

Table S12: Dimethylated (naturally unmodified) N-termini identified in both replicates of the TAILS experiment comparing wild-type and *Cts1^{-/-}* skin.

Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
M	VQAWYMEDESTADPR	0.25	-0.38	MTND_MOUSE	1,2-dihydroxy-3-keto-5-methylthiopentene dioxygenase;
NVVGARRSSW	RVISSIEQKTER	1.87	0.60	1433B_MOUSE	14-3-3 protein beta/alpha;
RYEDMAAFMK	SAVEKGEELSCEER	0.26	1.02	1433S_MOUSE	14-3-3 protein sigma;
VETELRGVCD	TVLGLLDSHLIKAGDAESR	1.29	2.89	1433S_MOUSE	14-3-3 protein sigma;
RYDDMAACMK	SVTEQGAELSNEER	0.12	0.07	1433Z_MOUSE	14-3-3 protein zeta/delta;
M	VLESTMVCVDNSEYMR	1.58	0.58	PSMD4_MOUSE	26S proteasome non-ATPase regulatory subunit 4;
NPNRVAQTTK	KVTQLDLDGPKELSR	-0.74	-0.17	HAP28_MOUSE	28 kDa heat- and acid-stable phosphoprotein;
PNRVAQTTKK	VTQLDLDGPKELSR	1.06	0.19	HAP28_MOUSE	28 kDa heat- and acid-stable phosphoprotein;
RRAHSALAQL	RCILDSELEGIR	0.60	0.60	KBL_MOUSE	2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial;
VILQHLRMSM	HTEAAEVLLER	-0.79	-0.71	HIBCH_MOUSE	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial;
AIMARIAQFL	SGIPETVPLSTVNR	0.45	0.95	THIKA_MOUSE	3-ketoacyl-CoA thiolase A, peroxisomal;
GEADRDTYRR	SAVPPGADKKAEGAGSATEFQFR	1.16	0.52	RS10_MOUSE	40S ribosomal protein S10;
HIFASFNDTF	VHVTDLSGKETICR	0.06	-0.81	RS14_MOUSE	40S ribosomal protein S14;
MAF	KDTGKTPVEPEVAIHR	1.81	-0.22	RS20_MOUSE	40S ribosomal protein S20;
SASNRIIAAK	DHASIQMNVAEVDR	-0.38	0.45	RS21_MOUSE	40S ribosomal protein S21;
FVPNDGCLNF	IEENDEVLVAGFGR	0.87	-0.38	RS23_MOUSE	40S ribosomal protein S23;
SIIRNVKGPV	REGDVLTLLESER	-0.67	-0.94	RS28_MOUSE	40S ribosomal protein S28;
RSIIRNVKGP	VREGDVLTLLESER	3.10	0.99	RS28_MOUSE	40S ribosomal protein S28;
TLTAVHDAIL	EDLVFPSEIVGKR	1.25	-0.54	RS7_MOUSE	40S ribosomal protein S7;
IHRAAAVAAM	STGTFVVSQPLNYR	-0.58	-1.40	AL9A1_MOUSE	4-trimethylaminobutyraldehyde dehydrogenase;
LLPWPAASA	WELTILHTNDVHSR	-0.42	0.19	5NTD_MOUSE	5'-nucleotidase;
SPSAKDIKKI	LDSVGIEADDDR	-1.03	-1.18	RLA2_MOUSE	60S acidic ribosomal protein P2;
ISKEWGF TKF	NADEFEDMVAEKR	-0.22	-1.79	RL10_MOUSE	60S ribosomal protein L10;
SLARELSGTI	KEILGTAQSVGCNVDGR	-0.67	-1.09	RL12_MOUSE	60S ribosomal protein L12;
MPCKI	EEIKDFLLTAR	-5.64	-1.84	RL38_MOUSE	60S ribosomal protein L38;
QEVRCLETSY	ASKPTLNEVVIVSAIR	-0.43	1.35	THIL_MOUSE	Acetyl-CoA acetyltransferase, mitochondrial;
YVALDFENEM	ATAASSSSLEKSYELPDGQVITIGNER	3.02	1.50	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
QGVVMVGMGQK	DSYVGDQAQSKR	2.20	3.34	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
DDEETTALVC	DNGSGLVKAGFAGDDAPR	-1.25	-1.56	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
YPGIADRMQK	EITALAPSTMKIKIIPPER	4.85	4.04	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
EETTALVCDN	GSGLVKAGFAGDDAPR	-0.12	-1.12	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
TTMPGIADR	MQKEITALAPSTMKIK	3.79	2.90	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
TTMPGIADR	MQKEITALAPSTMK	0.75	1.16	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
STFQQMWISK	QEYDEAGPSIVHR	-0.89	-0.27	ACTC_MOUSE	Actin, alpha cardiac muscle 1;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
ETTALVCDNG	SGLVKAGFAGDDAPR	0.49	-0.89	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
SAGIHETTYN	SIMKCDIDIR	0.25	0.10	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
NEMATAASSS	SLEKSYELPDGQVITIGNER	1.29	0.16	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
ELRVAPEEHP	TLLTEAPLNPKANR	0.15	0.30	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
WHHSFYNELR	VAPEEHPTLLTEAPLNPKANR	4.38	3.89	ACTC_MOUSE	Actin, alpha cardiac muscle 1;
CDIDIRKDLY	ANNVMSGGTTMYPGIADR	-2.64	-4.32	ACTS_MOUSE	Actin, alpha skeletal muscle;
IMKCDIDIRK	DLYANNVMSGGTTMYPGIADR	3.92	4.72	ACTS_MOUSE	Actin, alpha skeletal muscle;
PETLFQPSFI	GMESAGIHETTYNSIMKCDIDIR	4.60	4.47	ACTS_MOUSE	Actin, alpha skeletal muscle;
GRPRHQGVMV	GMGQKDSYVGDEAQSQR	1.01	0.23	ACTS_MOUSE	Actin, alpha skeletal muscle;
PSIVGRPRHQ	GVMVGMGQKDSYVGDEAQSQR	0.52	0.11	ACTS_MOUSE	Actin, alpha skeletal muscle;
LSTFQQMWIS	KQEYDEAGPSIVHR	-0.52	-0.74	ACTS_MOUSE	Actin, alpha skeletal muscle;
RPRHQGVMVG	MGQKDSYVGDEAQSQR	1.08	0.07	ACTS_MOUSE	Actin, alpha skeletal muscle;
TTMYPGIADR	MQKEITALAPSTMKIKIIPPER	2.31	-0.84	ACTS_MOUSE	Actin, alpha skeletal muscle;
SLSTFQQMWI	TKQEYDEAGPSIVHR	-0.47	-0.04	ACTS_MOUSE	Actin, alpha skeletal muscle;
VCDNGSGLCK	AGFAGDDAPR	-0.12	0.11	ACTA_MOUSE	Actin, aortic smooth muscle;
VFPSIVGRPR	HQGVMVGMGQKDSYVGDEAQSQR	3.54	3.66	ACTA_MOUSE	Actin, aortic smooth muscle;
IWHHSFYNEL	RVAPEEHPTLLTEAPLNPKANR	3.30	3.07	ACTA_MOUSE	Actin, aortic smooth muscle;
LYANTVLSGG	TTMYPGIADR	-4.64	0.32	ACTA_MOUSE	Actin, aortic smooth muscle;
HHTFYNELRV	APEEHPVLLTEAPLNPKANR	1.35	1.71	ACTB_MOUSE	Actin, cytoplasmic 1;
ASSSSLEKSY	ELPDGQVITIGNER	0.91	0.41	ACTB_MOUSE	Actin, cytoplasmic 1;
IWHHTFYNEL	RVAPEEHPVLLTEAPLNPKANR	4.28	5.24	ACTB_MOUSE	Actin, cytoplasmic 1;
RKDLYANTVL	SGGTTMYPGIADR	-0.42	-0.56	ACTB_MOUSE	Actin, cytoplasmic 1;
TAASSSSLEK	SYELPDGQVITIGNER	0.19	0.19	ACTB_MOUSE	Actin, cytoplasmic 1;
VDIRKDLYAN	TVLSGGTTMYPGIADR	0.06	0.84	ACTB_MOUSE	Actin, cytoplasmic 1;
WHHTFYNELR	VAPEEHPVLLTEAPLNPKANR	3.47	4.13	ACTB_MOUSE	Actin, cytoplasmic 1;
LASLSTFQQM	WISKQEYDESGPSIVHR	0.20	1.27	ACTB_MOUSE	Actin, cytoplasmic 1;
FQQMWISKQE	YDESGPSIVHR	0.28	0.87	ACTB_MOUSE	Actin, cytoplasmic 1;
AASSSSLEKS	YELPDGQVITIGNER	0.51	1.39	ACTB_MOUSE	Actin, cytoplasmic 1;
GTVTHLCRQY	SDAPPLTLDGIKDR	0.88	0.50	ACPM_MOUSE	Acyl carrier protein, mitochondrial;
TGGRTTWARD	NATLSVEPEGR	-0.47	0.36	ACOT2_MOUSE	Acyl-coenzyme A thioesterase 2, mitochondrial;
PGPYAQPSVN	TPLPNLQNGPIYAR	-0.60	0.00	CRK_MOUSE	Adapter molecule crk;
M	APNVLASEPEIPKGR	1.42	2.01	KAD2_MOUSE	Adenylate kinase 2, mitochondrial;
TQCEKIVQKY	GYTHLSTGDLLR	-0.79	-1.09	KAD1_MOUSE	Adenylate kinase isoenzyme 1;
GSGKGTQCEK	IVQKYGYTHLSTGDLLR	-0.42	0.62	KAD1_MOUSE	Adenylate kinase isoenzyme 1;
TIKKRLETTY	NATEPVISFYDKR	-0.38	-0.84	KAD1_MOUSE	Adenylate kinase isoenzyme 1;
GTQCEKIVQK	YGYTHLSTGDLLR	1.64	1.80	KAD1_MOUSE	Adenylate kinase isoenzyme 1;
ETIKKRLETY	YNATEPVISFYDKR	-0.86	-1.00	KAD1_MOUSE	Adenylate kinase isoenzyme 1;

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QKIGQPTELL	YVDAGAETMTQR	1.56	1.36	KAD1_MOUSE	Adenylate kinase isoenzyme 1;
LARAPLCERI	AQNFGQLQLSSGHLLR	0.66	1.12	KAD4_MOUSE	Adenylate kinase isoenzyme 4, mitochondrial;
RTFGTTGERR	AGEEAADSPPELPR	-0.43	-0.18	ADXL_MOUSE	Adrenodoxin-like protein, mitochondrial;
LESKSNKIVQ	SVIQTAVDQFAR	-1.18	-2.25	AKA12_MOUSE	A-kinase anchor protein 12;
HLAQGSETVQ	ATPESLEVPEVTEDVDR	-0.81	-2.74	AKA12_MOUSE	A-kinase anchor protein 12;
LDKVKSATLS	STESTASGMQDEVR	-0.76	-0.32	AKA12_MOUSE	A-kinase anchor protein 12;
WWNPPQEKI	EEQLDEEHLESHR	0.12	0.14	AKAP2_MOUSE	A-kinase anchor protein 2;
RASGPWGRSH	SSAAAESAALKVRPER	-1.52	-0.67	ALAT2_MOUSE	Alanine aminotransferase 2;
SPASHEIATN	LGDFAIISLYR	0.66	0.71	A1AT1_MOUSE	Alpha-1-antitrypsin 1-1;
DQSPASHEIA	TNLGDFAIISLYR	-1.03	-0.47	A1AT2_MOUSE	Alpha-1-antitrypsin 1-2;
DVQETDTSQK	DQSPASHEIATNLGDFALR	-2.40	0.65	A1AT4_MOUSE	Alpha-1-antitrypsin 1-4;
QETDTSQKQDQ	SPASHEIATNLGDFALR	-3.06	0.45	A1AT4_MOUSE	Alpha-1-antitrypsin 1-4;
NAVGPVPTAN	AALPADPPASVVVGPVVVPR	-0.22	-0.76	FETUA_MOUSE	Alpha-2-HS-glycoprotein;
VPTANAALPA	DPPASVVVGPVVVPR	-0.32	-0.60	FETUA_MOUSE	Alpha-2-HS-glycoprotein;
SDHRTYHDLR	HAFSPVASVESASGETLHSPK	-0.45	-0.38	FETUA_MOUSE	Alpha-2-HS-glycoprotein;
RKDAQMVHSN	ALNEDTQDELGDPR	-0.89	-0.40	AMRP_MOUSE	Alpha-2-macroglobulin receptor-associated protein;
LTSESSRPTR	DLSSSDLSTASKIVK	1.31	0.59	A2M_MOUSE	Alpha-2-macroglobulin;
LTSESSRPTR	DLSSSDLSTASK	-0.54	0.21	A2M_MOUSE	Alpha-2-macroglobulin;
RSTCHNQNSM	SICEEFSQQADDKGCFR	0.55	1.46	A2M_MOUSE	Alpha-2-macroglobulin;
RTSTSAVPLN	FVPLNTNPKEVQEMR	0.04	-0.71	ADDA_MOUSE	Alpha-adducin;
QDDWGAWQKF	TASAGIQVVGDDLTVTNPKR	0.63	0.18	ENOA_MOUSE	Alpha-enolase;
NRVYREELKR	DLAKDITSDTSGDFR	0.11	-0.45	ANXA1_MOUSE	Annexin A1;
AALHKAIMVK	GVDEATIIDILTKR	0.90	0.91	ANXA1_MOUSE	Annexin A1;
HLEEVVLAML	KTPAQFDAELR	0.77	0.77	ANXA1_MOUSE	Annexin A1;
GDHSTPPSAY	GSVKPYTNFDAER	-0.09	-0.60	ANXA2_MOUSE	Annexin A2;
STVHEILCKL	SLEGDHSTPPSAYGSVKPYTNFDAER	1.02	2.65	ANXA2_MOUSE	Annexin A2;
LCKLSLEGDH	STPPSAYGSVKPYTNFDAER	0.61	0.45	ANXA2_MOUSE	Annexin A2;
INRVYKEMYK	TDLEKDIISDTSGDFR	0.49	-0.58	ANXA2_MOUSE	Annexin A2;
QEINRVYKEM	YKTLEKDIISDTSGDFR	0.43	1.03	ANXA2_MOUSE	Annexin A2;
ELKHALKGAG	TDEKVLTEIISR	-0.30	-0.58	ANXA5_MOUSE	Annexin A5;
MA	TRGTVTDFPGFDGR	-0.74	-1.43	ANXA5_MOUSE	Annexin A5;
QLKKAMEGAG	TDEKTLIEILATR	-1.74	0.52	ANXA6_MOUSE	Annexin A6;
QLQDMGLIDL	FSPEKSQLPGIVAGGR	0.63	1.67	ANT3_MOUSE	Antithrombin-III;
GALGCAICHG	NPVDDICIAKPR	-0.36	0.06	ANT3_MOUSE	Antithrombin-III;
PSPGEALHIL	LDLPCTPPPPAPIPSVR	1.66	1.90	AP1G2_MOUSE	AP-1 complex subunit gamma-like 2;
SGGGLLDVDF	SDSASAVAPLAPGSEDNFAR	-0.25	-0.42	AP2A2_MOUSE	AP-2 complex subunit alpha-2;
QSQWVKVDF	ANVYVDAVKDSGR	1.32	0.77	APOA1_MOUSE	Apolipoprotein A-I;

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LGQQNLNLL	ENWDTLGSTVSQLQER	2.09	3.57	APOA1_MOUSE	Apolipoprotein A-I;
GPLVEQGRQR	TANLGAGAAQPLR	-1.09	-1.36	APOE_MOUSE	Apolipoprotein E;
SYMKIDELSL	YSVPEGQSKYVEEPR	-0.01	-0.47	APOO_MOUSE	Apolipoprotein O;
VSGRQQLVEL	VAEQADLEQAFSPDPDCVDR	2.44	5.74	API5_MOUSE	Apoptosis inhibitor 5;
AAPCIYWLPL	TESQIVQKEAEQAER	0.72	-0.94	ACINU_MOUSE	Apoptotic chromatin condensation inducer in the nucleus;
ELLSQEFLLL	TLEQKNAIVENEVR	1.95	1.32	ASHWN_MOUSE	Ashwin;
LGGAIDSGAA	YVLEQASSHIGNSTQAAVR	1.36	1.66	ATLA3_MOUSE	Atlantin-3;
QYREVAFAAQ	FGSDLDAATQQLSR	0.72	-0.34	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
YREVAFAQF	GSDLDAATQQLSR	-0.58	-0.54	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
NLHASNTRLQ	KTGTAEMSSILEER	-0.40	-0.76	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
LIKEGDVVKR	TGAIVDVPVGEELLGR	2.60	0.42	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
LIIGDRQTGK	TSIAIDIINQKR	-0.34	0.49	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
TKFENAFSLH	VISQHQSLGNIR	0.81	0.98	ATPA_MOUSE	ATP synthase subunit alpha, mitochondrial;
VQGRDSRLVL	EVAQHLGESTVR	0.54	1.75	ATPB_MOUSE	ATP synthase subunit beta, mitochondrial;
TVLSRAIAEL	GIYPAVDPLDSTSR	0.97	3.33	ATPB_MOUSE	ATP synthase subunit beta, mitochondrial;
DKIREYKSKR	QASGGPVDIGPEYQQDLDR	-1.74	-2.40	ATP5J_MOUSE	ATP synthase-coupling factor 6, mitochondrial;
MKVLQTRGFV	SDSSDSMDTGAGSIR	-1.74	-1.29	ATIF1_MOUSE	ATPase inhibitor, mitochondrial;
LQTRGFVSDS	SDSMDTGAGSIR	-0.32	-0.76	ATIF1_MOUSE	ATPase inhibitor, mitochondrial;
VLQTRGFVSD	SSDSMDTGAGSIR	0.06	-0.42	ATIF1_MOUSE	ATPase inhibitor, mitochondrial;
ASSREGSPAR	SGTPVHCPSPIR	0.69	0.59	BAG3_MOUSE	BAG family molecular chaperone regulator 3;
GRRDSKSPTK	ATPLPAEGKKNTLR	-0.20	-0.92	E41L2_MOUSE	Band 4.1-like protein 2;
EVREAKPALK	SSVETQPAEEVR	0.93	0.33	E41L2_MOUSE	Band 4.1-like protein 2;
QVLVQGSSSN	LPDTSIPGGSTPTVQVTPQLETR	-2.12	1.77	PGBM_MOUSE	Basement membrane-specific heparan sulfate proteoglycan core protein;
RPRHQGVMVG	MGQKDCYVGDEAQSKR	0.99	0.51	ACTBL_MOUSE	Beta-actin-like protein 2;
RLAKYNQLMR	IEEALGDKAVFAGR	-0.25	-1.25	ENOB_MOUSE	Beta-enolase;
HRSGETEDTF	IADLVVGLCTGQIKTGAPCR	-1.40	-2.40	ENOB_MOUSE	Beta-enolase;
LAKYNQLMRI	EEALGDKAVFAGR	-5.06	-2.84	ENOB_MOUSE	Beta-enolase;
ENLATAFTIL	HHPEFTPDQPTER	0.89	-0.52	TXLNB_MOUSE	Beta-taxilin;
MATRSCVSRG	SAGSAAAAGPVEAAIR	-0.12	-0.01	BOLA1_MOUSE	Bola-like protein 1;
QPRNWLLFAC	HVTNEVAQLIQGGR	-0.27	0.71	BR44L_MOUSE	Brain protein 44-like protein;
TIDCDVITLM	GTPSGTAEPYDGTKAR	0.23	2.01	BSDC1_MOUSE	BSD domain-containing protein 1;
TGTGTLVLL	LDVNDNAPIPEPR	2.84	3.58	CADH1_MOUSE	Cadherin-1;
YRIWRDTANW	LEINPETGAIFTR	-2.00	-2.56	CADH1_MOUSE	Cadherin-1;
RTSPVPRQKR	SIVVSPILIPENQR	0.38	1.00	CAD13_MOUSE	Cadherin-13;
SGSLVVEEFM	SLPELQQNPLVQR	-0.79	1.38	CANB1_MOUSE	Calcineurin subunit B type 1;

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GGGGTAMRIL	GGVISAISEAAAQYNPEPPPPR	1.51	2.40	CPNS1_MOUSE	Calpain small subunit 1;
RILGGVISAI	SEAAAQYNPEPPPPR	0.01	0.86	CPNS1_MOUSE	Calpain small subunit 1;
VVLDPMYSTY	LEALGIKEGTIPPEYR	-0.45	-0.56	ICAL_MOUSE	Calpastatin;
SIRSAPPKLA	SLKGVVPEDAVETLAGSLGTR	0.93	0.84	ICAL_MOUSE	Calpastatin;
TISLQMGTNK	GASQAGMLAPGTR	0.95	0.10	CNN3_MOUSE	Calponin-3;
LGTPRLGVQG	EDGLDFPEYDGVDR	-0.32	-0.94	CASQ1_MOUSE	Calsequestrin-1;
ATPQISNLTK	TASESISNLSEAGSVKKGGER	0.25	0.10	CLIP1_MOUSE	CAP-Gly domain-containing linker protein 1;
HDPQLPWSA	SYDPGSAKTILNNGKTCR	-0.71	-0.94	CAH3_MOUSE	Carbonic anhydrase 3;
IKTKGKEAPF	THFDPSCLPACR	-0.32	-0.07	CAH3_MOUSE	Carbonic anhydrase 3;
KLPGRVAFGE	DIDLPEYDFAR	3.16	2.59	CATB_MOUSE	Cathepsin B;
PKLPGRVAFG	EDIDLPEYDFAR	2.11	2.66	CATB_MOUSE	Cathepsin B;
GGPKLPGRVA	FGEDIDLPEYDFAR	1.29	1.37	CATB_MOUSE	Cathepsin B;
GPKLPGRVAF	GEDIDLPEYDFAR	0.32	2.33	CATB_MOUSE	Cathepsin B;
AFRPMEVANF	YYEPDCLAYGAKAAR	-0.64	-0.94	CEBPB_MOUSE	CCAAT/enhancer-binding protein beta;
LSIFVGSFCFS	ESPTKVQLVGGGHR	0.16	-0.94	CD5L_MOUSE	CD5 antigen-like;
DFRHTMHVGR	AGDAFGDTSFLTSLKAR	0.49	1.01	BORG4_MOUSE	Cdc42 effector protein 4;
M	VGGEASAAVEKLVSGVR	-0.03	0.73	C2AIL_MOUSE	CDKN2AIP N-terminal-like protein;
KDCKEPKRER	EQCCYNCGKPGHLAR	-0.36	0.84	CNBP_MOUSE	Cellular nucleic acid-binding protein;
RSRGRGFQFV	SSSLPDICYR	2.00	1.92	CNBP_MOUSE	Cellular nucleic acid-binding protein;
MSVFGKLF	GAGGGKAGKGGPTPQEAIQR	2.33	0.85	CHM4B_MOUSE	Charged multivesicular body protein 4b;
SCLVLAARHA	SASSTNLKDVLSNLIPEQAR	0.14	-0.42	CISY_MOUSE	Citrate synthase, mitochondrial;
LIWDNGMVLG	EQEVSDNELQELSTQGSR	2.10	1.12	CLUS_MOUSE	Clusterin;
DNGMVLGEQE	VSDNELQELSTQGSR	-0.62	1.31	CLUS_MOUSE	Clusterin;
GCLVLPGYEA	LKGPKEISGFEGDTVSLR	-0.45	-0.67	CLM9_MOUSE	CMRF35-like molecule 9;
APPWKDSKKF	KDAPDGPVTVLTVDGR	-6.64	-6.64	FA12_MOUSE	Coagulation factor XII;
NVNLAQIRTF	TEMDSHEEKVFR	-1.18	-0.94	COPD_MOUSE	Coatomer subunit delta;
MRAAPRRAPA	AQPPAAAAPSAVGSPPAAAPR	-1.43	-1.84	CHCH2_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;
MRAAPR	RAPAAQPPAAAAPSAVGSPPAAAPR	1.96	2.08	CHCH2_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 2, mitochondrial;
GTASTRRVTF	EADENENITVVKGIR	0.53	-0.52	CHCH3_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial;
SPSGSKSQRY	SSVYGASVDEDLKR	-0.17	-1.74	CHCH3_MOUSE	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial;
PEEYVSPNSE	DVGVEGPKGDPGPQGPR	-0.49	0.33	CO1A1_MOUSE	Collagen alpha-1(I) chain;
GATALLTHGQ	EDIPEVSCIHNGLR	-0.94	-1.84	CO1A1_MOUSE	Collagen alpha-1(I) chain;
GPAGKNGDRG	ETGPAGPAGPIGPAGAR	0.26	-0.15	CO1A1_MOUSE	Collagen alpha-1(I) chain;

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VGPAGKNGDR	GETGPAGPAGPIGPAGAR	1.76	0.12	CO1A1_MOUSE	Collagen alpha-1(I) chain;
LGGNFASQMS	YGYDEKSAGVSVPGPMGPGSGPR	-3.32	-5.64	CO1A1_MOUSE	Collagen alpha-1(I) chain;
GPVGPAGKNG	DRGETGPAGPAGPIGPAGAR	-2.64	-2.00	CO1A1_MOUSE	Collagen alpha-1(I) chain;
PGLGGNFASQ	MSYGYDEKSAGVSVPGPMGPGSGPR	-3.18	-2.84	CO1A1_MOUSE	Collagen alpha-1(I) chain;
SQMSYGYDEK	SAGVSVPGPMGPGSGPR	-2.74	-3.32	CO1A1_MOUSE	Collagen alpha-1(I) chain;
PGPVGPAGKN	GDRGETGPAGPAGPIGPAGAR	-2.00	-2.84	CO1A1_MOUSE	Collagen alpha-1(I) chain;
GGNFASQMSY	GYDEKSAGVSVPGPMGPGSGPR	-1.89	-2.64	CO1A1_MOUSE	Collagen alpha-1(I) chain;
PVGPAGKNGD	RGETGPAGPAGPIGPAGAR	-2.64	-2.25	CO1A1_MOUSE	Collagen alpha-1(I) chain;
NFASQMSYGY	DEKSAGVSVPGPMGPGSGPR	-3.06	-3.06	CO1A1_MOUSE	Collagen alpha-1(I) chain;
GLGGNFASQM	SYGYDEKSAGVSVPGPMGPGSGPR	-0.74	-2.25	CO1A1_MOUSE	Collagen alpha-1(I) chain;
LLHPTLILAQ	QSNVDELGCShLGQSYESR	-1.74	-3.64	CO3A1_MOUSE	Collagen alpha-1(III) chain;
GDKGDQGLAG	FPGSPGEKGEKGSAGTPGMPGSPGPR	0.86	1.75	CO4A1_MOUSE	Collagen alpha-1(IV) chain;
GLPGSMGPPG	TPSVDHGFLVTR	0.24	0.85	CO4A1_MOUSE	Collagen alpha-1(IV) chain;
SPSEIGPGMP	ANQDTIFEGIGGPR	-3.47	-2.56	CO5A1_MOUSE	Collagen alpha-1(V) chain;
PPLNPILSAN	YERPVLHLVALNTPVAGDIR	1.93	1.41	COFA1_MOUSE	Collagen alpha-1(XV) chain;
CPPETSKSRR	DTQSNELIEINPQTEGKVYTR	0.66	-0.22	COGA1_MOUSE	Collagen alpha-1(XVI) chain;
AAQYSDKGV	SGPGPMGLMGPR	-2.74	-1.84	CO1A2_MOUSE	Collagen alpha-2(I) chain;
EGPVGLPGID	GRPGPIGPAGPR	-2.47	-2.47	CO1A2_MOUSE	Collagen alpha-2(I) chain;
GNFAAQYSDK	GVSSGPGPMGLMGPR	-1.74	-2.32	CO1A2_MOUSE	Collagen alpha-2(I) chain;
GLTGNFAAQY	SDKGVSSGPGPMGLMGPR	-1.52	-2.32	CO1A2_MOUSE	Collagen alpha-2(I) chain;
YSQLQGLPGL	AGLHGDQGAPGPVGPAGPR	-2.40	-2.25	CO1A2_MOUSE	Collagen alpha-2(I) chain;
PGLTGNFAAQ	YSDKGVSSGPGPMGLMGPR	-2.40	-4.32	CO1A2_MOUSE	Collagen alpha-2(I) chain;
PSGPVKGKDR	SGQPGVPAGVR	-0.17	-2.40	CO1A2_MOUSE	Collagen alpha-2(I) chain;
RRDHVLGLAR	SELEEDIPEEDIISR	-0.89	1.74	CO3_MOUSE	Complement C3;
EKLQGGVQK	VDVPAADLSQVPTDSETR	0.81	1.05	CO3_MOUSE	Complement C3;
FEGRRSRRRR	EAPKVVEEQESR	-0.52	-0.23	CO4B_MOUSE	Complement C4-B;
NLDPLNNLGR	TLEIPGSSDPNIVPDGDFSSLVR	0.52	-0.67	CO4B_MOUSE	Complement C4-B;
AAVCAQPRGR	ILGGQEAAAHAR	-1.00	0.33	CFAD_MOUSE	Complement factor D;
GLILPGILAK	SIGTLDPCCKDPTTR	1.76	2.00	CDSN_MOUSE	Corneodesmosin;
EKSKLDWESF	KEEEGIGEELAIHNR	-0.18	-0.36	CFDP1_MOUSE	Craniofacial development protein 1;
PDSLKHNNHM	AKVLTPLDLYNKLR	0.53	0.04	KCRM_MOUSE	Creatine kinase M-type;
PTDKHKTDLN	HENLKGDDLDPNYVLSR	-1.25	-1.74	KCRM_MOUSE	Creatine kinase M-type;
HPFMWNEHLG	YVLTCPNLGTGLR	-2.56	-2.74	KCRM_MOUSE	Creatine kinase M-type;
KKAGHPFMWN	EHLGYVLTCPNLGTGLR	-0.97	-2.47	KCRM_MOUSE	Creatine kinase M-type;
AGDEESYTVF	KDLFDPIIQR	0.31	-3.18	KCRM_MOUSE	Creatine kinase M-type;
WPDARGIWHN	DNKSLVWVNEEDHLR	-1.32	-3.84	KCRM_MOUSE	Creatine kinase M-type;
LQKRGTTGGVD	TAAVGAVFDISNADR	-0.09	-1.32	KCRM_MOUSE	Creatine kinase M-type;

Table S12, Tholen et al.

Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
GGYKPTDKHK	TDLNHENLKGDDLDPNYVLSR	-0.52	-0.54	KCRM_MOUSE	Creatine kinase M-type;
LTRLRLQKRG	TGGVDTAAVGAVFDISNADR	0.20	0.98	KCRM_MOUSE	Creatine kinase M-type;
GCVAGDEESY	TVFKDLFDPIIQDR	0.04	-2.06	KCRM_MOUSE	Creatine kinase M-type;
KHKTDLNHEN	LKGGDDLDPNYVLSR	-1.12	-1.94	KCRM_MOUSE	Creatine kinase M-type;
GIWHNDNKSF	LVVWNEEDHLR	-1.56	-1.89	KCRM_MOUSE	Creatine kinase M-type;
AGDEESYEVF	ADLFDPVIKLR	-2.56	-3.84	KCRS_MOUSE	Creatine kinase S-type, mitochondrial;
KRGTGGVDTA	ATGSVFDISNDR	0.71	3.43	KCRU_MOUSE	Creatine kinase U-type, mitochondrial;
QQLIDHFLF	DKPVSPLLTAAGMAR	0.21	0.16	KCRU_MOUSE	Creatine kinase U-type, mitochondrial;
GVKVLAFLSL	AEVGQVAGPGPQR	2.08	1.01	CAND2_MOUSE	Cullin-associated NEDD8-dissociated protein 2;
GVNIGGAGSY	IYEKPQTEAPQVTGPIEVPVVR	-1.94	-0.43	CRIP2_MOUSE	Cysteine-rich protein 2;
AGSYIYEKPQ	TEAPQVTGPIEVPVVR	0.04	0.93	CRIP2_MOUSE	Cysteine-rich protein 2;
VNIGGAGSYI	YEKPQTEAPQVTGPIEVPVVR	1.44	2.35	CRIP2_MOUSE	Cysteine-rich protein 2;
EDERKMLTGS	GDPKEEEEEELVDPLTTVR	-0.20	-0.27	QCR6_MOUSE	Cytochrome b-c1 complex subunit 6, mitochondrial;
GLNVPASVRF	SHTDVKVPDFSDYR	-1.36	-0.76	UCRI_MOUSE	Cytochrome b-c1 complex subunit Rieske, mitochondrial;
RAISTSVCLR	AHGSVVKSEDYAFPTYADRR	-0.81	-0.76	COX41_MOUSE	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;
RAISTSVCLR	AHGSVVKSEDYAFPTYADR	-1.09	0.03	COX41_MOUSE	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial;
EEFDARWVTY	FNKPIDAWELR	-0.97	-1.22	COX5A_MOUSE	Cytochrome c oxidase subunit 5A, mitochondrial;
ARGAAVTRSM	ASGGGVPTDEEQATGLER	-0.22	0.70	COX5B_MOUSE	Cytochrome c oxidase subunit 5B, mitochondrial;
HTVEKGGKHK	TGPNLHGLFGR	-0.42	0.25	CYC_MOUSE	Cytochrome c, somatic;
AVALHSAVSA	SDLELHPPSPWWSHR	-0.67	-0.15	CY1_MOUSE	Cytochrome c1, heme protein, mitochondrial;
GILHENFQTL	KVEDNFEDIITKPPVR	1.36	-0.03	DC1L1_MOUSE	Cytoplasmic dynein 1 light intermediate chain 1;
YSPLAHRAYS	VVAGGPEVTLTPER	-1.94	0.04	D2HHD_MOUSE	D-2-hydroxyglutarate dehydrogenase, mitochondrial;
LLGSPRRSY	SLPPHQKVLPLSLPTMQAGTIAR	1.12	-0.20	ODP2_MOUSE	Dihydrolypoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial;
LPLLARLSAG	DCPCSEAAALCQPIR	-0.81	0.50	DIAC_MOUSE	Di-N-acetylchitobiase;
APMTDEIQQQ	ILNLPESWDWR	1.61	1.05	CATC_MOUSE	Dipeptidyl peptidase 1;
SLPSTAVTSE	TLPGSLPPVEKYR	-0.62	0.62	DLG1_MOUSE	Disks large homolog 1;
SVGDGETVEF	DVVEGEKGAAANVTGPDGVPVEGSR	-3.06	-1.79	DBPA_MOUSE	DNA-binding protein A;
GRYTDATSKY	ESVMKTEPSVAEYTVR	-0.43	-0.71	DNJC3_MOUSE	DnaJ homolog subfamily C member 3;
GALAPTPGSA	SSEAPPLVNEDVKR	-1.36	-0.49	RPN1_MOUSE	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1;
PREIFKQKER	AMSTTSVTSSQPGLR	1.70	2.45	DBNL_MOUSE	Drebrin-like protein;
FISNPNSIIL	AVTAANTDMATSEALKISR	0.30	1.24	DNM1L_MOUSE	Dynamin-1-like protein;
FIHHELLAYL	YSSADQSSLMEESAQAQR	1.38	2.65	DYN2_MOUSE	Dynamin-2;
VTLINFWPVD	SAPASSPQLSHDDTHSR	0.00	-0.84	DMD_MOUSE	Dystrophin;
LQAQRAFTR	RQJSEVDVGPDR	-0.84	-0.15	NEDD4_MOUSE	E3 ubiquitin-protein ligase NEDD4;
FQLRSICYLL	GQPEPLAPGTTLPAPDR	0.52	0.00	RN123_MOUSE	E3 ubiquitin-protein ligase RNF123;

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Non Prime Site	Prime Site	Fold change (log ₂)	Fold change (log ₂) of	Uniprot ID	Protein Name
		of ASAPRatio (replicate 1)	ASAPRatio (replicate 2)		
VLMDIFQVKA	EVLDMAENAFDDEYLKCKSR	-0.43	-2.56	NAR3_MOUSE	Ecto-ADP-ribosyltransferase 3;
TEGVKGAKNF	FEAKVQAINVSSR	0.21	0.49	EFHD2_MOUSE	EF-hand domain-containing protein D2;
GPEPTDCFV	AVMHGETEGTVPGNALVVDPEKPF	3.41	2.14	EHD2_MOUSE	EH domain-containing protein 2;
IILLFDAHKL	EISDEFSEAIGALR	-1.09	0.04	EHD2_MOUSE	EH domain-containing protein 2;
QDIAKLMPLL	RQEELESVEAGVQGGAFEGTR	4.63	3.39	EHD2_MOUSE	EH domain-containing protein 2;
QLPNQVLESI	SIIDTPGILSGAKQR	-0.17	0.65	EHD2_MOUSE	EH domain-containing protein 2;
QADCAVLIVA	AGVGEFEAGISKNGQTR	-1.89	-1.22	EF1A1_MOUSE	Elongation factor 1-alpha 1;
DGSASGTLL	EALDCILPPTTRPTDKPLR	-1.79	-1.56	EF1A1_MOUSE	Elongation factor 1-alpha 1;
LWKFETSKYY	VTIIDAPGHR	-5.06	-4.32	EF1A1_MOUSE	Elongation factor 1-alpha 1;
ADCAVLIVAA	GVGEFEAGISKNGQTR	-1.25	-1.40	EF1A1_MOUSE	Elongation factor 1-alpha 1;
LGRFAVRDMR	QTVAVGVKAVDKK	1.11	1.76	EF1A1_MOUSE	Elongation factor 1-alpha 1;
ASGTTLEAL	DCILPPTTRPTDKPLR	-2.25	-2.12	EF1A1_MOUSE	Elongation factor 1-alpha 1;
KDGSASGTLL	LEALDCILPPTTRPTDKPLR	-2.74	-2.64	EF1A1_MOUSE	Elongation factor 1-alpha 1;
EGNASGVSL	EALDTILPPTTRPTDKPLR	-4.32	-3.64	EF1A2_MOUSE	Elongation factor 1-alpha 2;
KEGNASGVSL	LEALDTILPPTTRPTDKPLR	-3.84	-2.56	EF1A2_MOUSE	Elongation factor 1-alpha 2;
AGELHLEICL	KDLEEDHACIPIKSDPVVSYR	-0.01	0.32	EF2_MOUSE	Elongation factor 2;
AHVDHGKSTL	TDSLVCAGIISAR	-1.00	0.10	EF2_MOUSE	Elongation factor 2;
LGVKSVQKLL	DAVDYIPVPTTR	3.76	1.83	EFTU_MOUSE	Elongation factor Tu, mitochondrial;
LLALAGLLQA	RLLLPQQAGFGECDR	-2.64	-2.06	ENDD1_MOUSE	Endonuclease domain-containing 1 protein;
VLLTFGFVRA	DDEVDVDGTVEEDLGKSR	2.25	1.85	ENPL_MOUSE	Endoplasmic reticulum chaperone 78 kDa;
HPTSPRPPG	GSIIIVYPKEIR	0.86	0.54	MA2B2_MOUSE	Epididymis-specific alpha-mannosidase;
RQYFYRITD	QEYIYSIHTR	-1.15	-0.23	MA2B2_MOUSE	Epididymis-specific alpha-mannosidase;
SSQPNLSTSY	SEQEYKAGGSPASYHGSTSPR	-0.29	-0.38	EPN2_MOUSE	Epsin-2;
RYLSPKYIKM	FVLDEADEMLSR	0.61	-0.25	IF4A1_MOUSE	Eukaryotic translation initiation factor 4A-1;
IQNLHSFDPF	ADASKGDDLLPAGTEDIHIR	0.67	0.86	EIF1_MOUSE	Eukaryotic translation initiation factor 1;
ASASTSQSSR	AASIFGGAKPVDTAAR	1.37	3.01	IF4B_MOUSE	Eukaryotic translation initiation factor 4B;
EEGPRKDG	KVDVVGATQGGAGSCSR	1.52	0.77	IF4B_MOUSE	Eukaryotic translation initiation factor 4B;
ASTSQSSRAA	SIFGGAKPVDTAAR	-1.18	-0.81	IF4B_MOUSE	Eukaryotic translation initiation factor 4B;
QRRLQLKPR	TVATPLNQVANPNSAIFGGARPR	1.77	1.97	IF4H_MOUSE	Eukaryotic translation initiation factor 4H;
QRRLQLKPR	TVATPLNQVANPNSAIFGGAR	1.18	2.67	IF4H_MOUSE	Eukaryotic translation initiation factor 4H;
NIKRNDFQLI	GIQDGYLSLLQDSGEVR	-0.18	-1.64	IF5A1_MOUSE	Eukaryotic translation initiation factor 5A-1;
FQLIGIQDGY	LSLLQDSGEVR	-2.84	-2.25	IF5A1_MOUSE	Eukaryotic translation initiation factor 5A-1;
GTDIFTGKYY	EDICPSTHMDVNPNIKR	-1.47	-2.06	IF5A1_MOUSE	Eukaryotic translation initiation factor 5A-1;
SCLDHVISYY	HVASDTEKIIR	0.77	-0.14	EXOC7_MOUSE	Exocyst complex component 7;
EKVIVPNMEF	RAADEEAFEDNSEEYIR	4.27	4.01	XPO2_MOUSE	Exportin-2;
TFKNYIKRNW	RIVEDEPNKICEADR	1.58	1.28	XPO2_MOUSE	Exportin-2;
ACGSVTMSNP	GESSFDLADR	-0.71	0.37	SODE_MOUSE	Extracellular superoxide dismutase [Cu-Zn];

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
LLAACGSVTM	SNPGESSFDLADRLDPVEKIDR	0.94	-0.01	SODE_MOUSE	Extracellular superoxide dismutase [Cu-Zn];
QDEGAEPMGY	SAELSSEGILDDRNEEKR	0.64	-0.32	EZRI_MOUSE	Ezrin;
QDEGAEPMGY	SAELSSEGILDDR	0.03	-0.49	EZRI_MOUSE	Ezrin;
EQLAAELAAY	TAKIALLEEAR	-0.94	-1.56	EZRI_MOUSE	Ezrin;
GKSTTIKRKR	DGDKLVVECVMKGVSTR	3.05	0.00	FABP4_MOUSE	Fatty acid-binding protein, adipocyte;
TVKTTVFSCN	LGEKFDETTADGR	-6.64	-6.64	FABP5_MOUSE	Fatty acid-binding protein, epidermal;
GRKTETVCTF	QDGALVQHQQWDGKESTITR	1.54	0.51	FABP5_MOUSE	Fatty acid-binding protein, epidermal;
TESTVKTTFV	SCNLGKFEDETTADGR	1.56	2.82	FABP5_MOUSE	Fatty acid-binding protein, epidermal;
ADGRKTETVC	TFQDGALVQHQQWDGKESTITR	1.93	3.25	FABP5_MOUSE	Fatty acid-binding protein, epidermal;
ITVKTESTVK	TTVFSCNLGKFEDETTADGR	2.59	2.41	FABP5_MOUSE	Fatty acid-binding protein, epidermal;
NWYKMGLQVL	ATIEKIPFESAFR	0.91	2.81	FACR2_MOUSE	Fatty acyl-CoA reductase 2;
KMGLQVLATI	EKIPFESAFR	0.98	2.07	FACR2_MOUSE	Fatty acyl-CoA reductase 2;
VAGPQPAQTG	APQGSGLGEYLFER	1.01	1.53	FRIL1_MOUSE	Ferritin light chain 1;
RVAGPQPAQT	GAPQGSGLGEYLFER	2.25	1.95	FRIL1_MOUSE	Ferritin light chain 1;
RGQSSANRR	AGSSSGSGVQASAGGLAADASR	0.48	0.65	FILA_MOUSE	Filaggrin;
PRQPSPSQSS	DSQVHSGVQVEGR	0.12	0.87	FILA_MOUSE	Filaggrin;
QASDSEGHSD	FSEGQAVGAHR	3.51	3.45	FILA_MOUSE	Filaggrin;
SQASDSEGHS	DFSEGQAVGAHR	-1.94	-2.25	FILA_MOUSE	Filaggrin;
RRGQSSANR	RAGSSSGSGVQASAGGLAADASR	-1.03	-0.23	FILA_MOUSE	Filaggrin;
ESQASDSEGH	SDFSEGQAVGAHR	-0.30	-0.20	FILA_MOUSE	Filaggrin;
RPRQPSPSQS	SDSQVHSGVQVEGR	-0.03	1.54	FILA_MOUSE	Filaggrin;
RRDRPRQPSP	SQSSDSQVHSGVQVEGR	2.19	2.13	FILA_MOUSE	Filaggrin;
DRPRQPSPSQ	SSDSQVHSGVQVEGR	0.60	0.94	FILA_MOUSE	Filaggrin;
SQSGSRSRSP	RSPVHPESSEGEHSVVPQR	-1.56	0.40	FILA2_MOUSE	Filaggrin-2;
QSGSRSRSPR	SPVHPESSEGEHSVVPQR	-1.74	-0.30	FILA2_MOUSE	Filaggrin-2;
SPRRSPVHPE	SSEGEHSVVPQR	0.06	0.82	FILA2_MOUSE	Filaggrin-2;
GSGRSRSPRSP	VHPESSEGEHSVVPQR	-0.64	0.68	FILA2_MOUSE	Filaggrin-2;
SPRRSQVHPE	YSEGEAHSEVSQR	-0.14	-0.49	FILA2_MOUSE	Filaggrin-2;
SVCVVHLRNL	GTLDNPSLDETAYER	-0.14	0.14	FRDA_MOUSE	Frataxin, mitochondrial;
KGVVPLAGTN	GETTTQGLDGLSER	-0.97	-0.92	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
IAHRIVAPGK	GILAADESTGSIKR	-0.17	-0.38	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
KKELSDIAHR	IVAPGKGILAADESTGSIKR	0.72	1.26	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
DESTGSIKR	LQSIGTENTEENRR	2.72	1.77	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
TPGHACTQKF	SNEEIAMATVTALR	-1.32	-1.69	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
VDKGVVPLAG	TNGETTTQGLDGLSER	-1.25	0.60	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
WRCVLKIGEH	TPSALAIMENANVLAR	0.12	0.08	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;
PNMVTDPGHAC	TQKFSNEEIAMATVTALR	0.80	0.18	ALDOA_MOUSE	Fructose-bisphosphate aldolase A;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
PRFNAHGDN	TIVCNTKEDGTWGTEHR	-0.20	0.25	LEG1_MOUSE	Galectin-1;
AGRFHVNLCC	GEEQGADAALHFNPR	0.26	1.71	LEG7_MOUSE	Galectin-7;
PDQAGRFBVN	LLCGEEQGADAALHFNPR	0.85	0.52	LEG7_MOUSE	Galectin-7;
DDGHLNNSLG	SPVQADVYFPR	0.00	0.04	LEGLA_MOUSE	Galectin-related protein A;
M	VVEHPEFLKAGKEPGLQIWR	0.26	0.70	GELS_MOUSE	Gelsolin;
M	GLLSQGSPLSWEETQR	-0.03	-0.04	GSH1_MOUSE	Glutamate--cysteine ligase catalytic subunit;
LLWAAACAQS	EQDFYDFKAVNIR	-0.62	-0.40	GPX7_MOUSE	Glutathione peroxidase 7; Glyceraldehyde-3-phosphate dehydrogenase, testis-specific;
NGKLTGMAFR	VPTPNVSVVDLTCR	2.71	0.86	G3PT_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
IVEGLMTTVH	AITATQKTVDGSPGKLWR	-0.25	-0.40	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
IIPASTGAAK	AVGKVIPELNGKLTGMAFR	-1.52	1.63	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
IALNDFVKL	ISWYDNEYGYSNR	2.31	2.83	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
LNGKLTGMAF	RVPTPNVSVVDLTCR	0.48	0.31	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
ALNDFVKLI	SWYDNEYGYSNR	4.76	4.65	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
STGAAKAVGK	VIPELNGKLTGMAFR	0.01	2.73	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase;
	MKVFTGPLPAEGR	-0.74	-0.15	GRHPR_MOUSE	Glyoxylate reductase/hydroxypyruvate reductase;
GEATWSGSEF	EISFPDSPAQAQADHLPR	0.59	1.37	GORS1_MOUSE	Golgi reassembly-stacking protein 1;
M	GSSQSVEIPGGGTEGYHVLR	0.12	0.76	GORS2_MOUSE	Golgi reassembly-stacking protein 2;
LTKLPGYPVK	EVKCDMEVSCPEGYTCCR	0.99	1.12	GRN_MOUSE	Granulins;
LLTKLPGYPV	KEVKCDMEVSCPEGYTCCR	2.30	2.66	GRN_MOUSE	Granulins;
PKHPVDQVQR	IIGGSMDAKGSFPWQAK	0.37	0.06	HPT_MOUSE	Haptoglobin;
TKQTQFTTY	SDNQPGVLIQVYEGER	0.23	-0.15	HS71A_MOUSE	Heat shock 70 kDa protein 1A;
IFEVKSTAGD	THLGGEDFDNR	1.07	-0.54	HS71A_MOUSE	Heat shock 70 kDa protein 1A;
MGYMMMAKKHL	EINPDHPIVETLR	-0.52	0.54	HS90B_MOUSE	Heat shock protein HSP 90-beta;
FYSNKEIFLR	ELISNASDALDKIR	0.79	0.42	HS90B_MOUSE	Heat shock protein HSP 90-beta;
SNKEIFLREL	ISNASDALDKIR	3.48	2.19	HS90B_MOUSE	Heat shock protein HSP 90-beta;
NTFYSNKEIF	LRELISNASDALDKIR	0.32	0.47	HS90B_MOUSE	Heat shock protein HSP 90-beta;
TFYSNKEIFL	RELISNASDALDKIR	-0.09	3.43	HS90B_MOUSE	Heat shock protein HSP 90-beta;
VVLLFETALL	SSGFSLEDPPQTHSNR	3.89	4.78	HS90B_MOUSE	Heat shock protein HSP 90-beta;
VLRPPGGGSN	FSLGFDEPAEQPVR	0.03	0.50	HN1_MOUSE	Hematological and neurological expressed 1 protein;
RKNKMASNIF	GTPEENPPSWAKSAGSKSSGGR	0.07	-0.18	HN1_MOUSE	Hematological and neurological expressed 1 protein;
LRPPGGGSNF	SLGFDEPAEQPVR	0.35	0.20	HN1_MOUSE	Hematological and neurological expressed 1 protein;
SNIKAAWGKI	GGHGAEYGAEALER	-1.74	-0.69	HBA_MOUSE	Hemoglobin subunit alpha;
KSNIKAAWGK	IGGHGAEYGAEALER	-2.06	1.51	HBA_MOUSE	Hemoglobin subunit alpha;
DAEKAASVCL	WGKVNSEVGGGALGR	1.38	-0.54	HBB1_MOUSE	Hemoglobin subunit beta-1;
DAEKASVCL	WAKVNPDEVGGGALGR	-2.32	0.70	HBB2_MOUSE	Hemoglobin subunit beta-2;
GNSTHPMHSR	CSPDPGLTALLSDHR	2.64	1.43	HEMO_MOUSE	Hemopexin;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
NSTHPMHSRC	SPDPGLTALLSDHR	0.00	0.99	HEMO_MOUSE	Hemopexin;
KDLKDYFTKF	GEVVDCTIKMDPNTGR	-1.94	-6.64	ROAA_MOUSE	Heterogeneous nuclear ribonucleoprotein A/B;
DTEEYNLRDY	FEKYGKIETIEVMEDR	-0.86	-1.84	ROA3_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;
YNLRDYFEKY	GKIETIEVMEDR	-1.36	-1.89	ROA3_MOUSE	Heterogeneous nuclear ribonucleoprotein A3;
KDLKDYFSKF	GEVVDCTLKLDPITGR	-1.64	-2.06	HNRPD_MOUSE	Heterogeneous nuclear ribonucleoprotein D0;
KDLTEYLSRF	GEVVDCTIKTDPVTGR	-2.32	-3.32	HNRDL_MOUSE	Heterogeneous nuclear ribonucleoprotein D-like;
ERRGFCFITY	TDEEPVKLLLESR	-2.18	-2.25	HNRDL_MOUSE	Heterogeneous nuclear ribonucleoprotein D-like;
AAGGGGGENY	DDPHKTPASPVVHIR	-0.01	-1.22	HNRPL_MOUSE	Heterogeneous nuclear ribonucleoprotein L;
LFVRNLANTV	TEEILEKSFSQFGKLER	-2.18	-3.47	HNRPO_MOUSE	Heterogeneous nuclear ribonucleoprotein Q;
GGRPAMEPGN	GSLDLGGDAAGR	2.65	2.76	HNRPU_MOUSE	Heterogeneous nuclear ribonucleoprotein U;
TEEHHLRDYF	EEYGKIDTIEIITDR	-1.06	-0.71	ROA2_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1;
GGNFGFGDSR	GGGGNFGPGPSNFR	-0.79	0.44	ROA2_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1;
MIASHMIACL	FTELNQNVQKVDQYLYHMR	1.38	-0.06	HXK2_MOUSE	Hexokinase-2;
EPKRRSARLS	AMPVPFTELKPKR	-0.25	-0.84	HMG5_MOUSE	High mobility group nucleosome-binding domain-containing protein 5;
QEPKRRSARL	SAMPVPFTELKPKR	0.82	-0.01	HMG5_MOUSE	High mobility group nucleosome-binding domain-containing protein 5;
GARGAQVRGN	AGVSDGSEVAKAQAAPGGASPTIFSR	0.52	0.33	HINT2_MOUSE	Histidine triad nucleotide-binding protein 2, mitochondrial;
ARGAQVRGNA	GVSDGSEVAKAQAAPGGASPTIFSR	0.43	-0.52	HINT2_MOUSE	Histidine triad nucleotide-binding protein 2, mitochondrial;
SELLHSITLL	AHLTGDTIIQGSATSLR	0.66	0.73	HIP1_MOUSE	Huntingtin-interacting protein 1;
LVGLTSLRAV	STSSMGTLPKQVKIVEVGPR	1.09	0.71	HMGCL_MOUSE	Hydroxymethylglutaryl-CoA lyase, mitochondrial;
VGLTSLRAVS	TSSMGTLPKQVKIVEVGPR	0.40	-0.20	HMGCL_MOUSE	Hydroxymethylglutaryl-CoA lyase, mitochondrial;
LMAVVIGINS	EVQLQQSGAELVR	-0.74	-0.60	HVM02_MOUSE	Ig heavy chain V region 93G7;
LVLILKGVQC	DVQLVESGGGLVQPGGSR	-3.18	-2.25	HVM16_MOUSE	Ig heavy chain V region MOPC 21;
E	VKLVESGGGLVQPGGSLR	-0.54	-3.06	HVM17_MOUSE	Ig heavy chain V region MOPC 47A;
MLLWLSGVEG	DIVMTQSHKFMSTSVGDR	-1.52	-0.54	KV5A1_MOUSE	Ig kappa chain V19-17;
LLWVPGSTGD	IVLTQSPASLAVSLGQR	-1.64	-2.25	KV3A1_MOUSE	Ig kappa chain V-III region PC 2880/PC 1229;
LLFWIPASRG	DILLTQSPAILSVPGER	-3.18	-0.56	KV5A9_MOUSE	Ig kappa chain V-V region L7;
D	IQMTQTSSLSASLGDR	-1.79	-2.12	KV5AA_MOUSE	Ig kappa chain V-V region MOPC 173;
ILLWLYGADG	NIVMTQSPKSMMSVGER	-1.32	-1.12	KV5A2_MOUSE	Ig kappa chain V-V region MOPC 21;
LLLWFPGARC	DIQMTQSPSSLSASLGER	-3.18	-0.86	KV5A7_MOUSE	Ig kappa chain V-V region MOPC 41;
LLLWFPGIKC	DIKMTQSPSSMYASLGER	-1.09	-0.25	KV5A5_MOUSE	Ig kappa chain V-V region T1;
LLPLLAGAQA	AIVFIKEPSSQDALQGR	1.05	2.50	PTK7_MOUSE	Inactive tyrosine-protein kinase 7;
IFGDYIERLW	AYLTIEQLLEKR	2.79	1.32	ITIH3_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;
GDYIERLWAY	LTIEQLLEKR	3.50	2.32	ITIH3_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
RSPLQLLGKR	SLPEGVVDGIEVYSTKISKVTSR	0.81	-3.06	ITIH3_MOUSE	Inter-alpha-trypsin inhibitor heavy chain H3;
RRSGRLLTRW	ETSSIPEAGEGQIR	0.43	0.39	ISCA2_MOUSE	Iron-sulfur cluster assembly 2 homolog, mitochondrial;
ACFATIKDGGK	SLTKDLGGNAKCSDFTEEICR	4.19	1.58	IDH3A_MOUSE	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial;
FRHACVPVDF	EEVHVSSNADEEDIR	-0.12	-0.30	IDHG1_MOUSE	Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial;
PSPLAVPRRA	HSILPVDDDDINGLNEEQKQLR	0.63	-0.15	IVD_MOUSE	Isovaleryl-CoA dehydrogenase, mitochondrial;
DAVTTRQVRT	IVEEVQDGKVISSR	4.48	4.72	K1C17_MOUSE	Keratin, type I cytoskeletal 17;
RDAVTTRQVR	TIVEEVQDGKVISSR	4.82	5.05	K1C17_MOUSE	Keratin, type I cytoskeletal 17;
TAGKHGDSLRL	DTKNEIAELTR	-0.54	0.04	K2C79_MOUSE	Keratin, type II cytoskeletal 79;
GLDNVHKQRV	AEVLNDPESMEKR	-0.92	-1.22	KLC1_MOUSE	Kinesin light chain 1;
ESVRSFGSSR	TEVLVTPAGVASKR	1.08	2.28	LAD1_MOUSE	Ladinin-1;
LYKPVTDLFL	QLVDSGKVDPEAR	-0.60	-1.22	LPPRC_MOUSE	Leucine-rich PPR motif-containing protein, mitochondrial;
CGLSDPNLTL	SSGKDGQCPLVVEQVR	0.80	-0.07	LRC47_MOUSE	Leucine-rich repeat-containing protein 47;
PQQQQMTSSY	GGYKEPAAPVSIQR	0.81	-0.25	LASP1_MOUSE	LIM and SH3 domain protein 1;
QQQQMTSSYG	GYKEPAAPVSIQR	2.06	1.18	LASP1_MOUSE	LIM and SH3 domain protein 1;
QQMTSSYGGY	KEPAAPVSIQR	-0.06	-0.17	LASP1_MOUSE	LIM and SH3 domain protein 1;
QQPQQQMTSS	SYGGYKEPAAPVSIQR	-1.00	-0.89	LASP1_MOUSE	LIM and SH3 domain protein 1;
QPQQQMTSS	YGGYKEPAAPVSIQR	0.58	-0.62	LASP1_MOUSE	LIM and SH3 domain protein 1;
NLQSRFRIL	AQMTGTTEYMQDPDEEALR	1.25	0.79	LDB3_MOUSE	LIM domain-binding protein 3;
ILAQMTGTEY	MQDPDEEALRR	0.33	-2.25	LDB3_MOUSE	LIM domain-binding protein 3;
SFRILAQMTG	TEYMQDPDEEALRR	0.59	-0.60	LDB3_MOUSE	LIM domain-binding protein 3;
HSLRTAAVLQ	GQVVQFKLSDIGEGIR	0.91	0.20	ODB2_MOUSE	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial;
LSVPCILGQN	GISDVVKVTLTPPEEAR	-0.84	-1.64	LDHA_MOUSE	L-lactate dehydrogenase A chain;
DLSKVLFICT	ANVIDTIPEPLR	0.86	0.43	LONM_MOUSE	Lon protease homolog, mitochondrial;
GESLQAFLIA	VVVPDVESLPSWAQKR	2.24	2.34	ACSL1_MOUSE	Long-chain-fatty-acid--CoA ligase 1;
LPTSLLLYL	DNNKISNIPDEYFKR	-1.09	-1.22	LUM_MOUSE	Lumican;
AGLPTSLTL	YLDNNKISNIPDEYFKR	-2.40	-3.64	LUM_MOUSE	Lumican;
PLLLCEGAQA	LECYSVCQKADDGCSPHR	2.97	2.23	LYPD3_MOUSE	Ly6/PLAUR domain-containing protein 3;
IWTRHPVQGG	ADLVQDLSISTCR	-0.81	0.01	LYVE1_MOUSE	Lymphatic vessel endothelial hyaluronic acid receptor 1;
DYSQQGHVSS	GSEVTQCCQTDLCNER	2.36	5.35	LY6D_MOUSE	Lymphocyte antigen 6D;
PPRSTEDRLT	TQWREDEEEAAR	1.98	0.59	LSP1_MOUSE	Lymphocyte-specific protein 1;
GPEANVGPYG	SGDSAPLQEAMAVLQHHDVSGTAR	-1.47	-0.47	MA2B1_MOUSE	Lysosomal alpha-mannosidase;
LLSWASRNEA	APDQDEIDCLPGLAKQPSFR	0.96	1.74	PPGB_MOUSE	Lysosomal protective protein;
SWASRNEAAP	DQDEIDCLPGLAKQPSFR	1.32	2.39	PPGB_MOUSE	Lysosomal protective protein;
LLATVWHGQG	APVIEPSGPELVVEPGETVTLR	-0.14	0.11	CSF1R_MOUSE	Macrophage colony-stimulating factor 1 receptor;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
VLHFGIAVLY	EACCVLLLLWLALFLSIQPR	3.19	2.43	MFS6L_MOUSE	Major facilitator superfamily domain-containing protein 6-like;
VTTLDIVRAN	TFVAELKGLDPA	0.07	0.00	MDHM_MOUSE	Malate dehydrogenase, mitochondrial;
SRLTYDIAH	TPGVAADLSHIETR	0.24	-0.22	MDHM_MOUSE	Malate dehydrogenase, mitochondrial;
KTIIPISQC	TPKVDFPQDQLATLTGR	-0.25	-0.34	MDHM_MOUSE	Malate dehydrogenase, mitochondrial;
LWVSLVATLLG	SKWPEPVFGR	-0.07	0.78	MASP2_MOUSE	Mannan-binding lectin serine protease 2;
ALSVLPDSRA	LRPGDCEVCISYLGR	0.74	0.01	MANF_MOUSE	Mesencephalic astrocyte-derived neurotrophic factor;
ISRRLVSDSG	SLAEVPKEAPKVGILGSGDFAR	-0.60	0.32	STEA3_MOUSE	Metalloreductase STEAP3;
EKAKREVCSW	TVEGDVNTDPWAGYR	-0.40	-0.79	AMPM1_MOUSE	Methionine aminopeptidase 1;
SPLRSPPLG	SESPYEDFLSADSKVLGR	0.06	-1.15	MAP1B_MOUSE	Microtubule-associated protein 1B;
DDGLADLLFV	SSGPTNASAFTR	2.07	5.86	MAP4_MOUSE	Microtubule-associated protein 4;
APQRPIATQR	TTAAPKAGPGMVR	0.66	1.20	MARE1_MOUSE	Microtubule-associated protein RP/EB family member 1;
DIKSKTYQVM	RDYEQAGSAAPSVFSR	-1.64	-2.06	MSTN1_MOUSE	Musculoskeletal embryonic nuclear protein 1;
EFEQFLPMMQ	AISNNKDQGGYEDFVEGLR	0.37	0.50	MYL1_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;
EQFLPMMQAI	SNNKDQGGYEDFVEGLR	-2.32	-2.40	MYL1_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;
FKEAFLFDR	TGECKITLSQVGDVLR	-4.64	-0.54	MYL1_MOUSE	Myosin light chain 1/3, skeletal muscle isoform;
DVIRNAFACF	DEEATGTIQEDYLR	3.93	1.48	ML12B_MOUSE	Myosin regulatory light chain 12B;
EGSSNVFSMF	DQTQIQEFKEAFTVIDQNR	-0.71	-1.69	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
FSMFDQTQIQ	EFKEAFTVIDQNR	-0.49	-1.43	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
SMFDQTQIQE	FKEAFTVIDQNR	-0.29	-1.22	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
PEGKGTIKKQ	FLEELLTQCDR	-0.97	-0.76	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
LDPEGKGTIK	KQFLEELLTQCDR	0.66	-1.03	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
EGKGTIKKQF	LEELLTQCDR	-1.56	-3.06	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
VFSMFDQTQI	QEFKEAFTVIDQNR	-2.94	-3.64	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
MFDQTQIQEF	KEAFTVIDQNR	-1.43	-2.32	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
FKVLDPGKGG	TIKKQFLEELLTQCDR	0.55	-0.81	MLRS_MOUSE	Myosin regulatory light chain 2, skeletal muscle isoform;
KQIQKLEXRV	RELEGEVENEQKR	-3.06	-1.69	MYH1_MOUSE	Myosin-1;
KKQIQKLEAR	VRELENEVENEQKR	-1.36	-1.56	MYH4_MOUSE	Myosin-4;
MDIQGDPKYR	AVSEQGVCTLEIR	-0.36	-0.71	MYBPH_MOUSE	Myosin-binding protein H;
HHDYNTYTF	DLNLDSLKFR	0.59	-2.25	NDUV3_MOUSE	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial;
QTRDTQLITV	DEKLDITLTGVPEEHIKTR	-2.06	-0.58	NDUS4_MOUSE	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial;
LQPQNLQPPS	QPHLSVSSAANGHLGR	-3.84	-3.84	NOTC1_MOUSE	Neurogenic locus notch homolog protein 1;
KPTDGASSSN	CVTDISHLVR	0.86	1.40	NASP_MOUSE	Nuclear autoantigenic sperm protein;
SVSMIASRKP	TDGASSSNCVTDISHLVR	0.93	1.68	NASP_MOUSE	Nuclear autoantigenic sperm protein;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
PVRNRKVVVDY	SQFQESDDADEDYGR	0.99	0.37	NUCKS_MOUSE	Nuclear ubiquitous casein and cyclin-dependent kinases substrate;
MNHHLKQF	EHLNHQNPNTFESR	1.46	1.64	NUCB2_MOUSE	Nucleobindin-2;
NVVKTRVML	GETNPADSKPGTIR	0.37	1.93	NDKA_MOUSE	Nucleoside diphosphate kinase A;
MANSER	TFIAIKPDGVQR	1.23	0.01	NDKA_MOUSE	Nucleoside diphosphate kinase A;
SVTREDSGQY	AAVISNAVGAAAYSSAR	-4.64	-3.84	OBSCN_MOUSE	Obscurin;
GRRGQFGARG	VSEGSAAAMAAGESMAQR	-0.71	-0.30	ORN_MOUSE	Oligoribonuclease, mitochondrial;
GVHTSVASAT	SVATKKTEQGPPSSEYIFER	-2.00	0.33	OAT_MOUSE	Ornithine aminotransferase, mitochondrial;
RGVHTSVASA	TSVATKKTEQGPPSSEYIFER	-0.84	0.18	OAT_MOUSE	Ornithine aminotransferase, mitochondrial;
LQKRPKPDEK	YYSSSIWGPCTDGLDR	-6.64	-6.64	DCOR_MOUSE	Ornithine decarboxylase;
NPEESIEDIY	ANIPDLPSSYIPSR	-0.27	-1.12	PALMD_MOUSE	Palmdelphin;
DLKTGESVVL	SSIPLSDDFKSTGIKVYEDR	3.18	2.54	PALMD_MOUSE	Palmdelphin;
GKRHPYKMNL	ASEPQEVHLHIGSAHNR	2.92	2.38	PDLI1_MOUSE	PDZ and LIM domain protein 1;
VLHIGSAHNR	SAMPFTASPAPSTR	0.84	1.90	PDLI1_MOUSE	PDZ and LIM domain protein 1;
KRHPYKMNLA	SEPQEVHLHIGSAHNR	-0.09	-0.38	PDLI1_MOUSE	PDZ and LIM domain protein 1;
EPPKQSTSFL	VLQEILESDGKGDPNKPSGFR	1.25	1.16	PDLI1_MOUSE	PDZ and LIM domain protein 1;
LNLKQKGYFF	VEGELYCETHAR	-1.74	-2.84	PDLI3_MOUSE	PDZ and LIM domain protein 3;
PRQPTVTSVC	SESAQELAEGQR	-0.07	0.03	PDLI5_MOUSE	PDZ and LIM domain protein 5;
MPLGLGR	RKKAPPLVENEAEPSR	2.47	1.90	GIPC1_MOUSE	PDZ domain-containing protein GIPC1;
LLIATGPTTA	LTEDEKQTMVDLHNQYR	0.42	0.95	PI16_MOUSE	Peptidase inhibitor 16;
MVNPTVF	FDITADDEPLGR	2.04	1.25	PPIA_MOUSE	Peptidyl-prolyl cis-trans isomerase A;
YKNSKFHRVI	KDFMIQGGDFTR	-3.47	-4.64	PPIB_MOUSE	Peptidyl-prolyl cis-trans isomerase B;
M	GVQVETISPGDGR	-0.25	1.53	FKB1A_MOUSE	Peptidyl-prolyl cis-trans isomerase FKBP1A;
QPRGSLRSVR	GLSAPSCPLDDKTEASAR	3.29	2.12	PLIN1_MOUSE	Perilipin-1;
MSMN	KGPTLLDGDLPQENVLQR	0.21	0.99	PLIN1_MOUSE	Perilipin-1;
LSLMEPESEF	RDIDNPSAEER	0.63	0.38	PLIN1_MOUSE	Perilipin-1;
AAVSTAQPIL	SKLEPQIATASEYHR	-0.34	-0.94	PLIN3_MOUSE	Perilipin-3;
PWINTPKKQG	GLGPMNIPLISDPKR	-0.30	1.06	PRDX1_MOUSE	Peroxisomal protein 1;
NIPLISDPKR	TIAQDYGVKKADEGISFR	0.56	-0.34	PRDX1_MOUSE	Peroxisomal protein 1;
STAASRATTL	SNAVSSLASTGLSLTKVDER	0.07	-0.23	PICA_MOUSE	Phosphatidylinositol-binding clathrin assembly protein;
VFEWEAFARG	TKSLMDEVVKATSR	-1.36	-0.34	PGK1_MOUSE	Phosphoglycerate kinase 1;
LREDPAYLHY	YDPAGGEDPLGAVHLR	0.52	-0.69	PLEK_MOUSE	Pleckstrin;
IREGEVEVLK	ATEMVEVGPEDDEVAER	1.02	0.24	PTRF_MOUSE	Polymerase I and transcript release factor;
MEDVTL	HIVERPYSGFDPASSEGEPTQGEAR	7.76	4.36	PTRF_MOUSE	Polymerase I and transcript release factor;
KIREGEVEVL	KATEMVEVGPEDDEVAER	-0.29	-1.18	PTRF_MOUSE	Polymerase I and transcript release factor;
REGEVEVLKA	TEMVEVGPEDDEVAER	1.14	-0.89	PTRF_MOUSE	Polymerase I and transcript release factor;
EVEVLKATEM	VEVGPEDDEVAER	0.57	0.16	PTRF_MOUSE	Polymerase I and transcript release factor;

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MD	GIVPDIIVGTRK	1.35	0.40	PTBP1_MOUSE	Polypyrimidine tract-binding protein 1;
GKSGGSGAGK	GAVSAEQVIAGFNR	0.33	-0.12	PFD2_MOUSE	Prefoldin subunit 2;
ETPSQRRATR	SGAQASSTPLSPTR	2.00	0.77	LMNA_MOUSE	Prelamin-A/C;
LADQNIKDRY	YGINDPVADKLLKR	-0.14	-1.43	RBM22_MOUSE	Pre-mRNA-splicing factor RBM22;
RVLLPEGGIT	AIVEFLEPLEAR	1.14	3.38	RBM19_MOUSE	Probable RNA-binding protein 19;
DVEPDTYCRY	DSVSVFNGAVSDDSKR	-0.30	-1.22	PCOC1_MOUSE	Procollagen C-endopeptidase enhancer 1;
VEPDTYCRYD	SVSVFNGAVSDDSKR	-1.74	-4.06	PCOC1_MOUSE	Procollagen C-endopeptidase enhancer 1;
DMTSKFLTAL	AQDGVINEEALSVELDR	2.22	3.88	PDC6I_MOUSE	Programmed cell death 6-interacting protein;
KLPSLAFLYM	EKNQLEEVPSALPR	-1.32	0.19	PRELP_MOUSE	Prolargin;
TQICPNNLVA	FHDFSSDLENVPHLR	3.13	2.51	PRELP_MOUSE	Prolargin;
VLGKLPFLAF	LYMEKNQLEEVPSALPR	0.19	-2.32	PRELP_MOUSE	Prolargin;
GKLPFLAFLY	MEKNQLEEVPSALPR	-0.01	-0.18	PRELP_MOUSE	Prolargin;
LGKLPFLAFL	YMEKNQLEEVPSALPR	2.07	2.00	PRELP_MOUSE	Prolargin;
LLVILPATGS	DPVLCFTQYEESGR	0.26	-0.52	PROP_MOUSE	Properdin;
YQCLVVSRL	SSVEYEPKEKTFDKILIANR	0.21	0.60	PCCA_MOUSE	Propionyl-CoA carboxylase alpha chain, mitochondrial;
PRKIISLSQL	LQEDSLNVADLSSLR	0.40	1.44	PSME2_MOUSE	Proteasome activator complex subunit 2;
TFLPRKIISL	SQLQEDSLNVADLSSLR	0.06	1.07	PSME2_MOUSE	Proteasome activator complex subunit 2;
LRVPHARKTG	TTIAGLVFR	2.10	0.89	PSB10_MOUSE	Proteasome subunit beta type-10;
FKLPKARKTG	TTIAGVVYKDGIVLGADTR	1.66	0.78	PSB7_MOUSE	Proteasome subunit beta type-7;
LEEVTMKQIC	KEYYENYPAYDLTER	-1.52	-3.06	DEK_MOUSE	Protein DEK;
SRDGKALEQF	LQEYFDGNLKR	-1.60	-1.12	PDIA3_MOUSE	Protein disulfide-isomerase A3;
A	SDVLELTDENFESR	2.31	1.95	PDIA3_MOUSE	Protein disulfide-isomerase A3;
SCTFFLAVSG	LYSSDDVIELTPSNFNR	0.37	0.59	PDIA6_MOUSE	Protein disulfide-isomerase A6;
CTFFLAVSGL	YSSDDVIELTPSNFNR	1.43	0.61	PDIA6_MOUSE	Protein disulfide-isomerase A6;
ANEVEAVKVH	SFPTLKFFPASADR	-1.29	-0.12	PDIA1_MOUSE	Protein disulfide-isomerase;
SFSQFTGSDG	TGGDAAAPGAAGTQAELEPHR	-0.60	-0.43	LMAN1_MOUSE	Protein ERGIC-53;
AVVRVAGRRL	SQQSASGAPVLLR	0.37	0.78	ETHE1_MOUSE	Protein ETHE1, mitochondrial;
DALKRGLREH	LCEQQAELDYLCGR	-3.32	-5.06	FA65C_MOUSE	Protein FAM65C;
VREKEAQPLE	AEAPGVLDLILPEGR	0.15	0.11	NIBAN_MOUSE	Protein Niban;
ITQQASMTSL	AQGPGETSAITFPPEEQEDPR	-0.64	-0.38	PRRC1_MOUSE	Protein PRRC1;
KGSVAGGAVY	LVYDQELLGSPDKSEALR	-1.84	-1.40	QIL1_MOUSE	Protein QIL1;
GSVAGGAVYL	VYDQELLGSPDKSEALR	1.16	0.80	QIL1_MOUSE	Protein QIL1;
QLSKTEFLSF	MNTELAaftknqkdpGVLDLDR	2.11	1.09	S10AB_MOUSE	Protein S100-A11;
LSCIAMMCNE	FFEGCPDKEPR	0.51	0.30	S10A4_MOUSE	Protein S100-A4;
RELPSFLGER	TDEAAFQKVMSNLDSNR	2.02	1.71	S10A4_MOUSE	Protein S100-A4;
EQALEDHFSS	FGPISEVVVKDR	0.07	-1.47	RBM3_MOUSE	Putative RNA-binding protein 3;
DEQALEDHFS	SFGPISEVVVKDR	-0.30	-0.22	RBM3_MOUSE	Putative RNA-binding protein 3;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
TDEQALEDFH	SSFGPISEVVVKDR	-1.36	-0.89	RBM3_MOUSE	Putative RNA-binding protein 3;
GGLRLLGVRR	SSSAPVASPNVR	0.53	-0.34	PYC_MOUSE	Pyruvate carboxylase, mitochondrial;
ASRVLVASRN	FANDATFEIKKCDLHR	1.65	0.35	ODPA_MOUSE	Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial;
KPHSEAGTAF	IQTQQLHAAMADTFLEHMCR	0.06	-1.36	KPYM_MOUSE	Pyruvate kinase isozymes M1/M2;
VIRFQPGETL	TEILETPATNEQEAEHQ	-0.43	-0.76	IQGA1_MOUSE	Ras GTPase-activating-like protein IQGAP1;
VQVEEYIADL	YSEEPGEEPAWVQTER	0.32	2.36	RCN3_MOUSE	Reticulocalbin-3;
LERKPAAGLS	AAPVPPAAAPLLDFSSDSVPPAPR	-0.22	0.21	RTN4_MOUSE	Reticulon-4;
NASAEAIIG	TDVLQDHNVAVDFEHR	0.86	1.37	APRV1_MOUSE	Retroviral-like aspartic protease 1;
LTKYKKTLLG	DVPVVADPTVPNVTVTR	0.40	1.09	GDIR2_MOUSE	Rho GDP-dissociation inhibitor 2;
SLTKYKKTLL	GDVPVVADPTVPNVTVTR	-0.49	0.37	GDIR2_MOUSE	Rho GDP-dissociation inhibitor 2;
AHQLFRGFSF	VATGLMEDDGKPR	-0.52	-0.04	KS6A1_MOUSE	Ribosomal protein S6 kinase alpha-1;
QLEEKEKLLA	TEQEDAAVAKSKLR	-1.36	-1.03	RRBP1_MOUSE	Ribosome-binding protein 1;
KSPQVILVNM	ASFPECTAAAIKAI	-0.30	0.24	RRFM_MOUSE	Ribosome-recycling factor, mitochondrial;
SPFRKDKSPV	REPIDNLTPEER	-0.18	-0.67	RBM39_MOUSE	RNA-binding protein 39;
DEKLLKRKER	FGIVTSSAGTGTTEDEAKKR	-0.84	-0.64	SARNP_MOUSE	SAP domain-containing ribonucleoprotein;
EKLKRKERF	GIVTSSAGTGTTEDEAKKR	-1.00	-0.86	SARNP_MOUSE	SAP domain-containing ribonucleoprotein;
ERGNPVIAQW	EEVEDASEEAPLR	3.66	0.12	SRCA_MOUSE	Sarcalumenin;
LASLLSGQA	EVEDASEEAPLR	0.71	-0.43	SRCA_MOUSE	Sarcalumenin;
IHQVQYQEMD	SKADDLLKSSGVIQR	-0.76	-1.00	C163A_MOUSE	Scavenger receptor cysteine-rich type 1 protein M130;
M	RGQVGDLSPPQQEALAR	1.69	2.41	S14L4_MOUSE	SEC14-like protein 4;
MRGQ	VGDLSPPQQEALAR	0.91	7.56	S14L4_MOUSE	SEC14-like protein 4;
MEPYS	CDTFVALPPATVGNR	-0.97	-1.12	SCRN3_MOUSE	Secernin-3;
VIQHRPSQQY	ATLDVYNPFENR	0.03	0.20	SCAM3_MOUSE	Secretory carrier-associated membrane protein 3;
ERDRITALKR	SFEVEIEPPNSTPPR	0.40	1.21	SEPT9_MOUSE	Septin-9;
TSGDSLTVAS	SNTDFAFSLYR	2.52	2.86	SPA3G_MOUSE	Serine protease inhibitor A3G;
KWKISFDPQD	TFESEFYLDEKR	-1.89	-1.36	SPA3K_MOUSE	Serine protease inhibitor A3K;
VHKAVLDVAE	TGTEAAAATGVIGGIR	-3.64	-3.47	SPA3K_MOUSE	Serine protease inhibitor A3K;
KAVLDVAETG	TEAAAATGVIGGIR	-1.15	-0.09	SPA3K_MOUSE	Serine protease inhibitor A3K;
KHKKEKAVTI	ATPATAAPAAVSAATTTSAQEPEAAPEPR	-1.69	-0.54	SRRM1_MOUSE	Serine/arginine repetitive matrix protein 1;
LPGPFPTHY	STLSKPAPLTGTLEVR	-2.56	-1.94	PKN1_MOUSE	Serine/threonine-protein kinase N1;
MSDN	GELEDKPPAPPVR	0.74	1.96	PAK2_MOUSE	Serine/threonine-protein kinase PAK 2;
TIEHLLPLFL	AQLKDECEVPR	-3.47	-1.84	2AAA_MOUSE	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform;
MTTLFCINVL	SEVCGQDITTKHMLPTVLR	0.11	1.64	2AAA_MOUSE	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform;
FEVLPEKADR	DQYELLCLDNTR	1.53	0.47	TRFE_MOUSE	Serotransferrin;

Table S12, Tholen et al.

Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
GTRKPVKDF	SCHLAQAPNHVVSR	-0.52	-0.32	TRFE_MOUSE	Serotransferrin;
NQQEGVCEG	SIDNSPVKWCALSHLR	-0.15	-0.27	TRFE_MOUSE	Serotransferrin;
GGDVAFVKHT	TIFEVLPEKADR	0.32	0.39	TRFE_MOUSE	Serotransferrin;
DQYELLCLDN	TRKPVQYEDCYLAR	-0.58	0.24	TRFE_MOUSE	Serotransferrin;
GGGDVAFVKH	TTIFEVLPEKADR	0.37	1.53	TRFE_MOUSE	Serotransferrin;
KAVLSAEKLR					
	DEEVHTGLGELLR	1.73	1.55	SERPH_MOUSE	Serpin H1;
AKAVLSAEKL	RDEEVHTGLGELLR	1.34	-0.52	SERPH_MOUSE	Serpin H1;
FYADHPFIFL	VRDNQSGSLLFIGR	-0.92	0.33	SERPH_MOUSE	Serpin H1;
NAILVRYTQK	APQVSTPTLVEAAR	-2.12	0.31	ALBU_MOUSE	Serum albumin;
ARNLGRVGTK	CCTLPEDQR	1.09	0.77	ALBU_MOUSE	Serum albumin;
DDFAQFLDTC	CKAADKDTCFSTEGPNLVTR	0.59	-0.12	ALBU_MOUSE	Serum albumin;
SAANCDKSLH	TLFGDKLCAIPNLR	-3.18	-3.64	ALBU_MOUSE	Serum albumin;
DKLCAIPNLR	ENYGELADCCTKQEPER	3.44	1.99	ALBU_MOUSE	Serum albumin;
QNAILVRYTQ	KAPQVSTPTLVEAAR	0.11	0.25	ALBU_MOUSE	Serum albumin;
FLDTCCKAAD	KDTCFSTEGPNLVTR	0.32	0.97	ALBU_MOUSE	Serum albumin;
KLATDLTKVN	KECCHGDLLECADDR	0.07	-0.18	ALBU_MOUSE	Serum albumin;
AANCDKSLHT	LFGDKLCAIPNLR	-0.32	-0.27	ALBU_MOUSE	Serum albumin;
FGDKLCAIPN	LRENYGELADCCTKQEPER	0.43	-0.11	ALBU_MOUSE	Serum albumin;
CDLYEKLGEY	GFQNAILVR	-2.00	-1.18	ALBU_MOUSE	Serum albumin;
TQCCAEADKE	SCLTPKLDGVKEKALVSSVR	-0.29	-0.43	ALBU_MOUSE	Serum albumin;
ADESAANCDK	SLHTLFGDKLCAIPNLR	1.07	0.35	ALBU_MOUSE	Serum albumin;
VMDDFAQFLD	TCCKAADKDTCFSTEGPNLVTR	0.93	0.19	ALBU_MOUSE	Serum albumin;
DTCKKAADKD	TCFSTEGPNLVTR	0.86	0.23	ALBU_MOUSE	Serum albumin;
ADFAEITKLA	TDLTKVNKECCHGDLLECADDR	1.55	0.60	ALBU_MOUSE	Serum albumin;
AEITKLATDL	TKVNKECCHGDLLECADDR	0.82	-0.40	ALBU_MOUSE	Serum albumin;
LNRVCLLHEK	TPVSEHVTKCCSGSLVER	1.27	0.69	ALBU_MOUSE	Serum albumin;
GFQNAILVRY	TQKAPQVSTPTLVEAAR	-0.71	-0.34	ALBU_MOUSE	Serum albumin;
AMCTSFKENP	TTFMGHYLHEVAR	0.86	-1.15	ALBU_MOUSE	Serum albumin;
YGFQNAILVR	YTQKAPQVSTPTLVEAAR	3.52	1.80	ALBU_MOUSE	Serum albumin;
PNHQKASSGK	SSPFKVSPLSFGR	1.69	0.30	SDPR_MOUSE	Serum deprivation-response protein; Short-chain specific acyl-CoA dehydrogenase,
RALGVRDWRR	LHTVYQSVELPETHQMLR	0.71	0.28	ACADS_MOUSE	mitochondrial;
LQVFRQFVRH	ESEVASSLVLER	3.98	5.27	SSBP_MOUSE	Single-stranded DNA-binding protein, mitochondrial;
QPISNVRAIQ	ANINIPMGAFRPGAGQPPR	0.21	0.32	SMPX_MOUSE	Small muscular protein;
GKALKRQLPF	RGDEGIFEEFIEER	-0.06	-0.49	SNX12_MOUSE	Sorting nexin-12;
DSPERELILS	SEPSPAVTPVPTTLIAPR	0.71	0.61	SNX2_MOUSE	Sorting nexin-2;
NDAYGPPSNF	LEIDVSNPQTVGVGR	-1.12	-2.00	SNX3_MOUSE	Sorting nexin-3;

Table S12, Tholen et al.

Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
GKAFLRQLPF	RGDDGIFDDNFIEER	-0.01	-0.94	SNX3_MOUSE	Sorting nexin-3;
MYIFPVHWQF	GQLDQHPIDGYLSHTEPLR	0.75	-1.09	SPRC_MOUSE	SPARC;
DWLKNVLT	YERDEGNLLTEKQKLR	-0.52	0.57	SPRC_MOUSE	SPARC;
PRTLASPXXX	DLSLEEIQKKLEAAEER	2.23	0.42	STMN1_MOUSE	Stathmin;
QAQPNANEDY	REGPCAVNLVLR	-0.06	-1.22	STK39_MOUSE	STE20/SPS1-related proline-alanine-rich protein kinase;
EPAGTPRRSY	ASGPGGLHADLLR	0.01	0.33	SSDH_MOUSE	Succinate-semialdehyde dehydrogenase, mitochondrial;
SDVQTAVKTN	SSFIQGFVDHVKEDCDR	0.08	1.99	SAP_MOUSE	Sulfated glycoprotein 1;
AMKANTMSNY	SLLPASLLDHR	3.02	2.73	ST2B1_MOUSE	Sulfotransferase family cytosolic 2B member 1;
AAMKANTMSN	YLLPASLLDHR	2.80	1.59	ST2B1_MOUSE	Sulfotransferase family cytosolic 2B member 1;
M	VEKEEAGGGGGGISEEEAAQYDR	3.31	1.48	SAE1_MOUSE	SUMO-activating enzyme subunit 1;
HHAFGQGRDM	AETFDQGAHHAFGQGGR	-0.45	-0.84	SBSN_MOUSE	Suprabasin;
DKVIRPGVSQ	AGEEMEQQFGQGR	-0.20	1.57	SBSN_MOUSE	Suprabasin;
VLLGTLPARA	AHEDPVEKVIIEGFSR	0.23	0.92	SBSN_MOUSE	Suprabasin;
GAHHAFGQGR	DMAETFDQGAHHAFGQGGR	0.06	0.50	SBSN_MOUSE	Suprabasin;
LGTLPARAAH	EDPVEKVIIEGFSR	0.33	0.69	SBSN_MOUSE	Suprabasin;
HAFGQGRDMA	ETFDQGAHHAFGQGGR	0.33	1.19	SBSN_MOUSE	Suprabasin;
LLGTLPARAA	HEDPVEKVIIEGFSR	0.53	0.21	SBSN_MOUSE	Suprabasin;
FSRGLSNAER	EVGKALEGINNGITQAGR	-1.18	-1.22	SBSN_MOUSE	Suprabasin;
AFGQGRDMAE	TFDQGAHHAFGQGGR	1.13	0.77	SBSN_MOUSE	Suprabasin;
MFGGLSSWL	GLKPPEGAAEAGEEPPSR	1.46	3.11	SYAP1_MOUSE	Synapse-associated protein 1;
ARRQSRMEKY	VISSGHAEAR	-3.06	-4.06	SYNPO_MOUSE	Synaptopodin;
GAQRMFPMNR	TAKPFLGSMNQPAAPFSPTR	1.06	0.14	SYNP2_MOUSE	Synaptopodin-2;
VSKQPSRITN	GQPQQTGAASGGYIKR	0.16	0.16	SNP23_MOUSE	Synaptosomal-associated protein 23;
ISLEVSRSR	AEVSTIHLQSPGR	0.68	-0.18	SYNEM_MOUSE	Synemin;
LDHGRTLREQ	GVEEHETLLLR	-0.74	-0.81	TLN1_MOUSE	Talin-1;
STSQLVACTK	VVAPTISSPVCQEQLVEAGR	2.38	3.44	TLN1_MOUSE	Talin-1;
KNCGHRFHVL	VANQDFVENLVR	0.59	1.21	TOM1_MOUSE	Target of Myb protein 1;
SLLSPMSVN	AVMKVIDPATATSVDLR	-0.27	2.14	TCPD_MOUSE	T-complex protein 1 subunit delta;
LSPMSVNAV	KVIDPATATSVDLR	-0.03	2.04	TCPD_MOUSE	T-complex protein 1 subunit delta;
SKMFEELKNR	MDVLAQEVALLEK	-1.64	-0.03	TETN_MOUSE	Tetranectin;
M	KPPAACAGDVVDAASPASTVNHLR	0.99	0.81	THOP1_MOUSE	Thimet oligopeptidase;
SPCLLPRVHL	ASAFGSSTESLVAR	-0.12	0.28	THEM5_MOUSE	Thioesterase superfamily member 5;
RTVHTTRVCL	TTFNVQDGPDFQDR	0.85	0.91	THIOM_MOUSE	Thioredoxin, mitochondrial;
M	VGKVPVSDPDFQPELSGAGSR	3.07	1.64	TXNL1_MOUSE	Thioredoxin-like protein 1;
ISAVEQTAQR	TTTTAVHIQPAEQAR	0.29	0.58	TITIN_MOUSE	Titin;
LEAWYRHGRT	TSSYSALSEPSR	-0.01	0.44	MECR_MOUSE	Trans-2-enoyl-CoA reductase, mitochondrial;
DTPKKQALYL	MFDTPQESPVKSPVVR	0.21	0.52	TACC2_MOUSE	Transforming acidic coiled-coil-containing protein 2;

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Non Prime Site	Prime Site	Fold change (log ₂)	Fold change (log ₂) of	Uniprot ID	Protein Name
		of ASAPRatio (replicate 1)	ASAPRatio (replicate 2)		
KKSKENPRNF	SDNQLQEGKNVIGLQMGNTNR	0.21	0.23	TAGL2_MOUSE	Transgelin-2;
AEKNAPAIIF	IDELDAIAPKR	0.85	0.16	TERA_MOUSE	Transitional endoplasmic reticulum ATPase;
VVYLETETLV	TREAVTEILGIEPDR	-0.52	-1.40	TSN_MOUSE	Translin;
LLLGPSVVLG	ISFHLPVNSR	-0.94	-0.18	TMEDA_MOUSE	Transmembrane emp24 domain-containing protein 10;
VSEAGPAGAG	ESKCLPMVKVLDVAVR	0.65	0.67	TTHY_MOUSE	Transthyretin;
LAGLVFVSEA	GPAGAGESKCLPMVKVLDVAVR	0.38	0.16	TTHY_MOUSE	Transthyretin;
GSWEFASGK	TAESGELHGLTTDEKFEVGVYR	0.65	-0.86	TTHY_MOUSE	Transthyretin;
KDVVDYIIFG	TVIQEVKTSNVAR	0.90	0.96	ECHB_MOUSE	Trifunctional enzyme subunit beta, mitochondrial;
EPVWAIGTGK	TATPQQAQEVHEKLR	0.32	0.36	TPIS_MOUSE	Triosephosphate isomerase;
TLNAANVPAG	TEVVCAPPTAYIDFAR	-1.25	-0.67	TPIS_MOUSE	Triosephosphate isomerase;
SPGMIKDLGA	TWVVLGHSER	-0.32	-0.67	TPIS_MOUSE	Triosephosphate isomerase;
PEPQQVGTVS	LHLGVTPSVLR	-0.18	0.99	TPP1_MOUSE	Tripeptidyl-peptidase 1;
RPEPQQVGTV	SLHLGVTPSVLR	0.77	1.74	TPP1_MOUSE	Tripeptidyl-peptidase 1;
ARRQHLKSVM	LQIAATELEKEESR	0.62	0.84	TNNI2_MOUSE	Troponin I, fast skeletal muscle;
RRQHLKSVML	QIAATELEKEESR	-0.67	-0.34	TNNI2_MOUSE	Troponin I, fast skeletal muscle;
DMEVKVQKSS	KELEDMNQKLFDLR	-1.22	-1.56	TNNI2_MOUSE	Troponin I, fast skeletal muscle;
KYDMEVKVQK	SSKELEDMNQKLFDLR	0.29	-1.52	TNNI2_MOUSE	Troponin I, fast skeletal muscle;
AITARRQHLK	SVMLQIAATELEKEESR	0.99	0.01	TNNI2_MOUSE	Troponin I, fast skeletal muscle;
RQNKDLMELQ	ALIDSHFEAR	-0.81	-1.22	TNNT3_MOUSE	Troponin T, fast skeletal muscle;
DKAKELWDTL	YQLETDKFEFGEKLR	-2.94	-1.43	TNNT3_MOUSE	Troponin T, fast skeletal muscle;
KKILAERRKP	LNIDHLSDDKLR	-1.64	-3.18	TNNT3_MOUSE	Troponin T, fast skeletal muscle;
RAFVHWYVGE	GMEEGEFSEAR	0.42	0.19	TBA1A_MOUSE	Tubulin alpha-1A chain;
AGKHVPRAVF	VDLEPTVIDEVR	2.35	4.36	TBA1A_MOUSE	Tubulin alpha-1A chain;
MYAKRAVHW	YVGEGMEEGEFSEAR	5.27	4.99	TBA1A_MOUSE	Tubulin alpha-1A chain;
EAAGNKYVPR	AILVDLEPGTMDSVR	-1.22	2.12	TBB2A_MOUSE	Tubulin beta-2A chain;
QIGAKFWEVI	SDEHGIDPTGTYHGDSDLQLDR	2.09	3.43	TBB5_MOUSE	Tubulin beta-5 chain;
RLSESEGAN	EGATAAPELSALEEFRR	0.57	-0.62	TPPP_MOUSE	Tubulin polymerization-promoting protein;
KGKSCRTITF	EQFQEALEELAKKR	-0.30	-1.69	TPPP_MOUSE	Tubulin polymerization-promoting protein;
M	VLSNEPAASAAEEVEDDALVR	-0.97	0.04	TBCD_MOUSE	Tubulin-specific chaperone D;
GPSAGDVEAI	KNAIANASTLAEVER	0.15	-1.29	RU2A_MOUSE	U2 small nuclear ribonucleoprotein A';
SGNRLDGKKK	GVEPSPSPIKPGDIKR	0.03	-0.29	UFD1_MOUSE	Ubiquitin fusion degradation protein 1 homolog;
TKIFTASNV	SVPLPAENVITITAGQR	-4.32	-3.32	UBP2L_MOUSE	Ubiquitin-associated protein 2-like;
KTDQVIQFFI	ALVNDPQPEHPLR	4.25	2.20	UB2L3_MOUSE	Ubiquitin-conjugating enzyme E2 L3;
NTLHLDYVMA	AANLFAQTYGLTGSQDR	-0.07	-0.74	UBA1_MOUSE	Ubiquitin-like modifier-activating enzyme 1;
SPVSSGVNLF	ANDGSFLELFKR	0.84	-0.89	CS043_MOUSE	Uncharacterized protein C19orf43 homolog;
QSLPSSHGPS	QPGLPAVLSSPPLSPR	4.13	4.33	CB071_MOUSE	Uncharacterized protein C2orf71 homolog;
PLPTFSSLNL	RETNLESPLVDTHSKR	2.62	1.63	VIME_MOUSE	Vimentin;

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Non Prime Site	Prime Site	Fold change (log ₂) of ASAPRatio (replicate 1)	Fold change (log ₂) of ASAPRatio (replicate 2)	Uniprot ID	Protein Name
LRAMRGIVNG	AAPELPVPTGGPMAGAR	-0.29	0.12	VATB2_MOUSE	V-type proton ATPase subunit B, brain isoform;
LNKNRHPNFL	VVEKDTTINEIEDTFR	1.51	1.72	VATF_MOUSE	V-type proton ATPase subunit F;
M	ASQTQGIQQLLQAEKR	2.48	5.73	VATG2_MOUSE	V-type proton ATPase subunit G 2;
VGASDGLYM	YNLDPQEGGECALMR	-0.03	0.65	WIPI2_MOUSE	WD repeat domain phosphoinositide-interacting protein 2;
ICAKLSRQVV	VEKGAEAGSQAEGSPLHPR	0.18	1.02	CASZ1_MOUSE	Zinc finger protein castor homolog 1;
KQYAPRCVC	SEPIMPEPGRDETVR	0.93	0.71	ZYX_MOUSE	Zyxin;
LTARDEARGR	AAVQQLQAEGLSPR	0.31	0.56	Q8K354_MOUSE	
LWLLPSLALA	AAVTEPADLEYTEVPR	2.69	1.86	Q8BVL6_MOUSE	
SLQLVSWTLA	AEPVDVLEAWGVHR	0.77	-0.27	Q9JLI2_MOUSE	
ARSKPSPQLS	AETPVAALPEFPR	-0.36	-0.47	E9Q0S6_MOUSE	
PKHLSRRTL	AFPQKVMPPQAR	0.33	0.99	Q3U422_MOUSE	
LALAFGLAHA	AMEGPWKTVAIAADR	2.48	2.41	A2AEN9_MOUSE	
ENAFSRSGGR	ASGDKEAEGAPQVEAGKR	2.09	1.49	Q8VCQ8_MOUSE	
QKIGQPTLL	AVEEQSCEYSGR	-1.52	-1.15	E9PX16_MOUSE	
VLTGFGMTLC	AVPIAQKSEPOQSLNEALMR	0.80	1.04	Q542V8_MOUSE	
LSLEVQELQA	AVRPLQLLGTCAELCR	-0.30	-0.14	Q8BTE6_MOUSE	
LQSELMSTL	AVSKEKEEETSPTDSIPR	1.34	-0.79	E9Q7D5_MOUSE	
QAGRFHVNLL	CGEEQGADAALHFNPR	1.99	2.49	Q9CRB1_MOUSE	
ESAAKDEAVF	DDEVAPDAAAENCLAER	0.81	-0.18	E9PVP1_MOUSE	
DVIRNAFACF	DEEAIGTIQEDYLR	1.25	1.71	Q6ZWQ9_MOUSE	
FVREPPIMVT	KQLEDMNAYCGER	-4.06	-5.06	D3YU50_MOUSE	
DFHLLNEVN	KTDPGIILKTENR	-1.29	-1.43	Q3UWK8_MOUSE	
GVSESQASDS	EGHSDFSEGQAVGAHR	1.36	0.67	F7BVV1_MOUSE	
LLAVLPTTTA	EKNGIDIYSLTVDSR	0.57	-0.07	Q9DBK8_MOUSE	
GAGFRPKVKR	EVKVDCSEYLALSKR	-0.71	-1.60	Q148R4_MOUSE	
EAASGALSMF	FQGEETENEENLSSEKAGLDKR	2.27	1.85	A2AIX1_MOUSE	
LLRGPPVARA	GAGAVGAGPVVR	-1.36	-0.43	Q6PE62_MOUSE	
DYKSAHKGFK	GAYDAQGTLSKIFKLGG	-2.12	-0.52	F7A0B0_MOUSE	
DLNLKGSKVK	GDVDISGPKLEGDIKVP	-0.67	-0.81	E9Q616_MOUSE	
DLNFKGPKLK	GEIDASVPEMEADLR	-0.42	0.23	E9Q616_MOUSE	
VETQPGKTVI	RLPSGSGPASPTTGSVDIR	-1.79	-1.69	E9Q616_MOUSE	
AVPVFDLIL	GVGPDGHTCSLFPDHPLLQER	3.11	2.16	6PGL_MOUSE	
GMVPDQAGRF	HVNLLCGEEQGADAALHFNPR	1.96	2.31	Q9CRB1_MOUSE	
QGVRVGTVMR	IRGMVPDQAGR	-0.01	-0.27	Q9CRB1_MOUSE	
RKRKEGENQR	ITSGESSGGNPKAKDECAQYR	-0.06	1.20	Q148R4_MOUSE	
LPMMQAISNN	KDQGGYEDFVEGLR	0.03	-2.06	E9PWG4_MOUSE	

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Non Prime Site	Prime Site	Fold change (log ₂)	Fold change (log ₂) of	Uniprot ID	Protein Name
		of ASAPRatio (replicate 1)	ASAPRatio (replicate 2)		
R	IFQTTTERPFIQKLF	-2.12	-1.52	F7D9Q0_MOUSE	
DQAGRFHVN	LCGEEQGADAALHFNPR	-0.54	1.21	Q9CRB1_MOUSE	
SPLPVIHQK	VVANSANADYQER	-1.89	-1.64	E9PYJ9_MOUSE	
MEVNRDIVF	LVDGSSSLGPSNFNAIR	-0.52	0.11	E9PWQ3_MOUSE	
GRSSNRDRP	RQPSPQSSDSQVHSGVQVEGR	0.87	2.64	E9Q019_MOUSE	
KSMWEKGSVF	SAPSASGTPNKETAGLKVGVSSR	0.08	0.19	Q8VCQ8_MOUSE	
LWALLPAEA	SCQGIQCAPGQR	0.77	0.59	E9PVG8_MOUSE	
RPANPNWGVF	SEFGDSSSPATR	0.01	-1.36	Q99K47_MOUSE	
RGVSESQASD	SEGHSDFSEGQAVGAHR	2.75	1.94	E9Q019_MOUSE	
SADRQRRGV	SESQASDSEGHSDFSEGQAVGAHR	0.90	1.62	E9Q019_MOUSE	
WTHEVFSSRS	SEVVLSGDDEDYQR	-0.03	-0.43	E9Q616_MOUSE	
NIDIRSAFKR	SGEGQEDAGELDFSGLLKR	-0.79	-2.47	D3YU50_MOUSE	
ESTECKTRV	SGEHMDLTTCPLAAGGQKEKLR	3.28	2.53	Q9D1B1_MOUSE	
KIPRHEVTEI	SNTDVETQPGKTIVR	-1.40	-1.00	E9Q616_MOUSE	
QFLVLLVAGR	SSDAVAGPASSLKQR	0.99	1.16	E9PWQ3_MOUSE	
SSVATQQTTL	SSIPSHPSTAGKIFR	0.60	-0.52	A2AQB2_MOUSE	
NKSVQKSGVR	STHQAAVVKIDSR	1.13	1.26	Q8VCQ8_MOUSE	
RVSGEHMDLT	TCPLAAGGQKEKLR	2.68	1.35	Q9D1B1_MOUSE	
ILSVASTVWT	TDTEKGEFLSEGGGVR	0.77	-1.12	Q99K47_MOUSE	
DEESKPASSN	TQVEGDEEAALLER	1.92	1.42	Q8VCQ8_MOUSE	
TRVSGEHMDL	TTCPLAAGGQKEKLR	1.77	1.78	Q9D1B1_MOUSE	
EERSVNCGTM	VAQPKNLEGYVGFANLPNQVYR	1.21	0.14	E9Q9F5_MOUSE	
EVNKRDIVFL	VDGSSSLGPSNFNAIR	0.53	-0.60	E9PWQ3_MOUSE	
IAEGVPQLLI	VLTAEPSGDVDR	2.50	2.91	E9PWQ3_MOUSE	
IPESLKNMLL	VMDTAEIFHSADAR	1.37	1.01	Q6DFZ1_MOUSE	
IESTECKTR	VSGEHMDLTTCPLAAGGQKEKLR	2.68	3.03	Q9D1B1_MOUSE	
FLPMMQAISN	NKDQGGYEDFVEGLR	-1.12	-2.25	E9PWG4_MOUSE	
STSSPVFHPK	YQACSGPILPHR	0.48	-0.74	Q99M20_MOUSE	
RLMEIYQEKL	YRPPVLDALGR	1.03	1.74	E9Q005_MOUSE	