_MOUSE	Metalloreductase STEAP3;	Dudulin-2;Protein nm1054;Six-transmembrane epithelial antigen of prostate 3;Tumor suppressor-activated pathway protein 6;
M	SGGKYVDSEGHLYTVPIR	N-ter + 42.01 Da, K +28.03 Da	57.1	62.4	3	2047.17	0.75	0.09	CAV1_MOUSE		Caveolin-1;	
M	SGGLLKALR	N-ter + 42.01 Da, K +34.06 Da	36.8	22.8	2	989.67	0.11	0.00	NCBP2_MOUSE	D3Z3D2_MOUSE	Nuclear cap-binding protein subunit 2;	20 kDa nuclear cap-binding protein;NCBP 20 kDa subunit;
RKDLFANTVL	SGGSTMYPGIADR	N-ter + 42.01 Da	37.8	69.4	2	1352.70	n.d.	n.d.	ACTBL_MOUSE		Beta-actin-like protein 2;	Kappa-actin;
M	SGGTPYIGSKISLISKAEIR	N-ter + 42.01 Da, K +28.03 Da	23.2	60.5	3	2174.36	0.18	0.01	LS14A_MOUSE		Protein LSM14 homolog A;	Protein FAM61A;RNA-associated protein 55A;
ESPRASTGVP	SGKRKLPTSEEERSPAKR	N-ter + 42.01 Da, K +34.06 Da, K +28.03 Da	29.7	102.2	4	2187.48	n.d.	n.d.	TP53B_MOUSE	A2AU91_MOUSE	Tumor suppressor p53-binding protein 1;	
M	SGSSSVAAMKKVVQQLR	N-ter + 42.01 Da, K +34.06 Da	48.1	59.9	3	1885.22	-0.29	0.04	GBG5_MOUSE		Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-5;	
MA	SGVAVSDGVIKVFNDMKVR	N-ter + 42.01 Da, K +34.06 Da	37.1	60.0	3	2130.34	-0.64	0.17	COF1_MOUSE	E9Q1T2_MOUSE	Cofilin-1;	Cofilin, non-muscle isoform;
M	SGYTPDEKLR	N-ter + 42.01 Da, K +34.06 Da	42.2	29.7	2	1240.69	-0.07	0.01	NDUB6_MOUSE	A2AP32_MOUSE	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 6;	Complex I-B17;NADH-ubiquinone oxidoreductase B17 subunit;
M	SHGFTKEEVAEFQAAFNR	N-ter + 42.01 Da, K +34.06 Da	43.2	95.9	4	2143.26	-0.43	0.02	CALM4_MOUSE		Calmodulin-4;	Calcium-binding protein Dd112;
M	SHPSWLPPKSTGEPLGHVPAR	N-ter + 42.01 Da, K +28.03 Da	40.5	71.7	4	2319.38	0.01	0.00	LPP_MOUSE		Lipoma-preferred partner homolog;	
M	SHQTGIQASEDVKEIFAR	N-ter + 42.01 Da, K +28.03 Da	54.7	77.2	3	2085.21	-0.30	0.05	TWF1_MOUSE		Twinfilin-1;	Protein A6;
M	SHTILLVQPTKRPEGR	N-ter + 42.01 Da, K +28.03 Da	34.7	61.4	4	1901.20	-0.36	0.02	ERH_MOUSE		Enhancer of rudimentary homolog;	
M	SIGVPIKVLHEAEGHIVTCETNTGEVYR	N-ter + 42.01 Da, K +28.03 Da, C +57.02 Da	32.5	90.4	4	3177.90	0.04	0.01	SMD3_MOUSE		Small nuclear ribonucleoprotein Sm D3;	snRNP core protein D3;
M	SILYVSPHPDAFPSLR	N-ter + 42.01 Da	49.9	56.0	3	1840.06	n.d.	n.d.	SYVC_MOUSE		Valine--tRNA ligase;	Protein G7a;Valyl-tRNA synthetase;
M	SISESSPAATSLPNGDCGRPR	N-ter + 42.01 Da, C +57.02 Da	36.4	58.2	3	2200.15	n.d.	n.d.	PURA2_MOUSE		Adenylosuccinate synthetase isozyme 2;	Adenylosuccinate synthetase, acidic isozyme;Adenylosuccinate synthetase, liver isozyme;IMP--aspartate ligase 2;
M	SISSLGSIGKGR	N-ter + 42.01 Da, K +34.06 Da	62.4	29.9	2	1236.76	1.37	0.13	B1AXE7_MOUSE	A2BI37_MOUSE		
M	SKQQPTQFINPETPGYVGFANLPNQVHR	N-ter + 42.01 Da, K +34.06 Da	45.0	84.5	4	3242.94	-0.15	0.03	SEPT2_MOUSE	D3Z3C0_MOUSE	Septin-2;	Neural precursor cell expressed developmentally down-regulated protein 5;
M	SKSESPKEPEQLR	N-ter + 42.01 Da, K +34.06 Da	30.1	63.8	3	1624.01	0.06	0.01	ROA1_MOUSE	Q5EBP8_MOUSE	Heterogeneous nuclear ribonucleoprotein A1;	HDP-1;Helix-destabilizing protein;Single-strand-binding protein;Topoisomerase-inhibitor suppressed;hnRNP core protein A1;
M	SKSFQQSSLGR	N-ter + 42.01 Da, K +34.06 Da	38.5	40.2	2	1299.75	0.25	0.03	MATR3_MOUSE	Q6ZQ61_MOUSE	Matrin-3;	
M	SLHQFLLEPITCHAWNR	N-ter + 42.01 Da, C +57.02 Da	56.5	62.5	3	2163.20	n.d.	n.d.	ARC1A_MOUSE	D3YVI5_MOUSE	Actin-related protein 2/3 complex subunit 1A;	SOP2-like protein;Sid 329;

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	SLICSISNEVPEHPCVSPVSNHVYER	N-ter + 42.01 Da, C +57.02 Da	37.8	76.0	4	3050.65	n.d.	n.d.	PRP19_MOUSE		Pre-mRNA-processing factor 19;	Nuclear matrix protein 200;PRP19/PSO4 homolog;Senescence evasion factor;
CEPVYGPLTM	SLKPQPQPPAPATGR	N-ter + 42.01 Da, K +28.03 Da	38.1	44.8	3	1613.96	0.14	0.01	ATX2_MOUSE	E9QQ60_MOUSE	Ataxin-2;	Spinocerebellar ataxia type 2 protein homolog;
M	SLSNKLTLDKLDVKGKR	N-ter + 42.01 Da, K +28.03 Da	28.0	42.0	3	2068.35	-0.11	0.01	PGK1_MOUSE		Phosphoglycerate kinase 1;	
M	SLVAVPFYQKR	N-ter + 42.01 Da, K +28.03 Da	38.5	33.9	2	1376.83	-0.58	0.07	Q14BI5_MOUSE			
M	SLVDLGKKLLEAAR	N-ter + 42.01 Da, K +34.06 Da	55.3	80.7	3	1622.17	-0.69	0.33	GABP1_MOUSE	A2AQ71_MOUSE	GA-binding protein subunit beta-1;	GABP subunit beta-2;
EVVLALDAIH	SMGLIHR	N-ter + 42.01 Da	34.5	41.3	2	854.48	n.d.	n.d.	ROCK2_MOUSE	F8VPK5_MOUSE	Rho-associated protein kinase 2;	Rho-associated, coiled-coil-containing protein kinase 2;Rho-associated, coiled-coil-containing protein kinase II;p164 ROCK-2;
ASVILQHLRM	SMHTEAAEVLLER	N-ter + 42.01 Da	35.9	46.9	3	1526.81	n.d.	n.d.	HIBCH_MOUSE	E0CX19_MOUSE	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial;	3-hydroxyisobutyryl-coenzyme A hydrolase;
M	SMNKGPTLLDGDLPEQENVLQR	N-ter + 42.01 Da, K +34.06 Da	55.9	47.4	3	2529.42	-0.71	0.08	PLIN1_MOUSE		Perilipin-1;	Lipid droplet-associated protein;Perilipin A;
M	SNGYEDHMAEDCRDDIGR	N-ter + 42.01 Da, C +57.02 Da	39.6	63.6	3	2180.99	n.d.	n.d.	ELAV1_MOUSE		ELAV-like protein 1;	Elav-like generic protein;Hu-antigen R;MelG;
GLQGPPGSPG	SPGEQGPSGASGPAGPR	N-ter + 42.01 Da	29.5	83.3	3	1549.84	n.d.	n.d.	CO1A1_MOUSE	F8WGB7_MOUSE	Collagen alpha-1(I) chain;	Alpha-1 type I collagen;
M	SQAEFDKAAEEVKR	N-ter + 42.01 Da, K +28.03 Da	62.4	33.0	2	1704.93	-0.25	0.01	ACBP_MOUSE		Acyl-CoA-binding protein;	Diazepam-binding inhibitor;Endozepine;
M	SQGDSNPAAIPHAAEDIQGDDR	N-ter + 42.01 Da	60.9	41.1	3	2305.12	n.d.	n.d.	PA1B2_MOUSE	F8WIW7_MOUSE	Platelet-activating factor acetylhydrolase IB subunit beta;	PAF acetylhydrolase 30 kDa subunit;PAF-AH subunit beta;
EDIRERVETL	SQVEVILQQSAADIAR	N-ter + 42.01 Da	32.8	47.0	3	1769.02	n.d.	n.d.	LAMB1_MOUSE	E9QN70_MOUSE	Laminin subunit beta-1;	Laminin B1 chain;Laminin-1 subunit beta;Laminin-10 subunit beta;Laminin-12 subunit beta;Laminin-2 subunit beta;Laminin-6 subunit beta;Laminin-8 subunit beta;
CQGGLPKDRP	SRGKDAIAPKR	N-ter + 42.01 Da, K +34.06 Da	20.2	43.7	3	1307.89	-1.15	0.13	FHDC1_MOUSE		FH2 domain-containing protein 1;	
M	SSEPPPPPLQPPTHQTSVGLLDTPR	N-ter + 42.01 Da	33.4	57.9	4	2689.53	n.d.	n.d.	CHSP1_MOUSE		Calcium-regulated heat stable protein 1;	Calcium-regulated heat-stable protein of 24 kDa;
M	SSILPFTPPVVKR	N-ter + 42.01 Da, K +34.06 Da	30.9	25.9	2	1515.96	0.71	0.07	SMAD2_MOUSE	E9Q3M0_MOUSE	Mothers against decapentaplegic homolog 2;	Mad-related protein 2;SMAD family member 2;
M	SSKSMVLGYWDIR	N-ter + 42.01 Da, K +28.03 Da	40.1	66.5	3	1610.92	-0.74	0.10	GSTM5_MOUSE	E9PVM7_MOUSE	Glutathione S-transferase Mu 5;	Fibrous sheath component 2;GST class-mu 5;
M	SSKTASTNSIAQAR	N-ter + 42.01 Da, K +34.06 Da	34.8	57.4	3	1496.89	-0.49	0.12	GBG12_MOUSE		Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12;	
GSSSPLPKYA	SSPKPNNSYMFKR	N-ter + 42.01 Da, K +34.06 Da, K +28.03 Da	22.4	7.6	3	1658.88	n.d.	n.d.	GLCI1_MOUSE	E9QKK4_MOUSE	Glucocorticoid-induced transcript 1 protein;	Glucocorticoid-induced gene 18 protein;Testhymin;Thymocyte/spermatocyte selection protein 1;
M	SSPPEGKLETKAGHPPAVKAGGMR	N-ter + 42.01 Da, K +28.03 Da	22.8	77.5	4	2527.55	0.18	0.01	DAP1_MOUSE		Death-associated protein 1;	
SMNRLWRKNK	SSQPGIFCIGVDLNR	N-ter + 42.01 Da, C +57.02 Da	27.5	5.6	3	1703.84	n.d.	n.d.	CBPA5_MOUSE	E9PYY7_MOUSE	Carboxypeptidase A5;	
TCVSNGPFIM	SSSASAANGNDSKKFKGDNR	N-ter + 42.01 Da, K +34.06 Da	31.8	103.8	4	2184.39	-0.36	0.10	PTBP1_MOUSE	Q922I7_MOUSE	Polypyrimidine tract-binding protein 1;	Heterogeneous nuclear ribonucleoprotein I;
M	SSSLLAGGHMVSLTPCEESR	N-ter + 42.01 Da, C +57.02 Da	45.4	64.0	3	2159.14	n.d.	n.d.	TENS4_MOUSE		Tensin-4;	
M	SSSRPVALVTGANKGIGFAITR	N-ter + 42.01 Da, K +28.03 Da	58.9	56.8	3	2271.40	0.25	0.06	CBR1_MOUSE		Carbonyl reductase [NADPH] 1;	15-hydroxyprostaglandin dehydrogenase [NADP+];NADPH-dependent carbonyl reductase 1;Prostaglandin 9-ketoreductase;Prostaglandin-E(2) 9-reductase;
M	SSTQFNKGPSYGLSAEVKNR	N-ter + 42.01 Da, K +34.06 Da	66.0	60.3	3	2279.36	0.06	0.01	CNN2_MOUSE	D3Z7R6_MOUSE	Calponin-2;	Calponin H2, smooth muscle;Neutral calponin;
M	SSVAVLTQESFAEHR	N-ter + 42.01 Da	49.6	74.2	3	1701.96	n.d.	n.d.	VIGLN_MOUSE		Vigilin;	High density lipoprotein-binding protein;
CKAADKDTCF	STEGPNLVTR	N-ter + 42.01 Da	29.1	87.8	2	1114.66	n.d.	n.d.	ALBU_MOUSE		Serum albumin;	
LFANTVLSGG	STMYPGIADR	N-ter + 42.01 Da	23.6	75.9	2	1151.62	n.d.	n.d.	ACTBL_MOUSE		Beta-actin-like protein 2;	Kappa-actin;
M	STNTDLSLSSYDEGQGSKFIR	N-ter + 42.01 Da, K +28.03 Da	58.5	40.0	3	2374.22	0.03	0.00	HIG1A_MOUSE		HIG1 domain family member 1A;	Hypoxia-inducible gene 1 protein;
M	STTTGPEAAPKPSAKSIYEQR	N-ter + 42.01 Da, K +28.03 Da	27.4	65.8	3	2316.35	-0.38	0.09	ES8L1_MOUSE	E9Q4X5_MOUSE	Epidermal growth factor receptor kinase substrate 8-like protein 1;	Epidermal growth factor receptor pathway substrate 8-related protein 1;
M	SVFGKLFGAGGGKAGKGGPTPQEAIQR	N-ter + 42.01 Da, K +28.03 Da	29.5	73.0	4	2740.70	-0.69	0.02	CHM4B_MOUSE		Charged multivesicular body protein 4b;	Chromatin-modifying protein 4b;
M	TAFFKTLR	N-ter + 42.01 Da, K +34.06 Da	34.5	32.1	2	1058.67	0.74	0.04	AGK_MOUSE		Acylglycerol kinase, mitochondrial;	Multiple substrate lipid kinase;
M	TAIIKEIVSR	N-ter + 42.01 Da, K +28.03 Da	59.0	36.5	2	1198.77	-0.45	0.10	PTEN_MOUSE		Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN;	Mutated in multiple advanced cancers 1;Phosphatase and tensin homolog;
M	TATLRPYLSAVR	N-ter + 42.01 Da	38.0	23.5	2	1388.81	n.d.	n.d.	ARPC4_MOUSE		Actin-related protein 2/3 complex subunit 4;	Arp2/3 complex 20 kDa subunit;
M	TETDGFYKSR	N-ter + 42.01 Da, K +28.03 Da	51.7	34.4	2	1272.64	0.24	0.02	CASP6_MOUSE		Caspase-6;	Apoptotic protease Mch-2;
M	TFAEDKTYKYIR	N-ter + 42.01 Da, K +28.03 Da	27.7	69.1	3	1631.97	-0.74	0.03	MAVS_MOUSE		Mitochondrial antiviral-signaling protein;	CARD adapter inducing interferon beta;Interferon beta promoter stimulator protein 1;Virus-induced-signaling adapter;
M	THSSQDAGSHGIQEEGR	N-ter + 42.01 Da	55.2	92.3	3	1836.97	n.d.	n.d.	CG053_MOUSE		Coiled-coil domain-containing transmembrane protein C7orf53 homolog;	
M	TMDKSELVQKAKLAEQAER	N-ter + 42.01 Da, K +28.03 Da	43.8	58.9	4	2300.38	0.10	0.01	1433B_MOUSE	A2A5N1_MOUSE	14-3-3 protein beta/alpha;	Protein kinase C inhibitor protein 1;
MPAIM	TMLADHAAR	N-ter + 42.01 Da	37.0	48.4	2	1026.54	n.d.	n.d.	XPO1_MOUSE	A2AKT6_MOUSE	Exportin-1;	Chromosome region maintenance 1 protein homolog;
M	TNEEPLPKKVR	N-ter + 42.01 Da, K +34.06 Da	19.6	45.6	3	1419.94	-0.23	0.03	FL2D_MOUSE	E0CYH0_MOUSE	Pre-mRNA-splicing regulator WTAP;	Female-lethal(2)D homolog;WT1-associated protein;Wilms tumor 1-associating protein;
M	TQEEAGRLPQVLAR	N-ter + 42.01 Da	25.0	37.2	3	1608.92	n.d.	n.d.	Q8BGM4_MOUSE	Q8BY07_MOUSE		
M	TQEYDNKRPVLVLQNEALYPQR	N-ter + 42.01 Da, K +28.03 Da	44.1	71.4	4	2743.63	-0.42	0.04	GRHL1_MOUSE		Grainyhead-like protein 1 homolog;	Transcription factor CP2-like 2;Transcription factor LBP-32;
LFKAKKVAMM	TQPPSTPALPR	N-ter + 42.01 Da	22.4	29.6	3	1205.68	n.d.	n.d.	E9PZQ0_MOUSE			
M	TSPEGAQNKEIDCLSPEAQR	N-ter + 42.01 Da, K +34.06 Da, C +57.02 Da	36.9	49.9	3	2305.22	-0.04	0.01	LRRF1_MOUSE	E9Q9T1_MOUSE	Leucine-rich repeat flightless-interacting protein 1;	FLI-LRR-associated protein 1;H186 FLAP;
M	TSSYGHVLER	N-ter + 42.01 Da	60.0	39.4	2	1189.62	n.d.	n.d.	PRRX1_MOUSE		Paired mesoderm homeobox protein 1;	Homeobox protein K-2;Homeobox protein mHox;Paired-related homeobox protein 1;
M	TTKDPESEHPSVTLFR	N-ter + 42.01 Da, K +34.06 Da	42.3	63.0	3	1919.11	0.38	0.04	ACY1_MOUSE		Aminoacylase-1;	N-acyl-L-amino-acid amidohydrolase;

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	TTNTVPLHPYWPR	N-ter + 42.01 Da	29.1	56.3	3	1622.91	n.d.	n.d.	EBP_MOUSE	A2AC29_MOUSE	3-beta-hydroxysteroid-Delta(8),Delta(7)-isomerase;	Cholestenol Delta-isomerase;Delta(8)-Delta(7) sterol isomerase;Emopamil-binding protein;
M	TTTTTFKGVDPNSR	N-ter + 42.01 Da, K +34.06 Da	27.3	49.3	3	1599.91	0.37	0.05	HN1_MOUSE		Hematological and neurological expressed 1 protein;	
VDIRKDLFAN	TVLSGGSTMYPGIADR	N-ter + 42.01 Da	28.2	60.0	3	1665.90	n.d.	n.d.	ACTBL_MOUSE		Beta-actin-like protein 2;	Kappa-actin;
M	VEKEEAGGGGGGISEEEAAQYDR	N-ter + 42.01 Da, K +34.06 Da	90.7	56.6	3	2470.27	-0.06	0.01	SAE1_MOUSE		SUMO-activating enzyme subunit 1;	Ubiquitin-like 1-activating enzyme E1A;
GVANVSIDDR	VISLSGEHSIIGR	N-ter + 42.01 Da	33.6	59.3	3	1408.85	n.d.	n.d.	SODC_MOUSE		Superoxide dismutase [Cu-Zn];	
PVDKM	VKVGVNGFGR	N-ter + 42.01 Da, K +28.03 Da	43.5	31.2	2	1101.66	-0.32	0.02	G3P_MOUSE	E9PX99_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;	Peptidyl-cysteine S-nitrosylase GAPDH;
CDEIHDRVKD	VLKSHQAHAR	N-ter + 42.01 Da, K +34.06 Da	22.7	14.6	3	1221.73	-2.12	0.37	SPAT6_MOUSE		Spermatogenesis-associated protein 6;	Kinesin-related protein;
KAAVSGLWGK	VNADEVGGEALGR	N-ter + 42.01 Da	20.6	27.8	2	1327.67	n.d.	n.d.	A8DUK4_MOUSE	E9Q223_MOUSE		
M	VSVMNTVDTSHEDMIHDAQMDYYGTR	N-ter + 42.01 Da	30.5	74.7	4	3056.52	n.d.	n.d.	SEC13_MOUSE		Protein SEC13 homolog;	SEC13-like protein 1;SEC13-related protein;
PGSTPFKFWA	WDPEEERR	N-ter + 42.01 Da	15.7	33.1	3	1157.55	n.d.	n.d.	LIMC1_MOUSE	E9PXS0_MOUSE	LIM and calponin homology domains-containing protein 1;	
LASLSTFQQM	WISKQEYDEAGPSIVHR	N-ter + 42.01 Da, K +28.03 Da	33.8	70.9	4	2084.18	1.14	0.07	ACTA_MOUSE	ACTC_MOUSE	Actin, aortic smooth muscle;	Alpha-actin-2;
LASLSTFQQM	WITKQEYDEAGPSIVHR	N-ter + 42.01 Da, K +28.03 Da	33.1	105.2	4	2098.27	1.64	0.20	ACTS_MOUSE		Actin, alpha skeletal muscle;	Alpha-actin-1;
DDFVPPRHAT	YFLAGLGPESGR	N-ter + 42.01 Da	24.3	39.4	2	1307.70	n.d.	n.d.	CRNS1_MOUSE	E9PX09_MOUSE	Carnosine synthase 1;	ATP-grasp domain-containing protein 1;
PGLTGNFAAQ	YSDKGVSSGPGPMGLMGPR	N-ter + 42.01 Da, K +28.03 Da	41.2	93.1	3	1962.12	-1.06	0.11	CO1A2_MOUSE	E0CXI2_MOUSE	Collagen alpha-2(I) chain;	Alpha-2 type I collagen;
YGFQNAILVR	YTQKAPQVSTPTLVEAAR	N-ter + 42.01 Da, K +34.06 Da	46.4	68.4	3	2035.26	-0.25	0.03	ALBU_MOUSE		Serum albumin;	