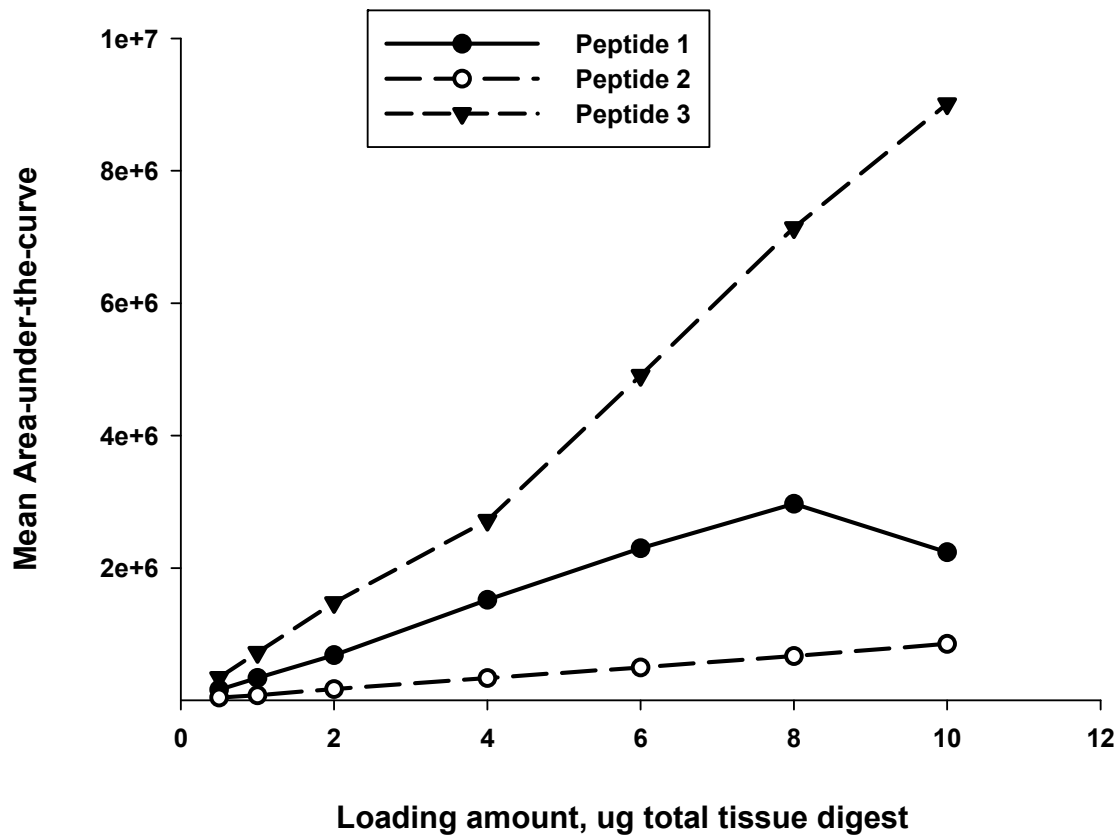
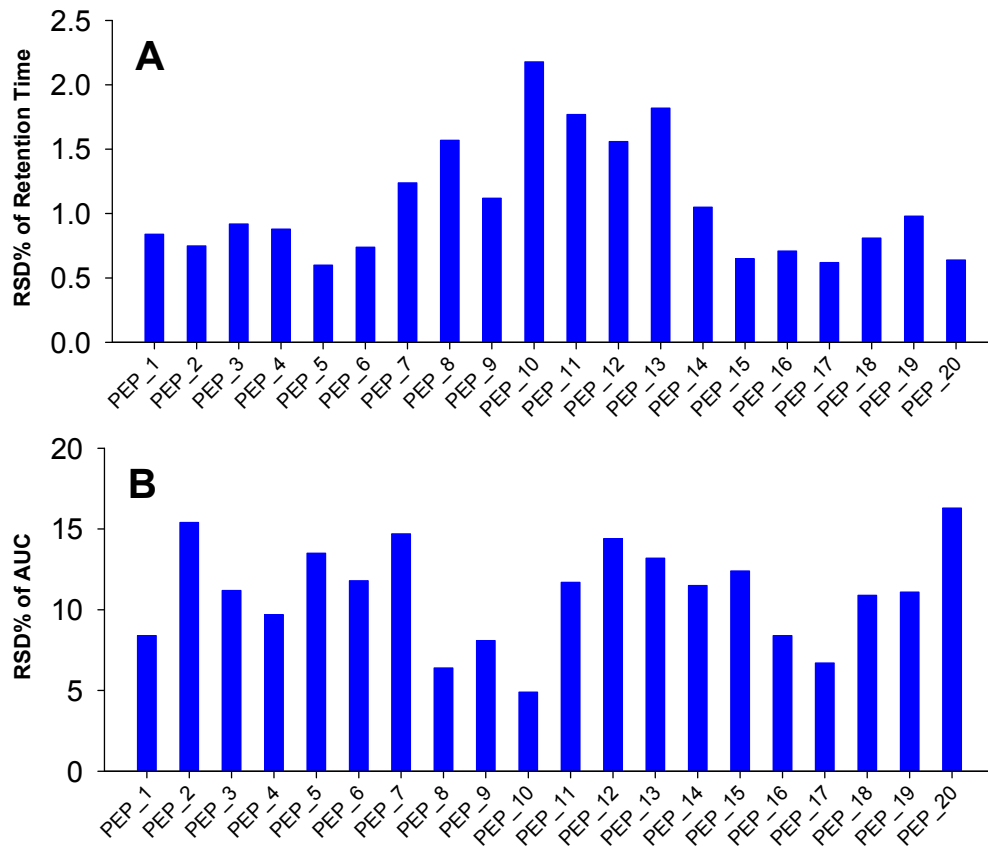


SI Figure 1. Efficient and reproducible extraction of the LAD heart tissues and protein digestion in the Sham and Hibernating pigs (N=12/group). (A) Protein extraction yields from myocardial samples using a cocktail of detergents. (B) The peptide recoveries of the precipitation/on-pellet-digestion procedure, which were determined by a modified BCA method.



SI Figure 2. The average peptide peak area responses vs. injection amounts of a heart tissue digest (in μg digested proteins, $N=3$). The polarity order of the three peptides are peptide 1>peptide 2>peptide 3. Peptide 1 is HKPHATEEQLR (from serum albumin; $RT=10.5$ min on the nano-LC column, the first peak eluted), Peptide 2 is TIAMDGTEGLVR (from ATP synthase subunit beta, mitochondrial, $RT=148$ min) and peptide 3 is TLATLNPESSLFIIASK (from glucose-6-phosphate isomerase, $RT= 278$ min).



Peptide #	Sequence	Protein	Xcorr	Average Mass error (ppm)	Average RT (min)
1	HKPHATEEQLR	serum albumin precursor	3.99	-0.47	10.27
2	RPVVSAGLHR	NADH dehydrogenase	4.37	1.84	28.10
3	SGGASHSELIHNL	protein-L-isoaspartate(D-aspartate) O-methyltransferase	3.80	-3.03	49.68
4	VDNSSLTGESEPQTR	sodium/potassium-transporting ATPase subunit alpha-1 precursor	3.99	-2.58	69.78
5	NLSNLQYQER	nebullette isoform 1	2.79	3.30	89.67
6	AAAEVNDQYGLDPK	fumarate hydratase	3.49	10.22	107.64
7	DYESASLTEVR	alpha-actinin-2	3.78	3.63	127.01
8	TIAMDGTEGLVR	ATP synthase subunit beta, mitochondrial	3.54	5.06	148.61
9	AYEAQTEPVLVEYYR	GTP:AMP phosphotransferase, mitochondrial isoform 1	3.24	4.91	166.77
10	TPYTDVNIVTIR	isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	3.36	2.30	184.38
11	LTGADGTPPGFLLK	mitochondrial 2-oxoglutarate/malate carrier protein	3.32	5.14	198.52
12	NQSSLVLIGDAFK	myomesin-2	4.51	8.51	226.79
13	NNLLQAELEELR	myosin-7	3.68	4.47	239.48
14	AQFGQPEILLGTIPGTGGTQR	enoyl-CoA hydratase, mitochondrial	3.45	3.65	251.42
15	LAPITSDPTEAAAVGAVEASFK	pyruvate kinase isozymes M1/M2 isoform 1	3.95	0.78	263.66
16	TLATLNPESSLFIIASK	glucose-6-phosphate isomerase	3.90	3.47	278.02
17	DALSDLALHFLNK	T-complex protein 1 subunit delta-like	3.68	5.76	291.61
18	FVTVYPGDIILGTGPAGVGVFR	fumarylacetoacetate hydrolase domain-containing protein 2-like isoform 2	3.65	8.64	311.27
19	LLTIELNPDNAAIAQQVVDVDFAGLQDR	catechol O-methyltransferase	3.76	8.54	330.23
20	LEQLSPFPFDLLLQEVQK	2-oxoglutarate dehydrogenase, mitochondrial-like	3.65	6.96	353.60

SI Figure 3. The reproducibility of (A) retention times and (B) areas-under-the-curves(AUC) of the twenty representative peptides randomly selected across the entire retention time window, for 24 runs of a pooled tissue sample (N=24).

SI Table 1. The 911 unique protein groups confidently quantified by the ion current-based strategy

Accession No./Protein name	Species	Description	Peptides Quantified	Ratio (HIB vs. Sham)	Pvalue (HIB vs. Sham)
A1XQR7 QIL1	PIG	Protein QIL1	2	0.78	<0.01
A2A2Z9 AN18B	HUMAN	Ankyrin repeat domain-containing protein 18B	2	0.85	0.53
A2PYH4 HFM1	HUMAN	Probable ATP-dependent DNA helicase HFM1	3	1.01	0.05
A2RRP1 NBAS	HUMAN	Neuroblastoma-amplified sequence	2	1.18	0.06
A4D1E1 Z804B	HUMAN	Zinc finger protein 804B	2	0.88	0.18
A4D1F6 YG015	HUMAN	Leucine-rich repeat and death domain-containing protein LOC401387	2	1.16	0.19
A4D2P6 GRD2I	HUMAN	Delphinin	4	0.73	<0.01
A4FU49 CA113	HUMAN	SH3 domain-containing protein C1orf113	2	1.55	0.05
A4FU69 EFCB5	HUMAN	EF-hand calcium-binding domain-containing protein 5	2	0.90	0.15
A4UGR9 XIRP2	HUMAN	Xin actin-binding repeat-containing protein 2	8	1.09	<0.01
A4Z6H0 PURA1	PIG	Adenylosuccinate synthetase isozyme 1	4	0.93	0.05
A5A3E0 POTEF	HUMAN	POTE ankyrin domain family member F	8	1.14	<0.01
A5GFS8 VAPB	PIG	Vesicle-associated membrane protein-associated protein B	2	1.02	0.32
A6H8Y1 BDP1	HUMAN	Transcription factor TFIIIB component B'' homolog	6	0.95	0.02
A6NL28 TPM3L	HUMAN	Putative tropomyosin alpha-3 chain-like protein	2	0.93	<0.01
A6NNC1 P12LL	HUMAN	Putative POM121-like protein 1-like	12	0.86	<0.01
A6NNM8 TTL13	HUMAN	Tubulin polyglutamylase TTL13	5	0.72	<0.01
A6QL64 AN36A	HUMAN	Ankyrin repeat domain-containing protein 36A	2	1.33	<0.01
A7E2Y1 MYH7B	HUMAN	Myosin-7B	5	0.87	<0.01
B1AJZ9 FHAD1	HUMAN	Forkhead-associated domain-containing protein 1	4	0.84	0.61
B2RTY4 MYO9A	HUMAN	Myosin-Ixa	6	0.95	0.18
O00151 PDLI1	HUMAN	PDZ and LIM domain protein 1	4	1.08	<0.01
O00160 MYO1F	HUMAN	Myosin-Ilf	3	0.96	0.13
O00299 CLIC1	HUMAN	Chloride intracellular channel protein 1	3	1.48	<0.01
O00311 CDC7	HUMAN	Cell division cycle 7-related protein kinase	3	0.81	0.23
O00329 PK3CD	HUMAN	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta isoform	2	0.89	0.12
O00330 ODPX	HUMAN	Pyruvate dehydrogenase protein X component, mitochondrial	2	0.85	<0.01
O00411 RPOM	HUMAN	DNA-directed RNA polymerase, mitochondrial	2	0.93	0.72
O00555 CAC1A	HUMAN	Voltage-dependent P/Q-type calcium channel subunit alpha-1A	8	1.00	0.01
O02705 HS90A	PIG	Heat shock protein HSP 90-alpha	11	1.62	<0.01
O02772 FABPH	PIG	Fatty acid-binding protein, heart	6	0.87	<0.01
O14497 ARI1A	HUMAN	AT-rich interactive domain-containing protein 1A	4	0.77	<0.01
O14558 HSPB6	HUMAN	Heat shock protein beta-6	5	1.54	<0.01
O14727 APAF	HUMAN	Apoptotic protease-activating factor 1	2	1.03	0.84
O14737 PDZD5	HUMAN	Programmed cell death protein 5	2	0.72	<0.01
O14827 RGRF2	HUMAN	Ras-specific guanine nucleotide-releasing factor 2	2	0.76	0.03
O14958 CASQ2	HUMAN	Calsequestrin-2	5	0.89	0.11
O15014 ZN609	HUMAN	Zinc finger protein 609	6	0.83	<0.01
O15016 TRI66	HUMAN	Tripartite motif-containing protein 66	2	0.72	0.01
O15018 PDZD2	HUMAN	PDZ domain-containing protein 2	4	1.06	0.98
O15021 MAST4	HUMAN	Microtubule-associated serine/threonine-protein kinase 4	6	0.89	<0.01
O15031 PLXB2	HUMAN	Plexin-B2	3	0.81	<0.01

O15050 TRNK1	HUMAN	TPR and ankyrin repeat-containing protein 1	3	1.06	0.02
O15061 SYNEM	HUMAN	Synemin	2	0.96	0.05
O15078 CE290	HUMAN	Centrosomal protein of 290 kDa	3	0.85	0.12
O15144 ARPC2	HUMAN	Actin-related protein 2/3 complex subunit 2	2	0.57	<0.01
O15417 TNC18	HUMAN	Trinucleotide repeat-containing gene 18 protein	7	0.97	<0.01
O15504 NUPL2	HUMAN	Nucleoporin-like protein 2	4	0.87	0.01
O19069 SUCA	PIG	Succinyl-CoA ligase [GDP-forming] subunit alpha, mitochondrial	2	1.12	<0.01
O43181 NDUS4	HUMAN	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial	2	0.99	0.05
O43242 PSMD3	HUMAN	26S proteasome non-ATPase regulatory subunit 3	2	0.94	0.55
O43379 WDR62	HUMAN	WD repeat-containing protein 62	2	1.26	0.01
O43424 GRID2	HUMAN	Glutamate receptor delta-2 subunit	2	1.17	<0.01
O43432 IF4G3	HUMAN	Eukaryotic translation initiation factor 4 gamma 3	4	1.13	<0.01
O43615 TIM44	HUMAN	Mitochondrial import inner membrane translocase subunit TIM44	4	1.11	<0.01
O43707 ACTN4	HUMAN	Alpha-actinin-4	11	1.36	<0.01
O43837 IDH3B	HUMAN	Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial	4	0.92	<0.01
O60229 KALRN	HUMAN	Kalirin	4	1.11	0.01
O60281 ZN292	HUMAN	Zinc finger protein 292	2	1.01	1.00
O60293 ZC3H1	HUMAN	Zinc finger C3H1 domain-containing protein	4	0.90	0.01
O60313 OPA1	HUMAN	Dynamin-like 120 kDa protein, mitochondrial	5	0.96	0.01
O60333 KIF1B	HUMAN	Kinesin-like protein KIF1B	2	0.89	0.28
O60447 EVI5	HUMAN	Ecotropic viral integration site 5 protein homolog	2	0.82	0.37
O60449 LY75	HUMAN	Lymphocyte antigen 75	4	0.75	<0.01
O60469 DSCAM	HUMAN	Down syndrome cell adhesion molecule	2	1.02	0.03
O60486 PLXC1	HUMAN	Plexin-C1	3	0.85	<0.01
O60673 DPOLZ	HUMAN	DNA polymerase zeta catalytic subunit	6	1.14	0.17
O60763 USO1	HUMAN	General vesicular transport factor p115	2	1.09	0.48
O60879 DIAP2	HUMAN	Protein diaphanous homolog 2	4	1.12	0.31
O60942 MCE1	HUMAN	mRNA-capping enzyme 1-phosphatidylinositol-4,5-bisphosphate	3	0.97	0.29
O75038 PLCH2	HUMAN	phosphodiesterase eta-2	2	0.74	<0.01
O75061 AUX1	HUMAN	Putative tyrosine-protein phosphatase auxilin	2	0.96	0.05
O75083 WDR1	HUMAN	WD repeat-containing protein 1	2	1.49	<0.01
O75112 LDB3	HUMAN	LIM domain-binding protein 3	6	0.89	<0.01
O75150 BRE1B	HUMAN	E3 ubiquitin-protein ligase BRE1B	2	0.67	<0.01
O75306 NDUS2	HUMAN	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	2	0.78	<0.01
O75323 NIPS2	HUMAN	Protein NipSnap homolog 2	2	0.96	0.51
O75339 CILP1	HUMAN	Cartilage intermediate layer protein 1	5	0.87	<0.01
O75369 FLNB	HUMAN	Filamin-B	7	1.08	<0.01
O75376 NCOR1	HUMAN	Nuclear receptor corepressor 1	3	1.15	0.44
O75489 NDUS3	HUMAN	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial	4	0.95	0.02
O75592 MYCB2	HUMAN	Probable E3 ubiquitin-protein ligase MYCBP2	7	0.89	0.09
O75608 LYPA1	HUMAN	Acyl-protein thioesterase 1	2	1.03	0.38
O75746 CMC1	HUMAN	Calcium-binding mitochondrial carrier protein Aralar1	8	0.84	<0.01
O75964 ATP5L	HUMAN	ATP synthase subunit g, mitochondrial	2	0.94	0.24
O76041 NEBL	HUMAN	Nebulette	7	0.89	<0.01
O94822 RN160	HUMAN	RING finger protein 160	2	0.68	0.10
O94875 SRBS2	HUMAN	Sorbin and SH3 domain-containing protein 2	3	1.33	<0.01
O94913 PCF11	HUMAN	Pre-mRNA cleavage complex 2 protein Pcf11	3	1.03	0.05

O94986 CE152	HUMAN	Centrosomal protein of 152 kDa	3	1.13	0.06
O94989 ARHGF	HUMAN	Rho guanine nucleotide exchange factor 15	2	0.99	0.26
O95153 RIMB1	HUMAN	Peripheral-type benzodiazepine receptor-associated protein 1	2	1.50	0.36
O95202 LETM1	HUMAN	LETM1 and EF-hand domain-containing protein 1, mitochondrial	2	0.97	1.00
O95239 KIF4A	HUMAN	Chromosome-associated kinesin KIF4A	3	0.93	<0.01
O95251 MYST2	HUMAN	Histone acetyltransferase MYST2	2	0.83	0.03
O95347 SMC2	HUMAN	Structural maintenance of chromosomes protein 2	3	0.88	0.10
O95425 SVIL	HUMAN	Supervillin	2	0.92	0.01
O95563 BR44	HUMAN	Brain protein 44	2	1.08	0.05
O95613 PCNT	HUMAN	Pericentrin	5	0.87	0.01
O95704 APBB3	HUMAN	Amyloid beta A4 precursor protein-binding family B member 3	2	0.89	0.10
O95786 DDX58	HUMAN	Probable ATP-dependent RNA helicase DDX58	2	0.75	0.04
O95810 SDPR	HUMAN	Serum deprivation-response protein	3	1.28	<0.01
O95817 BAG3	HUMAN	BAG family molecular chaperone regulator 3	2	0.96	0.45
O95831 AIFM1	HUMAN	Apoptosis-inducing factor 1, mitochondrial	6	1.02	0.81
O95996 APC2	HUMAN	Adenomatous polyposis coli protein 2	5	1.03	0.99
O96028 NSD2	HUMAN	Probable histone-lysine N-methyltransferase NSD2	2	0.87	0.04
O97580 SUCB1	PIG	Succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial (Fragment)	5	0.90	<0.01
O97788 FABP4	PIG	Fatty acid-binding protein, adipocyte	2	0.85	0.28
P00172 CYB5	PIG	Cytochrome b5	2	1.18	0.80
P00336 LDHB	PIG	L-lactate dehydrogenase B chain	10	0.80	<0.01
P00339 LDHA	PIG	L-lactate dehydrogenase A chain	2	2.13	<0.01
P00346 MDHM	PIG	Malate dehydrogenase, mitochondrial	15	0.76	<0.01
P00348 HCDH	PIG	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	5	0.80	<0.01
P00355 G3P	PIG	Glyceraldehyde-3-phosphate dehydrogenase	9	1.35	<0.01
P00367 DHE3	HUMAN	Glutamate dehydrogenase 1, mitochondrial	3	0.87	<0.01
P00451 FA8	HUMAN	Coagulation factor VIII	3	0.84	0.10
P00503 AATC	PIG	Aspartate aminotransferase, cytoplasmic	12	0.93	<0.01
P00506 AATM	PIG	Aspartate aminotransferase, mitochondrial	8	0.93	0.02
P00568 KAD1	HUMAN	Adenylate kinase isoenzyme 1	6	0.86	<0.01
P00761 TRYP	PIG	Trypsin	5	1.00	<0.01
P00795 CATD	PIG	Cathepsin D	5	1.77	<0.01
P00889 CISY	PIG	Citrate synthase, mitochondrial	10	0.92	<0.01
P00915 CAH1	HUMAN	Carbonic anhydrase 1	2	1.14	0.76
P01024 CO3	HUMAN	Complement C3	2	1.30	0.02
P01846 LAC	PIG	Ig lambda chain C region	2	0.83	0.91
P01965 HBA	PIG	Hemoglobin subunit alpha	7	1.23	<0.01
P02067 HBB	PIG	Hemoglobin subunit beta	9	1.13	<0.01
P02189 MYG	PIG	Myoglobin	5	0.86	<0.01
P02540 DESM	PIG	Desmin	22	1.76	<0.01
P03952 KLKB1	HUMAN	Plasma kallikrein	2	0.83	0.01
P03974 TERA	PIG	Transitional endoplasmic reticulum ATPase	7	1.48	<0.01
P04075 ALDOA	HUMAN	Fructose-bisphosphate aldolase A	6	0.99	0.88
P04114 APOB	HUMAN	Apolipoprotein B-100	2	1.49	0.01
P04181 OAT	HUMAN	Ornithine aminotransferase, mitochondrial	2	0.86	<0.01
P04264 K2C1	HUMAN	Keratin, type II cytoskeletal 1	3	0.71	<0.01
P05024 AT1A1	PIG	Sodium/potassium-transporting ATPase subunit alpha-1	8	0.98	0.33
P05027 AT1B1	PIG	Sodium/potassium-transporting ATPase subunit beta-1	2	0.89	0.03
P05141 ADT2	HUMAN	ADP/ATP translocase 2	4	0.90	0.20
P06576 ATPB	HUMAN	ATP synthase subunit beta, mitochondrial	24	0.87	<0.01

P06733 ENOA	HUMAN	Alpha-enolase	4	1.46	<0.01
P06744 GGPI	HUMAN	Glucose-6-phosphate isomerase	3	1.17	<0.01
P06753 TPM3	HUMAN	Tropomyosin alpha-3 chain	5	0.89	<0.01
P07237 PDIA1	HUMAN	Protein disulfide-isomerase	2	1.63	<0.01
P07437 TBBS	HUMAN	Tubulin beta chain	14	1.66	<0.01
P07737 PROF1	HUMAN	Profilin-1	2	1.28	<0.01
P07951 TPM2	HUMAN	Tropomyosin beta chain	5	0.87	<0.01
P07954 FUMH	HUMAN	Fumarate hydratase, mitochondrial	9	0.74	<0.01
P08133 ANXA6	HUMAN	Annexin A6	3	1.11	<0.01
P08238 HS90B	HUMAN	Heat shock protein HSP 90-beta	8	1.66	<0.01
P08574 CY1	HUMAN	Cytochrome c1, heme protein, mitochondrial	3	0.86	<0.01
P08590 MYL3	HUMAN	Myosin light chain 3	8	0.77	<0.01
P08670 VIME	HUMAN	Vimentin	13	1.96	<0.01
P08686 CP21A	HUMAN	Steroid 21-hydroxylase	2	0.86	0.01
P08758 ANXA5	HUMAN	Annexin A5	5	1.54	<0.01
P08835 ALBU	PIG	Serum albumin	21	1.14	<0.01
P08865 RSSA	HUMAN	40S ribosomal protein SA	3	1.52	<0.01
P09493 TPM1	HUMAN	Tropomyosin alpha-1 chain	11	0.87	<0.01
P09571 TRFE	PIG	Serotransferrin	14	1.21	<0.01
P09874 PARP1	HUMAN	Poly [ADP-ribose] polymerase 1	2	1.25	<0.01
P09913 IFIT2	HUMAN	Interferon-induced protein with tetratricopeptide repeats 2	2	1.26	<0.01
P09972 ALDOC	HUMAN	Fructose-bisphosphate aldolase C	2	0.96	<0.01
P0C7P4 UCRIL	HUMAN	Putative cytochrome b-c1 complex subunit Rieske-like protein 1	2	0.78	<0.01
P0C881 R10B1	HUMAN	Radial spoke head 10 homolog B	2	1.41	<0.01
P10515 ODP2	HUMAN	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	5	0.82	<0.01
P10600 TGFB3	HUMAN	Transforming growth factor beta-3	2	1.06	0.45
P10644 KAP0	HUMAN	cAMP-dependent protein kinase type I-alpha regulatory subunit	2	0.98	1.00
P10809 CH60	HUMAN	60 kDa heat shock protein, mitochondrial	10	0.99	<0.01
P10916 MLRV	HUMAN	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform	7	0.86	<0.01
P11021 GRP78	HUMAN	78 kDa glucose-regulated protein	13	1.47	<0.01
P11055 MYH3	HUMAN	Myosin-3	21	0.86	<0.01
P11137 MAP2	HUMAN	Microtubule-associated protein 2	2	1.14	0.64
P11142 HSP7C	HUMAN	Heat shock cognate 71 kDa protein	12	1.38	<0.01
P11177 ODPB	HUMAN	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	5	0.72	<0.01
P11216 PYGB	HUMAN	Glycogen phosphorylase, brain form	10	1.20	<0.01
P11217 PYGM	HUMAN	Glycogen phosphorylase, muscle form	6	1.35	<0.01
P11277 SPTB1	HUMAN	Spectrin beta chain, erythrocyte	3	1.03	<0.01
P11387 TOP1	HUMAN	DNA topoisomerase 1	3	1.03	0.20
P11388 TOP2A	HUMAN	DNA topoisomerase 2-alpha	2	0.76	0.10
P11607 AT2A2	PIG	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	19	0.72	<0.01
P11708 MDHC	PIG	Malate dehydrogenase, cytoplasmic	7	1.04	0.94
P11717 MPRI	HUMAN	Cation-independent mannose-6-phosphate receptor	3	0.80	<0.01
P12026 ACBP	PIG	Acyl-CoA-binding protein	2	1.31	<0.01
P12081 SYHC	HUMAN	Histidyl-tRNA synthetase, cytoplasmic	2	0.92	0.78
P12109 CO6A1	HUMAN	Collagen alpha-1(VI) chain	2	1.59	0.02
P12110 CO6A2	HUMAN	Collagen alpha-2(VI) chain	3	1.12	0.07
P12111 CO6A3	HUMAN	Collagen alpha-3(VI) chain	6	0.80	<0.01
P12235 ADT1	HUMAN	ADP/ATP translocase 1	5	0.98	1.00
P12236 ADT3	HUMAN	ADP/ATP translocase 3	5	0.96	0.36
P12270 TPR	HUMAN	Nucleoprotein TPR	3	1.37	<0.01
P12277 KCRB	HUMAN	Creatine kinase B-type	3	0.87	<0.01
P12682 HMGB1	PIG	High mobility group protein B1	2	0.84	0.15
P12814 ACTN1	HUMAN	Alpha-actinin-1	15	1.17	<0.01
P12882 MYH1	HUMAN	Myosin-1	19	0.84	<0.01

P12883 MYH7	HUMAN	Myosin-7	81	0.85	<0.01
P13073 COX41	HUMAN	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial	2	0.82	<0.01
P13533 MYH6	HUMAN	Myosin-6	67	0.85	<0.01
P13535 MYH8	HUMAN	Myosin-8	19	0.80	<0.01
P13618 ATP5J	PIG	ATP synthase-coupling factor 6, mitochondrial	2	0.86	<0.01
P13639 EF2	HUMAN	Elongation factor 2	11	1.35	<0.01
P13667 PDIA4	HUMAN	Protein disulfide-isomerase A4	8	0.95	0.54
P13796 PLSL	HUMAN	Plastin-2	2	3.32	<0.01
P13804 ETFA	HUMAN	Electron transfer flavoprotein subunit alpha, mitochondrial	5	1.13	0.03
P13807 GYS1	HUMAN	Glycogen [starch] synthase, muscle	4	1.43	<0.01
P13861 KAP2	HUMAN	cAMP-dependent protein kinase type II-alpha regulatory subunit	3	0.88	<0.01
P14618 KPYM	HUMAN	Pyruvate kinase isozymes M1/M2	10	1.02	<0.01
P15259 PGAM2	HUMAN	Phosphoglycerate mutase 2	2	1.09	<0.01
P15311 EZRI	HUMAN	Ezrin	4	1.02	<0.01
P15822 ZEP1	HUMAN	Zinc finger protein 40	2	0.80	0.14
P15880 RS2	HUMAN	40S ribosomal protein S2	3	1.00	0.92
P15918 RAG1	HUMAN	V(D)J recombination-activating protein 1	4	1.21	<0.01
P15924 DESP	HUMAN	Desmoplakin	3	1.26	<0.01
P16276 ACON	PIG	Aconitate hydratase, mitochondrial	23	0.98	<0.01
P16401 H15	HUMAN	Histone H1.5	2	1.05	0.25
P16402 H13	HUMAN	Histone H1.3	4	1.49	<0.01
P17540 KCRS	HUMAN	Creatine kinase S-type, mitochondrial	12	1.03	<0.01
P17948 VGFR1	HUMAN	Vascular endothelial growth factor receptor 1	7	0.89	0.02
P18648 APOA1	PIG	Apolipoprotein A-I	8	1.29	<0.01
P18669 PGAM1	HUMAN	Phosphoglycerate mutase 1	4	1.17	<0.01
P19022 CADH2	HUMAN	Cadherin-2	4	1.00	0.99
P19105 ML12A	HUMAN	Myosin regulatory light chain 12A	2	1.36	<0.01
P19367 HKK1	HUMAN	Hexokinase-1	9	0.91	<0.01
P19404 NDUV2	HUMAN	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial	6	0.73	<0.01
P19429 TNNI3	HUMAN	Troponin I, cardiac muscle	5	0.89	<0.01
P19619 ANXA1	PIG	Annexin A1	3	1.61	<0.01
P19620 ANXA2	PIG	Annexin A2	12	1.77	<0.01
P20305 GELS	PIG	Gelsolin (Fragment)	2	1.84	<0.01
P20774 MIME	HUMAN	Mimecan	2	1.00	0.69
P20810 ICAL	HUMAN	Calpastatin	6	1.15	<0.01
P20929 NEBU	HUMAN	Nebulin	12	0.95	<0.01
P21333 FLNA	HUMAN	Filamin-A	6	1.49	<0.01
P21980 TGM2	HUMAN	Protein-glutamine gamma-glutamyltransferase 2	2	0.97	0.23
P22105 TENX	HUMAN	Tenascin-X	2	1.03	0.01
P22314 UBA1	HUMAN	Ubiquitin-like modifier-activating enzyme 1	2	1.53	<0.01
P22626 ROA2	HUMAN	Heterogeneous nuclear ribonucleoproteins A2/B1	2	1.48	<0.01
P22695 QCR2	HUMAN	Cytochrome b-c1 complex subunit 2, mitochondrial	3	0.72	<0.01
P23378 GCSF	HUMAN	Glycine dehydrogenase [decarboxylating], mitochondrial	3	0.85	0.01
P23396 RS3	HUMAN	40S ribosomal protein S3	2	1.26	<0.01
P23467 PTPRB	HUMAN	Receptor-type tyrosine-protein phosphatase beta	4	0.97	0.02
P23497 SP100	HUMAN	Nuclear autoantigen Sp-100	3	0.92	0.67
P23528 COF1	HUMAN	Cofilin-1	2	1.68	<0.01
P23588 IF4B	HUMAN	Eukaryotic translation initiation factor 4B	2	0.70	<0.01
P23687 PPCE	PIG	Prolyl endopeptidase	2	1.57	0.01
P24043 LAMA2	HUMAN	Laminin subunit alpha-2	2	0.87	0.57
P24298 ALAT1	HUMAN	Alanine aminotransferase 1	3	0.74	<0.01
P24534 EF1B	HUMAN	Elongation factor 1-beta	3	1.50	<0.01
P25054 APC	HUMAN	Adenomatous polyposis coli protein	4	0.85	0.50
P25391 LAMA1	HUMAN	Laminin subunit alpha-1	3	0.78	0.39
P25440 BRD2	HUMAN	Bromodomain-containing protein 2	2	1.14	0.33
P25705 ATPA	HUMAN	ATP synthase subunit alpha, mitochondrial	14	0.98	<0.01
P26038 MOES	HUMAN	Moesin	5	1.52	<0.01
P26196 DDX6	HUMAN	Probable ATP-dependent RNA helicase DDX6	2	1.12	0.68
P26234 VINC	PIG	Vinculin	18	1.28	<0.01

P26440 IVD	HUMAN	Isovaleryl-CoA dehydrogenase, mitochondrial	2	0.55	<0.01
P26641 EF1G	HUMAN	Elongation factor 1-gamma	2	1.69	<0.01
P26678 PPLA	HUMAN	Cardiac phospholamban	2	0.96	0.92
P27348 1433T	HUMAN	14-3-3 protein theta	2	1.41	<0.01
P27797 CALR	HUMAN	Calreticulin	3	1.34	<0.01
P27816 MAP4	HUMAN	Microtubule-associated protein 4	6	0.89	<0.01
P27824 CALX	HUMAN	Calnexin	2	0.97	<0.01
P28289 TMOD1	HUMAN	Tropomodulin-1	6	0.90	<0.01
P28329 CLAT	HUMAN	Choline O-acetyltransferase	2	1.09	0.02
P28331 NDUS1	HUMAN	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	9	0.88	<0.01
P28482 MK01	HUMAN	Mitogen-activated protein kinase 1	3	1.20	0.08
P29375 KDM5A	HUMAN	Lysine-specific demethylase 5A	2	1.51	0.04
P29536 LMOD1	HUMAN	Leiomodin-1	2	0.92	0.56
P29692 EF1D	HUMAN	Elongation factor 1-delta	2	1.46	<0.01
P29700 FETUA	PIG	Alpha-2-HS-glycoprotein (Fragment)	4	1.15	<0.01
P29804 ODPA	PIG	Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial (Fragment)	7	0.74	<0.01
P29966 MARCS	HUMAN	Myristoylated alanine-rich C-kinase substrate	2	0.75	0.43
P30048 PRDX3	HUMAN	Thioredoxin-dependent peroxide reductase, mitochondrial	3	0.75	<0.01
P30086 PEBP1	HUMAN	Phosphatidylethanolamine-binding protein 1	3	0.74	<0.01
P30101 PDIA3	HUMAN	Protein disulfide-isomerase A3	3	1.31	<0.01
P30153 2AAA	HUMAN	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform	2	1.24	<0.01
P30622 CLIP1	HUMAN	CAP-Gly domain-containing linker protein 1	4	1.13	0.07
P31150 GDIA	HUMAN	Rab GDP dissociation inhibitor alpha	3	1.18	<0.01
P31629 ZEP2	HUMAN	Transcription factor HIVEP2	5	0.94	0.03
P31930 QCR1	HUMAN	Cytochrome b-c1 complex subunit 1, mitochondrial	5	0.89	<0.01
P31946 1433B	HUMAN	14-3-3 protein beta/alpha	3	1.62	<0.01
P33121 ACSL1	HUMAN	Long-chain-fatty-acid--CoA ligase 1	2	0.88	<0.01
P33176 KINH	HUMAN	Kinesin-1 heavy chain	2	1.29	<0.01
P33198 IDHP	PIG	Isocitrate dehydrogenase [NADP], mitochondrial (Fragment)	16	0.95	<0.01
P34932 HSP74	HUMAN	Heat shock 70 kDa protein 4	3	0.91	0.15
P35221 CTNA1	HUMAN	Catenin alpha-1	6	1.12	<0.01
P35222 CTNB1	HUMAN	Catenin beta-1	5	0.97	0.07
P35232 PHB	HUMAN	Prohibitin	4	1.16	<0.01
P35241 RADI	HUMAN	Radixin	2	1.62	<0.01
P35251 RFC1	HUMAN	Replication factor C subunit 1	2	0.89	0.09
P35579 MYH9	HUMAN	Myosin-9	18	1.22	<0.01
P35580 MYH10	HUMAN	Myosin-10	2	1.38	<0.01
P35609 ACTN2	HUMAN	Alpha-actinin-2	30	1.14	<0.01
P35749 MYH11	HUMAN	Myosin-11	5	1.41	<0.01
P36542 ATPG	HUMAN	ATP synthase subunit gamma, mitochondrial	2	1.05	0.68
P36776 LONM	HUMAN	Lon protease homolog, mitochondrial	2	0.91	0.07
P36871 PGM1	HUMAN	Phosphoglucomutase-1	5	1.09	<0.01
P37111 ACY1	PIG	Aminoacylase-1	2	1.13	<0.01
P37802 TAGL2	HUMAN	Transgelin-2	3	1.81	<0.01
P38646 GRP75	HUMAN	Stress-70 protein, mitochondrial	5	0.95	<0.01
P39687 AN32A	HUMAN	Acidic leucine-rich nuclear phosphoprotein 32 family member A	2	1.02	0.08
P41367 ACADM	PIG	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	5	1.02	<0.01
P42336 PK3CA	HUMAN	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	4	1.01	0.32
P42858 HD	HUMAN	Huntingtin	4	1.00	<0.01
P43155 CACP	HUMAN	Carnitine O-acetyltransferase	4	1.00	0.02
P45379 TNNT2	HUMAN	Troponin T, cardiac muscle	6	0.75	<0.01
P46013 KI67	HUMAN	Antigen KI-67	10	0.92	0.01

P46087 NOP2	HUMAN	Putative ribosomal RNA methyltransferase NOP2	2	0.97	0.05
P46939 UTRO	HUMAN	Utrophin	5	1.02	0.08
P46940 IQGA1	HUMAN	Ras GTPase-activating-like protein IQGAP1	2	0.83	0.03
P47756 CAPZB	HUMAN	F-actin-capping protein subunit beta	2	1.13	0.01
P47972 NPTX2	HUMAN	Neuronal pentraxin-2	2	1.17	0.16
P48643 TCPE	HUMAN	T-complex protein 1 subunit epsilon	2	0.86	0.05
P49411 EFTU	HUMAN	Elongation factor Tu, mitochondrial	2	0.81	<0.01
P49454 CENPF	HUMAN	Centromere protein F	5	1.10	<0.01
P49748 ACADV	HUMAN	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	2	0.79	<0.01
P49750 YLPMP1	HUMAN	YLP motif-containing protein 1	2	1.37	0.02
P49756 RBM25	HUMAN	RNA-binding protein 25	2	1.00	0.73
P49792 RBP2	HUMAN	E3 SUMO-protein ligase RanBP2	2	0.80	<0.01
P49821 NDUV1	HUMAN	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial	5	0.86	<0.01
P50213 IDH3A	HUMAN	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	5	0.88	<0.01
P50447 A1AT	PIG	Alpha-1-antitrypsin	2	1.17	<0.01
P50454 SERPH	HUMAN	Serpin H1	3	1.06	<0.01
P50461 CSR3	HUMAN	Cysteine and glycine-rich protein 3	3	1.66	<0.01
P50667 COX2	PIG	Cytochrome c oxidase subunit 2	3	0.81	<0.01
P50851 LRBA	HUMAN	Lipopolysaccharide-responsive and beige-like anchor protein	4	0.94	<0.01
P50990 TCPQ	HUMAN	T-complex protein 1 subunit theta	4	1.22	<0.01
P50993 AT1A2	HUMAN	Sodium/potassium-transporting ATPase subunit alpha-2	3	1.02	1.00
P51148 RAB5C	HUMAN	Ras-related protein Rab-5C	2	1.27	<0.01
P51553 IDH3G	HUMAN	Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial	2	0.83	<0.01
P51587 BRCA2	HUMAN	Breast cancer type 2 susceptibility protein	5	1.01	<0.01
P51816 AFF2	HUMAN	AF4/FMR2 family member 2	3	0.97	0.22
P51854 TKTL1	HUMAN	Transketolase-like protein 1	2	1.13	0.37
P51884 LUM	HUMAN	Lumican	3	1.24	<0.01
P51888 PRELP	HUMAN	Prolargin	2	1.91	<0.01
P52179 MYOM1	HUMAN	Myomesin-1	8	0.80	<0.01
P52272 HNRPM	HUMAN	Heterogeneous nuclear ribonucleoprotein M	2	1.01	<0.01
P52552 PRDX2	PIG	Peroxiredoxin-2 (Fragment)	3	1.43	<0.01
P52565 GDIR1	HUMAN	Rho GDP-dissociation inhibitor 1	3	1.09	<0.01
P52701 MSH6	HUMAN	DNA mismatch repair protein Msh6	2	2.64	<0.01
P53590 SUCB2	PIG	Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial (Fragment)	5	0.70	<0.01
P53621 COPA	HUMAN	Coatomer subunit alpha	2	0.81	0.72
P53675 CLH2	HUMAN	Clathrin heavy chain 2	2	1.27	<0.01
P54278 PMS2	HUMAN	Mismatch repair endonuclease PMS2	3	0.95	<0.01
P54296 MYOM2	HUMAN	Myomesin-2	5	0.75	<0.01
P55084 ECHB	HUMAN	Trifunctional enzyme subunit beta, mitochondrial	5	1.05	0.77
P55157 MTP	HUMAN	Microsomal triglyceride transfer protein large subunit	2	0.82	0.07
P55196 AFAD	HUMAN	Afadin	3	0.79	<0.01
P55290 CAD13	HUMAN	Cadherin-13	3	0.78	<0.01
P55931 ETFD	PIG	Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial	5	1.11	<0.01
P57772 SELB	HUMAN	Selenocysteine-specific elongation factor	4	1.11	0.72
P58107 EPIPL	HUMAN	Epiplakin	3	1.05	0.95
P60174 TPIS	HUMAN	Triosephosphate isomerase	5	1.10	<0.01
P60660 MYL6	HUMAN	Myosin light polypeptide 6	2	0.83	<0.01
P60709 ACTB	HUMAN	Actin, cytoplasmic 1	15	1.12	<0.01
P61019 RAB2A	HUMAN	Ras-related protein Rab-2A	2	1.40	<0.01
P61026 RAB10	HUMAN	Ras-related protein Rab-10	2	1.63	<0.01
P61088 UBE2N	HUMAN	Ubiquitin-conjugating enzyme E2 N	3	1.02	<0.01
P61160 ARP2	HUMAN	Actin-related protein 2	2	1.54	<0.01
P61586 RHOA	HUMAN	Transforming protein RhoA	2	0.91	0.43

P61978 HNRPK	HUMAN	Heterogeneous nuclear ribonucleoprotein K	5	1.60	<0.01
P61981 1433G	HUMAN	14-3-3 protein gamma	4	1.37	<0.01
P62140 PP1B	HUMAN	Serine/threonine-protein phosphatase PP1-beta catalytic subunit	3	1.05	<0.01
P62258 1433E	HUMAN	14-3-3 protein epsilon	5	1.20	<0.01
P62263 RS14	HUMAN	40S ribosomal protein S14	2	0.60	<0.01
P62701 RS4X	HUMAN	40S ribosomal protein S4, X isoform	4	1.48	<0.01
P62805 H4	HUMAN	Histone H4	5	1.29	<0.01
P62834 RAP1A	HUMAN	Ras-related protein Rap-1A	2	1.23	<0.01
P62895 CYC	PIG	Cytochrome c	4	0.86	<0.01
P62936 PPIA	PIG	Peptidyl-prolyl cis-trans isomerase A	3	2.26	<0.01
P63104 1433Z	HUMAN	14-3-3 protein zeta/delta	5	1.27	<0.01
P63316 TNNC1	HUMAN	Troponin C, slow skeletal and cardiac muscles	4	0.87	<0.01
P67936 TPM4	HUMAN	Tropomyosin alpha-4 chain	2	0.96	0.24
P68032 ACTC	HUMAN	Actin, alpha cardiac muscle 1	18	1.26	<0.01
P68363 TBA1B	HUMAN	Tubulin alpha-1B chain	9	2.07	<0.01
P68366 TBA4A	HUMAN	Tubulin alpha-4A chain	7	1.94	<0.01
P68371 TBB2C	HUMAN	Tubulin beta-2C chain	14	1.64	<0.01
P78509 RELN	HUMAN	Reelin	3	0.95	0.05
P78527 PRKDC	HUMAN	DNA-dependent protein kinase catalytic subunit	4	0.91	<0.01
P79263 ITIH4	PIG	Inter-alpha-trypsin inhibitor heavy chain H4	3	0.43	0.47
P79273 ACADS	PIG	Short-chain specific acyl-CoA dehydrogenase, mitochondrial	2	0.76	0.01
P79274 ACADL	PIG	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	8	0.75	<0.01
P79303 UGPA	PIG	UTP--glucose-1-phosphate uridylyltransferase	3	1.28	<0.01
P79384 PCCB	PIG	Propionyl-CoA carboxylase beta chain, mitochondrial	3	0.76	<0.01
P80031 GSTP1	PIG	Glutathione S-transferase P	3	1.18	<0.01
P80895 PIMT	PIG	Protein-L-isoaspartate(D-aspartate) O-methyltransferase	2	0.83	<0.01
P80928 MIF	PIG	Macrophage migration inhibitory factor	2	1.49	<0.01
P82460 THIO	PIG	Thioredoxin	2	1.81	<0.01
P83686 NB5R3	PIG	NADH-cytochrome b5 reductase 3 (Fragment)	3	1.19	<0.01
P98160 PGBM	HUMAN	Basement membrane-specific heparan sulfate proteoglycan core protein	3	0.98	0.34
P98173 FAM3A	HUMAN	Protein FAM3A	2	0.98	0.98
Q00325 MPCP	HUMAN	Phosphate carrier protein, mitochondrial	4	0.97	<0.01
Q00610 CLH1	HUMAN	Clathrin heavy chain 1	5	1.34	<0.01
Q00688 FKBP3	HUMAN	Peptidyl-prolyl cis-trans isomerase FKBP3	3	1.39	<0.01
Q00722 PLCB2	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-2	3	0.86	0.23
Q00770 DHSB	PIG	Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial	2	0.84	<0.01
Q00839 HNRPU	HUMAN	Heterogeneous nuclear ribonucleoprotein U	3	0.85	<0.01
Q00975 CAC1B	HUMAN	Voltage-dependent N-type calcium channel subunit alpha-1B	4	0.72	<0.01
Q01082 SPTB2	HUMAN	Spectrin beta chain, brain 1	16	1.24	<0.01
Q01484 ANK2	HUMAN	Ankyrin-2	2	0.90	0.71
Q01955 CO4A3	HUMAN	Collagen alpha-3(IV) chain	2	0.63	<0.01
Q01968 OCRL	HUMAN	Inositol polyphosphate 5-phosphatase OCRL-1	2	1.01	<0.01
Q01970 PLCB3	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-3	2	0.76	0.05
Q01995 TAGL	HUMAN	Transgelin	3	1.75	<0.01
Q02218 ODO1	HUMAN	2-oxoglutarate dehydrogenase, mitochondrial	12	0.96	<0.01
Q02224 CENPE	HUMAN	Centromere-associated protein E	9	0.97	<0.01
Q02252 MMSA	HUMAN	Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial	2	0.61	<0.01
Q02338 BDH	HUMAN	D-beta-hydroxybutyrate dehydrogenase, mitochondrial	3	0.82	<0.01
Q02388 CO7A1	HUMAN	Collagen alpha-1(VII) chain	4	0.96	0.40

Q02846 GUC2D	HUMAN	Retinal guanylyl cyclase 1	2	1.37	0.09
Q02880 TOP2B	HUMAN	DNA topoisomerase 2-beta Mitochondrial 2-	4	0.93	0.06
Q02978 M2OM	HUMAN	oxoglutarate/malate carrier protein	3	1.07	<0.01
Q03001 BPA1	HUMAN	Bullous pemphigoid antigen 1	2	0.67	<0.01
Q03164 MLL1	HUMAN	Histone-lysine N- methyltransferase MLL	6	0.99	0.79
Q04917 1433F	HUMAN	14-3-3 protein eta	3	1.28	<0.01
Q04967 HSP76	PIG	Heat shock 70 kDa protein 6	7	1.19	<0.01
Q05329 DCE2	HUMAN	Glutamate decarboxylase 2	2	1.03	<0.01
Q05397 FAK1	HUMAN	Focal adhesion kinase 1	2	0.87	0.01
Q05639 EF1A2	HUMAN	Elongation factor 1-alpha 2	9	1.32	<0.01
Q05682 CALD1	HUMAN	Caldesmon	2	1.51	<0.01
Q05707 COEA1	HUMAN	Collagen alpha-1(XIV) chain	2	0.94	0.60
Q06323 PSME1	HUMAN	Proteasome activator complex subunit 1	2	1.62	<0.01
Q06828 FMOD	HUMAN	Fibromodulin	2	1.45	0.29
Q06830 PRDX1	HUMAN	Peroxiredoxin-1	2	1.52	<0.01
Q07864 DPOE1	HUMAN	DNA polymerase epsilon catalytic subunit A	4	0.91	0.13
Q07954 LRP1	HUMAN	Prolow-density lipoprotein receptor-related protein 1	3	0.88	<0.01
Q08211 DHX9	HUMAN	ATP-dependent RNA helicase A	4	0.88	<0.01
Q08AD1 CAMP2	HUMAN	Calmodulin-regulated spectrin- associated protein 2	3	1.44	0.02
Q09161 NCBP1	HUMAN	Nuclear cap-binding protein subunit 1	2	1.55	0.01
Q09666 AHNK	HUMAN	Neuroblast differentiation- associated protein AHNK	30	1.09	<0.01
Q09MP3 R51A2	HUMAN	RAD51-associated protein 2	3	0.87	0.14
Q0MVN8 QOR	PIG	Quinone oxidoreductase	3	0.84	0.01
Q0QF01 DHSA	PIG	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	4	0.85	<0.01
Q0VDD8 DYH14	HUMAN	Dynein heavy chain 14, axonemal	10	0.81	<0.01
Q12802 AKP13	HUMAN	A-kinase anchor protein 13	6	1.21	<0.01
Q12830 BPTF	HUMAN	Nucleosome-remodeling factor subunit BPTF	6	0.89	0.02
Q12851 M4K2	HUMAN	Mitogen-activated protein kinase kinase kinase kinase 2	3	1.16	0.82
Q12873 CHD3	HUMAN	Chromodomain-helicase-DNA- binding protein 3	5	1.00	0.12
Q12913 PTPRJ	HUMAN	Receptor-type tyrosine- protein phosphatase eta	2	0.57	0.67
Q12931 TRAP1	HUMAN	Heat shock protein 75 kDa, mitochondrial	2	1.33	<0.01
Q12955 ANK3	HUMAN	Ankyrin-3	9	1.00	<0.01
Q12959 DLG1	HUMAN	Disks large homolog 1	3	1.03	0.51
Q13029 PRDM2	HUMAN	PR domain zinc finger protein 2	7	0.88	<0.01
Q13085 ACACA	HUMAN	Acetyl-CoA carboxylase 1	2	1.18	<0.01
Q13099 IFT88	HUMAN	Intraflagellar transport protein 88 homolog	5	1.13	0.17
Q13136 LIPA1	HUMAN	Liprin-alpha-1	2	1.35	<0.01
Q13162 PRDX4	HUMAN	Peroxiredoxin-4	2	0.91	<0.01
Q13367 AP3B2	HUMAN	AP-3 complex subunit beta-2	3	0.95	0.49
Q13393 PLD1	HUMAN	Phospholipase D1	3	1.13	0.03
Q13423 NNTM	HUMAN	NAD(P) transhydrogenase, mitochondrial	12	0.89	<0.01
Q13428 TCOF	HUMAN	Treacle protein	3	1.00	0.95
Q13438 OS9	HUMAN	Protein-9	2	0.83	<0.01
Q13439 GOGA4	HUMAN	Golgin subfamily A member 4	6	0.93	<0.01
Q13523 PRP4B	HUMAN	Serine/threonine-protein kinase PRP4 homolog	2	1.17	0.18
Q13554 KCC2B	HUMAN	Calcium/calmodulin- dependent protein kinase type II subunit beta	5	1.03	0.12
Q13557 KCC2D	HUMAN	Calcium/calmodulin- dependent protein kinase type II subunit delta	7	1.09	0.07
Q13642 FHL1	HUMAN	Four and a half LIM domains protein 1	5	1.36	<0.01
Q13698 CAC1S	HUMAN	Voltage-dependent L-type calcium channel subunit alpha- 1S	2	1.20	0.42
Q13796 SHRM2	HUMAN	Protein Shroom2	2	1.06	0.07
Q13813 SPTA2	HUMAN	Spectrin alpha chain, brain	17	1.05	<0.01
Q13873 BMPR2	HUMAN	Bone morphogenetic protein receptor type-2	2	0.90	<0.01
Q14004 CDK13	HUMAN	Cell division protein kinase 13	3	1.04	0.98
Q14008 CKAP5	HUMAN	Cytoskeleton-associated protein 5	9	0.94	0.03
Q14028 CNGB1	HUMAN	Cyclic nucleotide-gated cation channel beta-1	2	0.93	0.02
Q14160 SCRIB	HUMAN	Protein scribble homolog	3	1.11	0.31

Q14191 WRN	HUMAN	Werner syndrome ATP-dependent helicase	2	1.20	0.45
Q14195 DPYL3	HUMAN	Dihydropyrimidinase-related protein 3	7	1.60	<0.01
Q14204 DYHC1	HUMAN	Cytoplasmic dynein 1 heavy chain 1	5	1.06	<0.01
Q14240 IF4A2	HUMAN	Eukaryotic initiation factor 4A-II	3	1.34	<0.01
Q14315 FLNC	HUMAN	Filamin-C	37	1.69	<0.01
Q14524 SCN5A	HUMAN	Sodium channel protein type 5 subunit alpha	2	0.86	0.21
Q14573 ITPR3	HUMAN	Inositol 1,4,5-trisphosphate receptor type 3	2	0.89	0.32
Q14667 K0100	HUMAN	UPF0378 protein KIAA0100	3	0.90	0.81
Q14683 SMC1A	HUMAN	Structural maintenance of chromosomes protein 1A	5	1.08	<0.01
Q14690 RRP5	HUMAN	Protein RRP5 homolog	5	0.85	0.13
Q14789 GOGGB1	HUMAN	Golgin subfamily B member 1	3	0.76	0.04
Q14833 GRM4	HUMAN	Metabotropic glutamate receptor 4	2	1.00	1.00
Q14839 CHD4	HUMAN	Chromodomain-helicase-DNA-binding protein 4	6	0.92	0.77
Q14896 MYPC3	HUMAN	Myosin-binding protein C, cardiac-type	17	0.78	<0.01
Q14978 NOLC1	HUMAN	Nucleolar and coiled-body phosphoprotein 1	2	0.93	0.81
Q14993 COJA1	HUMAN	Collagen alpha-1(XIX) chain	2	0.91	0.56
Q149N8 SHPRH	HUMAN	E3 ubiquitin-protein ligase SHPRH	2	0.90	0.25
Q14CM0 FRPD4	HUMAN	FERM and PDZ domain-containing protein 4	2	0.85	0.01
Q15032 R3HD1	HUMAN	R3H domain-containing protein 1	2	1.02	0.77
Q15124 PGM5	HUMAN	Phosphoglucomutase-like protein 5	4	1.22	<0.01
Q15147 PLCB4	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-4	2	1.14	0.01
Q15149 PLEC	HUMAN	Plectin	16	1.17	<0.01
Q15365 PCBP1	HUMAN	Poly(rC)-binding protein 1	3	1.68	<0.01
Q15366 PCBP2	HUMAN	Poly(rC)-binding protein 2	2	1.30	<0.01
Q15404 RSU1	HUMAN	Ras suppressor protein 1	2	1.27	<0.01
Q15413 RYSR3	HUMAN	Ryanodine receptor 3	6	0.79	<0.01
Q15648 MED1	HUMAN	Mediator of RNA polymerase II transcription subunit 1	2	1.18	0.17
Q15652 JHD2C	HUMAN	Probable JmjC domain-containing histone demethylation protein 2C	6	0.84	<0.01
Q15746 MYLK	HUMAN	Myosin light chain kinase, smooth muscle	2	1.21	0.07
Q15772 SPEG	HUMAN	Striated muscle preferentially expressed protein kinase	6	1.23	<0.01
Q16082 HSPB2	HUMAN	Heat shock protein beta-2	2	1.61	<0.01
Q16478 GRIK5	HUMAN	Glutamate receptor, ionotropic kainate 5	2	1.05	0.88
Q16555 DPYL2	HUMAN	Dihydropyrimidinase-related protein 2	4	1.34	<0.01
Q16720 AT2B3	HUMAN	Plasma membrane calcium-transporting ATPase 3	2	0.74	0.11
Q16795 NDUA9	HUMAN	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	3	1.03	<0.01
Q16891 IMMT	HUMAN	Mitochondrial inner membrane protein	2	0.85	<0.01
Q17RC7 CN073	HUMAN	SEC6-like protein C14orf73	2	0.83	0.04
Q19AZ8 THRB	PIG	Prothrombin	3	1.05	0.23
Q1KYTO ENOB	PIG	Beta-enolase	9	1.30	<0.01
Q1MSJ5 CSPP1	HUMAN	Centrosome and spindle pole-associated protein 1	3	1.14	<0.01
Q28938 IL12B	PIG	Interleukin-12 subunit beta	3	1.32	<0.01
Q28943 DPYD	PIG	Dihydropyrimidine dehydrogenase [NADP+]	2	0.79	<0.01
Q28983 ZAN	PIG	Zonadhesin	9	1.02	<0.01
Q29092 ENPL	PIG	Endoplasmic	11	1.19	<0.01
Q29315 RLA2	PIG	60S acidic ribosomal protein P2	3	1.74	<0.01
Q29380 VDAC3	PIG	Voltage-dependent anion-selective channel protein 3	3	0.99	<0.01
Q29551 SCOT1	PIG	Succinyl-CoA:3-ketoacid-coenzyme A transferase 1, mitochondrial	8	0.91	<0.01
Q29554 ECHA	PIG	Trifunctional enzyme subunit alpha, mitochondrial	15	1.01	0.44
Q2EN76 NDKB	PIG	Nucleoside diphosphate kinase B	4	1.33	<0.01
Q2EN81 ATPO	PIG	ATP synthase subunit O, mitochondrial	5	0.98	<0.01

Q2HYU2 K6PF	PIG	6-phosphofructokinase, muscle type	13	1.31	<0.01
Q2KJY2 KI26B	HUMAN	Kinesin-like protein KIF26B	3	0.85	0.05
Q2MJV9 PALMD	PIG	Palmelphin	2	1.02	0.78
Q2NL82 TSR1	HUMAN	Pre-rRNA-processing protein TSR1 homolog	2	0.95	0.75
Q32P41 TRMT5	HUMAN	tRNA (guanine-N(1)-methyltransferase	2	1.09	0.75
Q35914 ATP8	PIG	ATP synthase protein 8	2	0.58	1.00
Q38SD2 LRRK1	HUMAN	Leucine-rich repeat serine/threonine-protein kinase 1	3	0.92	0.06
Q3T8J9 GON4L	HUMAN	GON-4-like protein	2	0.85	0.09
Q3V6T2 GRDN	HUMAN	Girdin	3	0.95	<0.01
Q3ZD69 LMNA	PIG	Prelamin-A/C	8	1.24	<0.01
Q460N5 PAR14	HUMAN	Poly [ADP-ribose] polymerase 14	3	0.88	<0.01
Q49I35 LEG1	PIG	Galectin-1	2	0.92	<0.01
Q4G0P3 HYDIN	HUMAN	Hydrocephalus-inducing protein homolog	3	0.77	<0.01
Q4KWH8 PLCH1	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase eta-1	2	1.06	0.78
Q4ZHG4 FNDC1	HUMAN	Fibronectin type III domain-containing protein 1	2	0.88	0.17
Q52I78 NAMPT	PIG	Nicotinamide phosphoribosyltransferase	2	1.00	1.00
Q56P28 PRAF3	PIG	PRA1 family protein 3	2	1.19	<0.01
Q5CZC0 FSIP2	HUMAN	Fibrous sheath-interacting protein 2	10	0.94	<0.01
Q5D891 PK3C3	PIG	Phosphatidylinositol 3-kinase catalytic subunit type 3	5	0.90	0.12
Q5FZP5 SCG2	PIG	Secretogranin-2	3	1.54	<0.01
Q5GN48 DMD	PIG	Dystrophin	13	1.06	<0.01
Q5JR59 MTUS2	HUMAN	Microtubule-associated tumor suppressor candidate 2	3	0.84	0.07
Q5JRA6 MIA3	HUMAN	Melanoma inhibitory activity protein 3	3	0.89	0.55
Q5ISL3 DOC11	HUMAN	Dedicator of cytokinesis protein 11	3	0.96	0.77
Q5JV73 FRPD3	HUMAN	FERM and PDZ domain-containing protein 3	3	1.28	<0.01
Q5K651 SAMD9	HUMAN	Sterile alpha motif domain-containing protein 9	2	1.25	<0.01
Q5M9N0 CD158	HUMAN	Coiled-coil domain-containing protein 158	4	0.95	0.35
Q5PXT2 LMCD1	PIG	LIM and cysteine-rich domains protein 1	4	0.80	<0.01
Q5S1U1 HSPB1	PIG	Heat shock protein beta-1	11	1.54	<0.01
Q5SYB0 FRPD1	HUMAN	FERM and PDZ domain-containing protein 1	2	1.32	0.06
Q5SYE7 NHSL1	HUMAN	NHS-like protein 1	2	0.84	0.28
Q5T200 ZC3HD	HUMAN	Zinc finger CCCH domain-containing protein 13	7	0.94	0.34
Q5T5P2 SKT	HUMAN	Sickle tail protein homolog	5	1.07	0.10
Q5T7N2 LITD1	HUMAN	LINE-1 type transposase domain-containing protein 1	2	1.12	0.65
Q5T8P6 RBM26	HUMAN	RNA-binding protein 26	2	0.81	0.62
Q5TAX3 TUT4	HUMAN	Terminal uridylyltransferase 4	4	0.87	<0.01
Q5TBA9 FRY	HUMAN	Protein furry homolog	6	0.93	<0.01
Q5TCQ9 MAGI3	HUMAN	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 3	2	0.82	0.04
Q5TCY1 TTBK1	HUMAN	Tau-tubulin kinase 1	2	0.73	0.05
Q5TCZ1 SPD2A	HUMAN	SH3 and PX domain-containing protein 2A	7	1.03	0.06
Q5THJ4 VP13D	HUMAN	Vacuolar protein sorting-associated protein 13D	6	0.91	<0.01
Q5TZA2 CROCC	HUMAN	Rootletin	2	0.84	<0.01
Q5UIP0 RIF1	HUMAN	Telomere-associated protein RIF1	3	0.88	<0.01
Q5VST9 OBSCN	HUMAN	Obscurin	4	1.00	0.01
Q5VTE0 EF1A3	HUMAN	Putative elongation factor 1-alpha-like 3	7	1.51	<0.01
Q5VTT5 MYOM3	HUMAN	Myomesin-3	7	0.71	<0.01
Q5VU97 CAHD1	HUMAN	VWFA and cache domain-containing protein 1	2	0.78	0.01
Q5VZ66 JKIP3	HUMAN	Janus kinase and microtubule-interacting protein 3	2	1.10	0.84
Q5VZE5 NAA35	HUMAN	N-alpha-acetyltransferase 35, NatC auxiliary subunit	3	1.39	<0.01
Q5VZK9 LR16A	HUMAN	Leucine-rich repeat-containing protein 16A	4	1.03	0.04
Q5XLD3 KCRM	PIG	Creatine kinase M-type	16	0.95	<0.01
Q63HN8 RN213	HUMAN	RING finger protein 213	3	0.92	0.44

Q66GS9 CP135	HUMAN	Centrosomal protein of 135 kDa	2	0.90	0.01
Q68D51 DEN2C	HUMAN	DENN domain-containing protein 2C	3	1.06	0.05
Q6F5E8 LR16C	HUMAN	Leucine-rich repeat-containing protein 16C	3	1.45	0.01
Q6IQ23 PKHA7	HUMAN	Pleckstrin homology domain-containing family A member 7	2	0.96	0.63
Q6KB66 K2C80	HUMAN	Keratin, type II cytoskeletal 80	3	1.30	<0.01
Q6KC79 NIPBL	HUMAN	Nipped-B-like protein	5	1.04	0.01
Q6NZI2 PTRF	HUMAN	Polymerase I and transcript release factor	4	1.03	<0.01
Q6PJF5 RHDF2	HUMAN	Rhomboid family member 2	2	0.84	0.91
Q6PLK3 AOFB	PIG	Amine oxidase [flavin-containing] B	3	0.99	0.71
Q6PQD5 ATM	PIG	Serine-protein kinase ATM	8	0.97	<0.01
Q6Q759 SPG17	HUMAN	Sperm-associated antigen 17	3	0.96	0.85
Q6Q7I2 GDIB	PIG	Rab GDP dissociation inhibitor beta	7	0.85	<0.01
Q6R327 RICTR	HUMAN	Rapamycin-insensitive companion of mTOR	2	1.30	0.12
Q6RVA9 CAV1	PIG	Caveolin-1	2	1.07	0.93
Q6S4N2 HS71B	PIG	Heat shock 70 kDa protein 1B	10	1.67	<0.01
Q6S8J3 POTEE	HUMAN	POTE ankyrin domain family member E	8	1.20	<0.01
Q6UAQ8 ETFB	PIG	Electron transfer flavoprotein subunit beta	6	1.08	<0.01
Q6UB99 ANR11	HUMAN	Ankyrin repeat domain-containing protein 11	6	1.16	<0.01
Q6UWP2 DHR11	HUMAN	Dehydrogenase/reductase SDR family member 11	2	1.21	<0.01
Q6VAB6 KSR2	HUMAN	Kinase suppressor of Ras 2	3	0.56	<0.01
Q6W2J9 BCOR	HUMAN	BCL-6 corepressor	3	1.21	0.16
Q6ZMN7 PZRN4	HUMAN	PDZ domain-containing RING finger protein 4	2	0.71	<0.01
Q6ZMW3 EMAL6	HUMAN	Echinoderm microtubule-associated protein-like 6	2	0.91	0.12
Q6ZN30 BNC2	HUMAN	Zinc finger protein basonuclin-2	4	1.03	0.99
Q6ZQQ6 WDR87	HUMAN	WD repeat-containing protein 87	3	0.81	0.01
Q6ZQY3 GADL1	HUMAN	Glutamate decarboxylase-like protein 1	2	0.86	0.27
Q6ZR08 DYH12	HUMAN	Dynein heavy chain 12, axonemal	3	1.10	0.26
Q702N8 XIRP1	HUMAN	Xin actin-binding repeat-containing protein 1	7	1.33	<0.01
Q709C8 VP13C	HUMAN	Vacuolar protein sorting-associated protein 13C	5	0.98	0.39
Q70CQ2 UBP34	HUMAN	Ubiquitin carboxyl-terminal hydrolase 34	2	0.82	0.11
Q70E73 RAPH1	HUMAN	Ras-associated and pleckstrin homology domains-containing protein 1	4	0.82	0.03
Q71DI3 H32	HUMAN	Histone H3.2	2	1.08	<0.01
Q71F56 MD13L	HUMAN	Mediator of RNA polymerase II transcription subunit 13-like	2	0.60	<0.01
Q76N89 HECW1	HUMAN	E3 ubiquitin-protein ligase HECW1	2	1.77	<0.01
Q7LBC6 KDM3B	HUMAN	Lysine-specific demethylase 3B	5	1.20	0.07
Q7M2W6 CRYAB	PIG	Alpha-crystallin B chain	5	2.28	<0.01
Q7SIB7 PGK1	PIG	Phosphoglycerate kinase 1	12	1.21	<0.01
Q7Z2Z2 ETUD1	HUMAN	Elongation factor Tu GTP-binding domain-containing protein 1	2	1.00	0.23
Q7Z406 MYH14	HUMAN	Myosin-14	3	1.15	<0.01
Q7Z443 PK1L3	HUMAN	Polycystic kidney disease protein 1-like 3	3	0.90	<0.01
Q7Z460 CLAP1	HUMAN	CLIP-associating protein 1	6	0.90	<0.01
Q7Z478 DHX29	HUMAN	ATP-dependent RNA helicase DHX29	2	0.75	0.01
Q7Z4H7 HAUS6	HUMAN	HAUS augmin-like complex subunit 6	4	0.87	<0.01
Q7Z5J8 ANKAR	HUMAN	Ankyrin and armadillo repeat-containing protein	2	0.84	<0.01
Q7Z5P9 MUC19	HUMAN	Mucin-19	2	0.47	0.06
Q7Z6E9 RBBP6	HUMAN	E3 ubiquitin-protein ligase RBBP6	4	1.12	<0.01
Q7Z7A1 CP110	HUMAN	Centriolin	2	0.78	0.38
Q7Z7G8 VP13B	HUMAN	Vacuolar protein sorting-associated protein 13B	5	0.79	<0.01
Q863Z0 PSME2	PIG	Proteasome activator complex subunit 2	2	0.79	<0.01

Q865U8 ANKR1	PIG	Ankyrin repeat domain-containing protein 1	2	1.86	<0.01
Q86SQ0 PHLB2	HUMAN	Pleckstrin homology-like domain family B member 2	4	1.26	<0.01
Q86TC9 MYPN	HUMAN	Myopalladin	2	1.15	<0.01
Q86TD4 SRCA	HUMAN	Sarcalumenin	7	0.83	<0.01
Q86U86 PB1	HUMAN	Protein polybromo-1	2	0.87	0.76
Q86UK5 LBN	HUMAN	Limbin	4	0.95	0.02
Q86UP2 KTN1	HUMAN	Kinectin	4	1.47	<0.01
Q86VF7 NRAP	HUMAN	Nebulin-related-anchoring protein	4	1.04	0.18
Q86VI3 IQGA3	HUMAN	Ras GTPase-activating-like protein IQGAP3	3	0.72	<0.01
Q86VS8 HOOK3	HUMAN	Protein Hook homolog 3	3	0.90	0.03
Q86VV8 RTTN	HUMAN	Rotatin	2	1.48	<0.01
Q86WG5 MTMRD	HUMAN	Myotubularin-related protein 13	3	0.98	0.33
Q86WI3 NLRC5	HUMAN	Protein NLRC5	3	1.25	<0.01
Q86WN1 FCSO1	HUMAN	FCH and double SH3 domains protein 1	2	1.21	0.78
Q86YN6 PRGC2	HUMAN	Peroxisome proliferator-activated receptor gamma coactivator 1-beta	2	0.83	0.01
Q8IUD2 RB6I2	HUMAN	ELKS/Rab6-interacting/CAST family member 1	2	0.99	0.88
Q8IUG5 MY18B	HUMAN	Myosin-XVIIIb	8	0.92	<0.01
Q8IVF2 AHNK2	HUMAN	Protein AHNK2	9	0.89	0.03
Q8IVF4 DYH10	HUMAN	Dynein heavy chain 10, axonemal	3	0.77	<0.01
Q8IVL0 NAV3	HUMAN	Neuron navigator 3	4	1.15	<0.01
Q8IVL1 NAV2	HUMAN	Neuron navigator 2	9	1.03	<0.01
Q8IVW4 CDKL3	HUMAN	Cyclin-dependent kinase-like 3	2	1.12	0.23
Q8IWA6 CCD60	HUMAN	Coiled-coil domain-containing protein 60	4	1.12	<0.01
Q8IWB9 TEX2	HUMAN	Testis-expressed sequence 2 protein	3	1.49	0.03
Q8IWC1 MA7D3	HUMAN	MAP7 domain-containing protein 3	2	0.79	0.02
Q8IWV9 MGAP	HUMAN	MAX gene-associated protein	6	0.94	0.07
Q8IX01 SFR14	HUMAN	Putative splicing factor, arginine/serine-rich 14	3	1.15	0.08
Q8IX21 F178A	HUMAN	Protein FAM178A	2	1.28	0.06
Q8IY92 SLX4	HUMAN	Structure-specific endonuclease subunit SLX4	6	0.95	0.89
Q8IYA2 C144C	HUMAN	Coiled-coil domain-containing protein 144C	2	0.94	0.77
Q8IYB3 SRRM1	HUMAN	Serine/arginine repetitive matrix protein 1	6	1.12	<0.01
Q8IYD8 FANCM	HUMAN	Fanconi anemia group M protein	2	0.74	0.19
Q8IYY4 DZ11L	HUMAN	Zinc finger protein DZIP1L	2	0.81	0.07
Q8IZC6 CORA1	HUMAN	Collagen alpha-1(XVII) chain	3	1.04	0.04
Q8IZF6 GP112	HUMAN	Probable G-protein coupled receptor 112	5	1.32	<0.01
Q8IZT6 ASPM	HUMAN	Abnormal spindle-like microcephaly-associated protein	5	1.20	0.01
Q8MJ14 GPX1	PIG	Glutathione peroxidase 1	4	1.63	<0.01
Q8MJ76 FETA	PIG	Alpha-fetoprotein	2	0.86	0.10
Q8N3CO HELC1	HUMAN	Activating signal cointegrator 1 complex subunit 3	3	1.10	<0.01
Q8N3K9 CMYA5	HUMAN	Cardiomyopathy-associated protein 5	5	0.88	0.01
Q8N3V7 SYNPO	HUMAN	Synaptopodin	2	0.97	0.12
Q8N3X1 FNBP4	HUMAN	Formin-binding protein 4	3	1.03	0.09
Q8N7P1 PLD5	HUMAN	Inactive phospholipase D5	2	1.10	0.95
Q8N7X0 CAN7L	HUMAN	Calpain-7-like protein	3	1.01	1.00
Q8NB12 SMYD1	HUMAN	SET and MYND domain-containing protein 1	2	1.10	0.24
Q8NBF2 NHLC2	HUMAN	NHL repeat-containing protein 2	2	1.27	0.01
Q8NCM8 DYHC2	HUMAN	Cytoplasmic dynein 2 heavy chain 1	4	0.98	0.08
Q8NDW8 TT21A	HUMAN	Tetratricopeptide repeat protein 21A	2	0.98	0.32
Q8NE18 NSUN7	HUMAN	Putative methyltransferase NSUN7	4	0.79	0.01
Q8NEF3 CC112	HUMAN	Coiled-coil domain-containing protein 112	2	1.31	<0.01
Q8NEY1 NAV1	HUMAN	Neuron navigator 1	12	0.97	<0.01
Q8NF91 SYNE1	HUMAN	Nesprin-1	15	1.04	<0.01
Q8NFC6 BOD1L	HUMAN	Biorientation of chromosomes in cell division protein 1-like	3	1.06	0.75
Q8NFW1 COMA1	HUMAN	Collagen alpha-1(XXII) chain	2	1.53	0.05
Q8NG31 CASC5	HUMAN	Protein CASC5	5	0.96	0.21
Q8NHV3 GA2L2	HUMAN	GAS2-like protein 2	2	0.89	<0.01

Q8NI27 THOC2	HUMAN	THO complex subunit 2	3	0.89	<0.01
Q8SP57 HPT	PIG	Haptoglobin	3	0.30	0.15
Q8TC29 ENKUR	HUMAN	Enkurin	2	0.57	<0.01
Q8TC99 FNDC8	HUMAN	Fibronectin type III domain-containing protein 8	2	1.10	0.52
Q8TD26 CHD6	HUMAN	Chromodomain-helicase-DNA-binding protein 6	2	1.40	0.03
Q8TD57 DYH3	HUMAN	Dynein heavy chain 3, axonemal	6	0.84	<0.01
Q8TDI0 CHD5	HUMAN	Chromodomain-helicase-DNA-binding protein 5	5	1.08	0.83
Q8TDJ6 DMXL2	HUMAN	DmX-like protein 2	6	1.03	<0.01
Q8TDM6 DLG5	HUMAN	Disks large homolog 5	2	1.18	0.16
Q8TDQ7 GNPI2	HUMAN	Glucosamine-6-phosphate isomerase 2	2	1.65	<0.01
Q8TDW5 SYTL5	HUMAN	Synaptotagmin-like protein 5	2	0.77	0.01
Q8TDX9 PK1L1	HUMAN	Polycystic kidney disease protein 1-like 1	5	1.18	<0.01
Q8TE49 OTU7A	HUMAN	OTU domain-containing protein 7A	4	1.25	<0.01
Q8TE73 DYH5	HUMAN	Dynein heavy chain 5, axonemal	6	1.15	<0.01
Q8TE82 S3TC1	HUMAN	SH3 domain and tetratricopeptide repeats-containing protein 1	2	0.79	0.74
Q8WNV7 DHRS4	PIG	Dehydrogenase/reductase SDR family member 4	3	1.79	<0.01
Q8WNV3 PLAK	PIG	Junction plakoglobin	2	1.11	0.04
Q8WUY9 DEP1B	HUMAN	DEP domain-containing protein 1B	3	1.11	0.01
Q8WWL7 CCNB3	HUMAN	G2/mitotic-specific cyclin-B3	2	0.69	0.10
Q8WWQ8 STAB2	HUMAN	Stabilin-2	3	0.91	0.07
Q8WXH0 SYNE2	HUMAN	Nesprin-2	2	1.27	0.50
Q8WXI7 MUC16	HUMAN	Mucin-16	4	0.85	<0.01
Q8WXR4 MYO3B	HUMAN	Myosin-IIlb	2	1.59	0.04
Q8WXW3 PIBF1	HUMAN	Progesterone-induced-blocking factor 1	3	0.86	0.06
Q8WXX0 DYH7	HUMAN	Dynein heavy chain 7, axonemal	3	0.74	<0.01
Q8WYP5 ELYS	HUMAN	Protein ELYS	5	1.17	0.07
Q8WYQ5 DGCR8	HUMAN	Microprocessor complex subunit DGCR8	2	0.74	0.44
Q8WZ42 TITIN	HUMAN	Titin	52	1.01	<0.01
Q92499 DDX1	HUMAN	ATP-dependent RNA helicase DDX1	2	1.08	0.63
Q92523 CPT1B	HUMAN	Carnitine O-palmitoyltransferase 1, muscle isoform	2	0.71	<0.01
Q92539 LPIN2	HUMAN	Phosphatidate phosphatase LPIN2	2	1.16	0.12
Q92614 MY18A	HUMAN	Myosin-XVIIIa	4	1.16	0.09
Q92736 RYSR2	HUMAN	Ryanodine receptor 2	3	1.21	0.05
Q92804 RBP56	HUMAN	TATA-binding protein-associated factor 2N	4	0.65	<0.01
Q92833 JARID2	HUMAN	Protein Jumonji	2	0.85	0.19
Q92841 DDX17	HUMAN	Probable ATP-dependent RNA helicase DDX17	2	1.01	0.02
Q92974 ARHG2	HUMAN	Rho guanine nucleotide exchange factor 2	2	1.60	<0.01
Q95339 ATPK	PIG	ATP synthase subunit f, mitochondrial	2	0.93	0.69
Q96AC1 FERM2	HUMAN	Fermitin family homolog 2	2	1.15	<0.01
Q96AY4 TTC28	HUMAN	Tetratricopeptide repeat protein 28	4	0.85	<0.01
Q96DT5 DYH11	HUMAN	Dynein heavy chain 11, axonemal	6	0.96	0.03
Q96G01 BICD1	HUMAN	Protein bicaudal D homolog 1	2	0.76	<0.01
Q96GP6 SREC2	HUMAN	Scavenger receptor class F member 2	2	1.00	<0.01
Q96HC4 PDLI5	HUMAN	PDZ and LIM domain protein 5	4	0.98	0.76
Q96HJ3 CCD34	HUMAN	Coiled-coil domain-containing protein 34	2	1.16	0.04
Q96JB1 DYH8	HUMAN	Dynein heavy chain 8, axonemal	8	0.95	0.05
Q96JE9 MAP6	HUMAN	Microtubule-associated protein 6	2	0.92	0.63
Q96J7 SPTCS	HUMAN	Spatacsin	2	0.96	0.42
Q96JM7 LMBL3	HUMAN	Lethal(3)malignant brain tumor-like protein 3	3	0.89	0.04
Q96JN8 NEUL4	HUMAN	Neuralized-like protein 4	3	1.02	0.02
Q96JQ0 PCD16	HUMAN	Protocadherin-16	2	1.03	<0.01
Q96L93 KIF16B	HUMAN	Kinesin-like protein KIF16B	3	0.93	<0.01
Q96MC2 CB039	HUMAN	UPF0407 protein C2orf39	3	1.19	0.05
Q96MR6 WDR65	HUMAN	WD repeat-containing protein 65	3	1.15	0.13
Q96N16 JKIP1	HUMAN	Janus kinase and microtubule-interacting protein 1	3	0.83	0.02

Q96P44 COLA1	HUMAN	Collagen alpha-1(XI) chain	2	1.10	0.27
Q96PK2 MACF4	HUMAN	Microtubule-actin cross-linking factor 1, isoform 4	7	1.24	<0.01
Q96PN6 ADCYA	HUMAN	Adenylate cyclase type 10	3	0.83	0.06
Q96PV7 F193B	HUMAN	Protein FAM193B	3	0.97	0.41
Q96PY5 FMNL2	HUMAN	Formin-like protein 2	4	0.68	<0.01
Q96Q04 LMTK3	HUMAN	Serine/threonine-protein kinase LMTK3	2	0.98	0.98
Q96Q15 SMG1	HUMAN	Serine/threonine-protein kinase SMG1	3	0.85	0.08
Q96Q89 KI20B	HUMAN	Kinesin-like protein KIF20B	3	1.11	0.16
Q96QE3 ATAD5	HUMAN	ATPase family AAA domain-containing protein 5	6	0.93	0.35
Q96R06 SPAG5	HUMAN	Sperm-associated antigen 5	4	0.95	0.75
Q96RL7 VP13A	HUMAN	Vacuolar protein sorting-associated protein 13A	2	1.51	<0.01
Q96RW7 HMCN1	HUMAN	Hemicentin-1	2	0.87	0.36
Q96RY7 IF140	HUMAN	Intraflagellar transport protein 140 homolog	2	0.99	0.54
Q96SB4 SRPK1	HUMAN	Serine/threonine-protein kinase SRPK1	2	1.79	0.01
Q96T58 MINT	HUMAN	Msx2-interacting protein Nicotinamide	9	0.97	0.02
Q96T66 NMNA3	HUMAN	mononucleotide adenylyltransferase 3	2	0.81	0.32
Q99028 COMT	PIG	Catechol O-methyltransferase (Fragment)	3	1.35	<0.01
Q99259 DCE1	HUMAN	Glutamate decarboxylase 1	2	0.77	0.03
Q99457 NP1L3	HUMAN	Nucleosome assembly protein 1-like 3	2	1.11	0.58
Q99460 PSMD1	HUMAN	26S proteasome non-ATPase regulatory subunit 1	2	0.98	0.15
Q99497 PARK7	HUMAN	Protein DJ-1	3	1.05	1.00
Q99623 PHB2	HUMAN	Prohibitin-2	5	1.06	0.15
Q99698 LYST	HUMAN	Lysosomal-trafficking regulator	2	1.29	0.01
Q99715 COCA1	HUMAN	Collagen alpha-1(XII) chain	5	0.93	<0.01
Q99880 H2B1L	HUMAN	Histone H2B type 1-L	4	1.12	<0.01
Q99959 PKP2	HUMAN	Plakophilin-2	5	1.12	<0.01
Q99996 AKAP9	HUMAN	A-kinase anchor protein 9	2	0.97	0.76
Q9BDY8 ANGP1	PIG	Angiotensinogen 1	2	0.78	0.02
Q9BQ69 MACD1	HUMAN	MACRO domain-containing protein 1	3	1.01	<0.01
Q9BQE3 TBA1C	HUMAN	Tubulin alpha-1C chain	9	2.00	<0.01
Q9BQI7 PSD2	HUMAN	PH and SEC7 domain-containing protein 2	3	1.00	0.79
Q9BSF8 BTBDA	HUMAN	BTB/POZ domain-containing protein 10	2	0.92	<0.01
Q9BTC0 DIDO1	HUMAN	Death-inducer obliterator 1	3	1.14	0.02
Q9BVG3 TRI62	HUMAN	Tripartite motif-containing protein 62	3	0.95	0.27
Q9BX26 SYCP2	HUMAN	Synaptonemal complex protein 2	4	0.88	0.50
Q9BX63 FANCI	HUMAN	Fanconi anemia group J protein	4	0.85	0.01
Q9BX66 SRBS1	HUMAN	Sorbin and SH3 domain-containing protein 1	5	1.00	0.16
Q9BXM0 PRAX	HUMAN	Periaxin	2	1.10	0.04
Q9BXN1 ASPN	HUMAN	Asporin	4	1.59	<0.01
Q9BXT5 TEX15	HUMAN	Testis-expressed sequence 15 protein	4	0.89	<0.01
Q9BXT6 M10L1	HUMAN	Putative helicase Mov10L1	3	0.95	0.12
Q9BXX3 AN30A	HUMAN	Ankyrin repeat domain-containing protein 30A	3	1.42	<0.01
Q9BYW2 SETD2	HUMAN	Histone-lysine N-methyltransferase SETD2	4	0.94	<0.01
Q9BZ29 DOCK9	HUMAN	Dedicator of cytokinesis protein 9	4	0.96	0.98
Q9C000 NALP1	HUMAN	NACHT, LRR and PYD domains-containing protein 1	2	0.94	0.10
Q9C091 GRB1L	HUMAN	GREB1-like protein	6	1.18	0.01
Q9C099 LRCC1	HUMAN	Leucine-rich repeat and coiled-coil domain-containing protein 1	3	0.93	0.66
Q9C0F0 ASXL3	HUMAN	Putative Polycomb group protein ASXL3	2	1.43	0.01
Q9C0G6 DYH6	HUMAN	Dynein heavy chain 6, axonemal	6	1.05	<0.01
Q9C0I9 LRC27	HUMAN	Leucine-rich repeat-containing protein 27	2	1.14	<0.01
Q9GJT2 ESTD	PIG	S-formylglutathione hydrolase	2	1.04	0.97
Q9GKQ6 PGS1	PIG	Biglycan (Fragments)	2	2.90	<0.01
Q9GL51 LIS1	PIG	Platelet-activating factor acetylhydrolase 1B subunit alpha	2	1.19	0.01

Q9GZU2 PEG3	HUMAN	Paternally-expressed gene 3 protein	3	0.70	<0.01
Q9H082 RB33B	HUMAN	Ras-related protein Rab-33B	2	1.53	<0.01
Q9H251 CAD23	HUMAN	Cadherin-23	2	1.06	0.29
Q9H2D6 TARA	HUMAN	TRIO and F-actin-binding protein	4	1.08	<0.01
Q9H2G2 SLK	HUMAN	STE20-like serine/threonine-protein kinase	3	0.89	0.01
Q9H2S9 IKZF4	HUMAN	Zinc finger protein Eos	2	0.95	0.85
Q9H3U1 UN45A	HUMAN	Protein unc-45 homolog A	3	1.12	0.26
Q9H4G0 E41L1	HUMAN	Band 4.1-like protein 1	2	1.36	0.06
Q9H4M7 PKHA4	HUMAN	Pleckstrin homology domain-containing family A member 4	2	1.32	0.19
Q9H583 HEAT1	HUMAN	HEAT repeat-containing protein 1	4	0.92	<0.01
Q9H5Y7 SLIK6	HUMAN	SLIT and NTRK-like protein 6	2	0.99	0.99
Q9H792 SG269	HUMAN	Tyrosine-protein kinase SgK269	2	0.56	0.30
Q9H7B2 RPF2	HUMAN	Ribosome production factor 2 homolog	2	0.77	0.15
Q9H987 SYP2L	HUMAN	Synaptopodin 2-like protein	4	1.36	<0.01
Q9HAR2 LPHN3	HUMAN	Latrophilin-3	2	1.06	0.06
Q9HAV4 XPO5	HUMAN	Exportin-5	2	1.33	<0.01
Q9HBE1 PATZ1	HUMAN	POZ-, AT hook-, and zinc finger-containing protein 1	3	0.81	0.03
Q9HC35 EMAL4	HUMAN	Echinoderm microtubule-associated protein-like 4	2	0.89	0.03
Q9HC77 CENPJ	HUMAN	Centromere protein J	6	1.23	<0.01
Q9HCB6 SPON1	HUMAN	Spondin-1	3	1.10	0.45
Q9HD23 MRS2	HUMAN	Magnesium transporter MRS2 homolog, mitochondrial	3	1.11	<0.01
Q9HD67 MYO10	HUMAN	Myosin-X	4	0.99	0.25
Q9HDC5 JPH1	HUMAN	Junctophilin-1	3	0.88	0.30
Q9MZ15 VDAC2	PIG	Voltage-dependent anion-selective channel protein 2	8	1.04	<0.01
Q9MZ16 VDAC1	PIG	Voltage-dependent anion-selective channel protein 1	8	1.01	<0.01
Q9N0F1 ODO2	PIG	Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial	5	0.85	<0.01
Q9NPC6 MYOZ2	HUMAN	Myozenin-2	3	0.79	<0.01
Q9NPF5 DMAP1	HUMAN	DNA methyltransferase 1-associated protein 1	3	0.89	<0.01
Q9NQ66 PLCB1	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-1	2	0.95	0.08
Q9NQC3 RTN4	HUMAN	Reticulon-4	3	1.37	<0.01
Q9NR30 DDX21	HUMAN	Nucleolar RNA helicase 2	2	1.37	<0.01
Q9NR82 KCNQ5	HUMAN	Potassium voltage-gated channel subfamily KQT member 5	2	0.93	0.11
Q9NR96 TLR9	HUMAN	Toll-like receptor 9	3	0.87	<0.01
Q9NRC6 SPTN5	HUMAN	Spectrin beta chain, brain 4	5	1.04	0.81
Q9NRL2 BAZ1A	HUMAN	Bromodomain adjacent to zinc finger domain protein 1A	2	0.94	0.65
Q9NRM1 ENAM	HUMAN	Enamelin	4	0.97	0.03
Q9NSI6 BRWD1	HUMAN	Bromodomain and WD repeat-containing protein 1	4	0.92	0.02
Q9NTI5 PDS5B	HUMAN	Sister chromatid cohesion protein PDS5 homolog B	3	0.71	0.27
Q9NTJ3 SMC4	HUMAN	Structural maintenance of chromosomes protein 4	3	1.00	0.04
Q9NTK5 OLA1	HUMAN	Obg-like ATPase 1	3	0.78	0.16
Q9NU22 MDN1	HUMAN	Midasin	3	0.86	<0.01
Q9NUA8 ZBT40	HUMAN	Zinc finger and BTB domain-containing protein 40	2	1.03	0.22
Q9NUB1 ACS2L	HUMAN	Acetyl-coenzyme A synthetase 2-like, mitochondrial	4	0.91	0.63
Q9NVM9 M89BB	HUMAN	Cell cycle regulator Mat89Bb homolog	2	1.02	0.98
Q9NWH9 SLTM	HUMAN	SAFB-like transcription modulator	2	0.97	0.85
Q9NX45 SOLH2	HUMAN	Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 2	3	0.77	<0.01
Q9NX63 CHCH3	HUMAN	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial	2	0.98	0.75
Q9NXD2 MTMRA	HUMAN	Myotubularin-related protein 10	2	0.85	0.33
Q9NY65 TBA8	HUMAN	Tubulin alpha-8 chain	6	1.33	<0.01
Q9NYB9 ABI2	HUMAN	Abl interactor 2	2	0.75	<0.01

Q9NYC9 DYH9	HUMAN	Dynein heavy chain 9, axonemal	5	1.02	0.05
Q9NYQ7 CELR3	HUMAN	Cadherin EGF LAG seven-pass G-type receptor 3	2	0.71	<0.01
Q9NYQ8 FAT2	HUMAN	Protocadherin Fat 2	2	1.09	0.41
Q9NYU1 UGGG2	HUMAN	UDP-glucose:glycoprotein glucosyltransferase 2	3	0.81	0.01
Q9NYU2 UGGG1	HUMAN	UDP-glucose:glycoprotein glucosyltransferase 1	3	0.85	0.28
Q9NZ52 GGA3	HUMAN	ADP-ribosylation factor-binding protein GGA3	2	1.68	<0.01
Q9NZJ4 SACS	HUMAN	Sacsin	6	0.94	0.36
Q9NZJ5 E2AK3	HUMAN	Eukaryotic translation initiation factor 2-alpha kinase 3	2	0.81	0.26
Q9NZJ6 COQ3	HUMAN	Hexaprenyldihydroxybenzoate methyltransferase, mitochondrial	2	0.86	<0.01
Q9NZM1 MYOF	HUMAN	Myoferlin	4	0.95	0.22
Q9NZN4 EHD2	HUMAN	EH domain-containing protein 2	2	1.34	<0.01
Q9P0L2 MARK1	HUMAN	Serine/threonine-protein kinase MARK1	3	0.90	0.44
Q9P203 BTBD7	HUMAN	BTB/POZ domain-containing protein 7	2	0.72	<0.01
Q9P219 DAPLE	HUMAN	Protein Daple	3	0.70	<0.01
Q9P225 DYH2	HUMAN	Dynein heavy chain 2, axonemal	5	0.81	<0.01
Q9P227 RHG23	HUMAN	Rho GTPase-activating protein 23	4	1.01	<0.01
Q9P281 BAHC1	HUMAN	BAH and coiled-coil domain-containing protein 1	3	0.92	0.66
Q9P2D7 DYH1	HUMAN	Dynein heavy chain 1, axonemal	3	1.71	<0.01
Q9P2D8 UNC79	HUMAN	Protein unc-79 homolog	3	0.94	0.89
Q9P2K1 C2D2A	HUMAN	Coiled-coil and C2 domain-containing protein 2A	2	0.83	<0.01
Q9P2P1 NYNRI	HUMAN	Protein NYNRIN	3	0.88	0.30
Q9P2P6 STAR9	HUMAN	StAR-related lipid transfer protein 9	4	0.73	<0.01
Q9TDR1 NU5M	PIG	NADH-ubiquinone oxidoreductase chain 5	2	0.88	0.19
Q9TSX9 PRDX6	PIG	Peroxiredoxin-6	5	0.83	<0.01
Q9UBF9 MYOTI	HUMAN	Myotilin	3	1.11	<0.01
Q9UBU7 DBF4A	HUMAN	Protein DBF4 homolog A	2	0.84	0.42
Q9UBY9 HSPB7	HUMAN	Heat shock protein beta-7	2	1.28	<0.01
Q9UFH2 DYH17	HUMAN	Dynein heavy chain 17, axonemal	5	0.86	<0.01
Q9UH99 SUN2	HUMAN	SUN domain-containing protein 2	2	0.77	<0.01
Q9UHB6 LIMA1	HUMAN	LIM domain and actin-binding protein 1	2	1.39	0.05
Q9UHC1 MLH3	HUMAN	DNA mismatch repair protein Mlh3	4	1.21	0.16
Q9UHL0 DDX25	HUMAN	ATP-dependent RNA helicase DDX25	2	1.12	0.79
Q9UHP3 UBP25	HUMAN	Ubiquitin carboxyl-terminal hydrolase 25	3	0.96	0.04
Q9UIF8 BAZ2B	HUMAN	Bromodomain adjacent to zinc finger domain protein 2B	4	0.91	<0.01
Q9UIG0 BAZ1B	HUMAN	Tyrosine-protein kinase BAZ1B	2	0.84	0.06
Q9UIW2 PLXA1	HUMAN	Plexin-A1	4	1.20	<0.01
Q9UJS0 CMC2	HUMAN	Calcium-binding mitochondrial carrier protein Aralar2	4	0.88	<0.01
Q9UKL3 C8AP2	HUMAN	CASP8-associated protein 2	7	0.93	0.05
Q9UKN7 MYO15	HUMAN	Myosin-XV	5	0.95	<0.01
Q9UKV0 HDAC9	HUMAN	Histone deacetylase 9	2	1.68	<0.01
Q9UKX2 MYH2	HUMAN	Myosin-2	21	0.85	<0.01
Q9UKX3 MYH13	HUMAN	Myosin-13	15	0.81	<0.01
Q9UKX5 ITA11	HUMAN	Integrin alpha-11	2	0.87	0.40
Q9ULK0 GRID1	HUMAN	Glutamate receptor delta-1 subunit	3	0.90	0.46
Q9UM54 MYO6	HUMAN	Myosin-VI	4	0.76	<0.01
Q9UMS6 SYNP2	HUMAN	Synaptopodin-2	4	1.07	<0.01
Q9UMZ3 PTPRQ	HUMAN	Phosphatidylinositol phosphatase PTPRQ	2	0.99	0.07
Q9UNS1 TIM	HUMAN	Protein timeless homolog	2	1.42	0.19
Q9UPA5 BSN	HUMAN	Protein bassoon	3	1.10	<0.01
Q9UPP1 PHF8	HUMAN	Histone lysine demethylase PHF8	4	0.88	0.10
Q9UPX0 TUTLB	HUMAN	Protein turtle homolog B	3	1.14	0.04
Q9UQ26 RIMS2	HUMAN	Regulating synaptic membrane exocytosis protein 2	6	1.01	0.69
Q9XSD9 PGS2	PIG	Decorin	3	0.88	0.02
Q9Y210 TRPC6	HUMAN	Short transient receptor potential channel 6	2	1.14	0.94

Q9Y235 ABEC2	HUMAN	Probable C->U-editing enzyme APOBEC-2	2	1.00	1.00
Q9Y281 COF2	HUMAN	Cofilin-2	3	1.30	<0.01
Q9Y2H5 PKHA6	HUMAN	Pleckstrin homology domain-containing family A member 6	9	0.92	<0.01
Q9Y2H9 MAST1	HUMAN	Microtubule-associated serine/threonine-protein kinase 1	2	0.84	0.10
Q9Y2I6 NINL	HUMAN	Ninein-like protein	4	1.01	0.28
Q9Y2J2 E41L3	HUMAN	Band 4.1-like protein 3	2	0.99	0.07
Q9Y2J8 PADI2	HUMAN	Protein-arginine deiminase type-2	2	1.33	0.14
Q9Y2X3 NOP58	HUMAN	Nucleolar protein 58	2	1.13	0.33
Q9Y3P9 RBGP1	HUMAN	Rab GTPase-activating protein 1	2	0.97	0.74
Q9Y490 TLN1	HUMAN	Talin-1	3	1.28	<0.01
Q9Y4B6 VPRBP	HUMAN	Protein VPRBP	2	0.87	0.09
Q9Y4C8 RBM19	HUMAN	Probable RNA-binding protein 19	2	0.94	<0.01
Q9Y4D8 K0614	HUMAN	Probable E3 ubiquitin-protein ligase C12orf51	3	0.94	0.06
Q9Y4F1 FARP1	HUMAN	FERM, RhoGEF and pleckstrin domain-containing protein 1	5	1.11	0.04
Q9Y4F4 F179B	HUMAN	Protein FAM179B	4	0.83	0.16
Q9Y4G6 TLN2	HUMAN	Talin-2	4	1.13	<0.01
Q9Y4G8 RPGF2	HUMAN	Rap guanine nucleotide exchange factor 2	3	1.00	0.42
Q9Y4K1 AIM1	HUMAN	Absent in melanoma 1 protein	2	0.81	<0.01
Q9Y4W6 AFG32	HUMAN	AFG3-like protein 2	2	1.01	0.07
Q9Y520 BA2L2	HUMAN	Protein BAT2-like 2	5	1.08	<0.01
Q9Y5K6 CD2AP	HUMAN	CD2-associated protein	3	0.98	0.85
Q9Y5L4 TIM13	HUMAN	Mitochondrial import inner membrane translocase subunit Tim13	2	1.07	0.68
Q9Y5W8 SNX13	HUMAN	Sorting nexin-13	2	0.72	<0.01
Q9Y618 NCOR2	HUMAN	Nuclear receptor corepressor 2	4	0.82	<0.01
Q9Y623 MYH4	HUMAN	Myosin-4	19	0.83	<0.01
Q9Y6R6 Z780B	HUMAN	Zinc finger protein 780B	2	1.29	0.07
Q9Y6W3 CAN7	HUMAN	Calpain-7	3	0.85	0.08
Q9Y6X0 SETBP	HUMAN	SET-binding protein	2	0.67	<0.01
Q9Y6X9 MORC2	HUMAN	MORC family CW-type zinc finger protein 2	4	0.93	0.01
Q9YNA8 GAK3	HUMAN	HERV-K_19q12 provirus ancestral Gag polyprotein	4	0.83	<0.01

SI Table 2. Dysregulated proteins in hibernating animals vs. sham

Accession ID	Species	Protein Name	Ratio (HIB vs. Sham)
Metabolism(35)			
P26440	HUMAN	Isovaleryl-CoA dehydrogenase, mitochondrial	0.55
Q02252	HUMAN	Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial	0.61
P53590	PIG	Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial	0.70
Q92523	HUMAN	Carnitine O-palmitoyltransferase 1, muscle isoform	0.71
P11177	HUMAN	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	0.72
P22695	HUMAN	Cytochrome b-c1 complex subunit 2, mitochondrial	0.72
P19404	HUMAN	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial	0.73
P07954	HUMAN	Fumarate hydratase, mitochondrial	0.74
O75038	HUMAN	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase eta-2	0.74
P29804	PIG	Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondr	0.74
P24298	HUMAN	Alanine aminotransferase 1	0.74
P79274	PIG	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	0.75
P79384	PIG	Propionyl-CoA carboxylase beta chain, mitochondrial	0.76
P00346	PIG	Malate dehydrogenase, mitochondrial	0.76
P79273	PIG	Short-chain specific acyl-CoA dehydrogenase, mitochondrial	0.76
P0C7P4	HUMAN	Putative cytochrome b-c1 complex subunit Rieske-like protein 1	0.78
O75306	HUMAN	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	0.78
Q8NE18	HUMAN	Putative methyltransferase NSUN7	0.79
P49748	HUMAN	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	0.79
P79303	PIG	UTP--glucose-1-phosphate uridylyltransferase	1.28
Q1KYT0	PIG	Beta-enolase	1.30
Q2HYU2	PIG	6-phosphofructokinase, muscle type	1.31
P12026	PIG	Acyl-CoA-binding protein	1.31
Q99028	PIG	Catechol O-methyltransferase	1.35
P11217	HUMAN	Glycogen phosphorylase, muscle form	1.35
P00355	PIG	Glyceraldehyde-3-phosphate dehydrogenase	1.35
P12270	HUMAN	Nucleoprotein TPR	1.37
P13807	HUMAN	Glycogen [starch] synthase, muscle	1.43
P06733	HUMAN	Alpha-enolase	1.46
P11021	HUMAN	78 kDa glucose-regulated protein	1.47
P07237	HUMAN	Protein disulfide-isomerase	1.63
Q8TDQ7	HUMAN	Glucosamine-6-phosphate isomerase 2	1.65
Q8WNV7	PIG	Dehydrogenase/reductase SDR family member 4	1.79
P51888	HUMAN	Prolargin	1.91
P00339	PIG	L-lactate dehydrogenase A chain	2.13
Apoptosis and c #N/A			
Q9GZU2	HUMAN	Paternally-expressed gene 3 protein	0.70
O14737	HUMAN	Programmed cell death protein 5	0.72
P30086	HUMAN	Phosphatidylethanolamine-binding protein 1	0.74
P30048	HUMAN	Thioredoxin-dependent peroxide reductase, mitochondrial	0.75
O14497	HUMAN	AT-rich interactive domain-containing protein 1A	0.77
Q9UJH9	HUMAN	SUN domain-containing protein 2	0.77
Q28943	PIG	Dihydropyrimidine dehydrogenase [NADP+]	0.79
Q863Z0	PIG	Proteasome activator complex subunit 2	0.79
P09913	HUMAN	Interferon-induced protein with tetratricopeptide repeats 2	1.26
P63104	HUMAN	14-3-3 protein zeta/delta	1.27
Q04917	HUMAN	14-3-3 protein eta	1.28
P18648	PIG	Apolipoprotein A-I	1.29
P30101	HUMAN	Protein disulfide-isomerase A3	1.31
Q28938	PIG	Interleukin-12 subunit beta	1.32
Q2EN76	PIG	Nucleoside diphosphate kinase B	1.33
P27797	HUMAN	Calreticulin	1.34
Q9NQC3	HUMAN	Reticulon-4	1.37
P61981	HUMAN	14-3-3 protein gamma	1.37
P27348	HUMAN	14-3-3 protein theta	1.41
P52552	PIG	Peroxiredoxin-2	1.43
P03974	PIG	Transitional endoplasmic reticulum ATPase	1.48
P80928	PIG	Macrophage migration inhibitory factor	1.49
Q06830	HUMAN	Peroxiredoxin-1	1.52
P22314	HUMAN	Ubiquitin-like modifier-activating enzyme 1	1.53
P08758	HUMAN	Annexin A5	1.54
P19619	PIG	Annexin A1	1.61

P31946	HUMAN	14-3-3 protein beta/alpha	1.62
Q06323	HUMAN	Proteasome activator complex subunit 1	1.62
Q8MJ14	PIG	Glutathione peroxidase 1	1.63
Q01995	HUMAN	Transgelin	1.75
P00795	PIG	Cathepsin D	1.77
P19620	PIG	Annexin A2	1.77
P82460	PIG	Thioredoxin	1.81
P37802	HUMAN	Transgelin-2	1.81
Q865U8	PIG	Ankyrin repeat domain-containing protein 1	1.86
P62936	PIG	Peptidyl-prolyl cis-trans isomerase A	2.26
Q7M2W6	PIG	Alpha-crystallin B chain	2.28
P52701	HUMAN	DNA mismatch repair protein Msh6	2.64
Q9GKQ6	PIG	Biglycan	2.90

Organization of #N/A

O15144	HUMAN	Actin-related protein 2/3 complex subunit 2	0.57
Q03001	HUMAN	Bullous pemphigoid antigen 1	0.67
Q96PY5	HUMAN	Formin-like protein 2	0.68
P04264	HUMAN	Keratin, type II cytoskeletal 1	0.71
A4D2P6	HUMAN	Delphinin	0.73
Q9NYB9	HUMAN	Abl interactor 2	0.75
P55290	HUMAN	Cadherin-13	0.78
Q43379	HUMAN	WD repeat-containing protein 62	1.26
P68032	HUMAN	Actin, alpha cardiac muscle 1	1.26
P15924	HUMAN	Desmoplakin	1.26
Q15404	HUMAN	Ras suppressor protein 1	1.27
P51148	HUMAN	Ras-related protein Rab-5C	1.27
P07737	HUMAN	Profilin-1	1.28
P26234	PIG	Vinculin	1.28
Q9Y490	HUMAN	Talin-1	1.28
Q9Y281	HUMAN	Cofilin-2	1.30
Q6KB66	HUMAN	Keratin, type II cytoskeletal 80	1.30
Q9NY65	HUMAN	Tubulin alpha-8 chain	1.33
Q16555	HUMAN	Dihydropyrimidinase-related protein 2	1.34
Q43707	HUMAN	Alpha-actinin-4	1.36
P61019	HUMAN	Ras-related protein Rab-2A	1.40
Q75083	HUMAN	WD repeat-containing protein 1	1.49
P21333	HUMAN	Filamin-A	1.49
Q05682	HUMAN	Caldesmon	1.51
P61160	HUMAN	Actin-related protein 2	1.54
Q92974	HUMAN	Rho guanine nucleotide exchange factor 2	1.60
Q14195	HUMAN	Dihydropyrimidinase-related protein 3	1.60
P35241	HUMAN	Radixin	1.62
P61026	HUMAN	Ras-related protein Rab-10	1.63
P68371	HUMAN	Tubulin beta-2C chain	1.64
P07437	HUMAN	Tubulin beta chain	1.66
P23528	HUMAN	Cofilin-1	1.68
Q14315	HUMAN	Filamin-C	1.69
P02540	PIG	Desmin	1.76
P20305	PIG	Gelsolin	1.84
P68366	HUMAN	Tubulin alpha-4A chain	1.94
P08670	HUMAN	Vimentin	1.96
Q9BQE3	HUMAN	Tubulin alpha-1C chain	2.00
P68363	HUMAN	Tubulin alpha-1B chain	2.07
P13796	HUMAN	Plastin-2	3.32

Transcription an #N/A

Q71F56	HUMAN	Mediator of RNA polymerase II transcription subunit 13-like	0.60
P62263	HUMAN	40S ribosomal protein S14	0.60
Q75150	HUMAN	E3 ubiquitin-protein ligase BRE1B	0.67
P23588	HUMAN	Eukaryotic translation initiation factor 4B	0.70
Q7Z478	HUMAN	ATP-dependent RNA helicase DHX29	0.75
Q96G01	HUMAN	Protein bicaudal D homolog 1	0.76
P23396	HUMAN	40S ribosomal protein S3	1.26
P62805	HUMAN	Histone H4	1.29
Q05639	HUMAN	Elongation factor 1-alpha 2	1.32
Q14240	HUMAN	Eukaryotic initiation factor 4A-II	1.34
P13639	HUMAN	Elongation factor 2	1.35
Q9BXX3	HUMAN	Ankyrin repeat domain-containing protein 30A	1.42
Q9C0F0	HUMAN	Putative Polycomb group protein ASXL3	1.43

P29692	HUMAN	Elongation factor 1-delta	1.46
P22626	HUMAN	Heterogeneous nuclear ribonucleoproteins A2/B1	1.48
P62701	HUMAN	40S ribosomal protein S4, X isoform	1.48
P16402	HUMAN	Histone H1.3	1.49
P24534	HUMAN	Elongation factor 1-beta	1.50
Q5VTE0	HUMAN	Putative elongation factor 1-alpha-like 3	1.51
P08865	HUMAN	40S ribosomal protein SA	1.52
P61978	HUMAN	Heterogeneous nuclear ribonucleoprotein K	1.60
Q9UKV0	HUMAN	Histone deacetylase 9	1.68
P26641	HUMAN	Elongation factor 1-gamma	1.69
Q29315	PIG	60S acidic ribosomal protein P2	1.74
Q96SB4	HUMAN	Serine/threonine-protein kinase SRPK1	1.79
Protein processi	#N/A		
Q01955	HUMAN	Collagen alpha-3(IV) chain	0.63
A6NNM8	HUMAN	Tubulin polyglutamylase TTLL13	0.72
Q9Y5W8	HUMAN	Sorting nexin-13	0.72
O60449	HUMAN	Lymphocyte antigen 75	0.75
Q8TDW5	HUMAN	Synaptotagmin-like protein 5	0.77
Q7Z7G8	HUMAN	Vacuolar protein sorting-associated protein 13B	0.79
P12111	HUMAN	Collagen alpha-3(VI) chain	0.80
P53675	HUMAN	Clathrin heavy chain 2	1.27
Q15366	HUMAN	Poly(rC)-binding protein 2	1.30
Q9HAV4	HUMAN	Exportin-5	1.33
Q9NZN4	HUMAN	EH domain-containing protein 2	1.34
Q00610	HUMAN	Clathrin heavy chain 1	1.34
Q00688	HUMAN	Peptidyl-prolyl cis-trans isomerase FKBP3	1.39
Q96RL7	HUMAN	Vacuolar protein sorting-associated protein 13A	1.51
Q09161	HUMAN	Nuclear cap-binding protein subunit 1	1.55
Q9NZ52	HUMAN	ADP-ribosylation factor-binding protein GGA3	1.68
Q15365	HUMAN	Poly(rC)-binding protein 1	1.68
Q76N89	HUMAN	E3 ubiquitin-protein ligase HECW1	1.77
Cell differentiati	#N/A		
Q9NX45	HUMAN	Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing	0.77
Q702N8	HUMAN	Xin actin-binding repeat-containing protein 1	1.33
O94875	HUMAN	Sorbin and SH3 domain-containing protein 2	1.33
Q13642	HUMAN	Four and a half LIM domains protein 1	1.36
Q5VZE5	HUMAN	N-alpha-acetyltransferase 35, NatC auxiliary subunit	1.39
Q5FZP5	PIG	Secretogranin-2	1.54
P50461	HUMAN	Cysteine and glycine-rich protein 3	1.66
Muscle Contract	#N/A		
Q5VTT5	HUMAN	Myomesin-3	0.71
Q9P2P6	HUMAN	StAR-related lipid transfer protein 9	0.73
Q8WXX0	HUMAN	Dynein heavy chain 7, axonemal	0.74
P45379	HUMAN	Troponin T, cardiac muscle	0.75
P54296	HUMAN	Myomesin-2	0.75
Q9UM54	HUMAN	Myosin-VI	0.76
Q8IVF4	HUMAN	Dynein heavy chain 10, axonemal	0.77
P08590	HUMAN	Myosin light chain 3	0.77
Q14896	HUMAN	Myosin-binding protein C, cardiac-type	0.78
Q9NPC6	HUMAN	Myozenin-2	0.79
P13535	HUMAN	Myosin-8	0.80
P52179	HUMAN	Myomesin-1	0.80
P33176	HUMAN	Kinesin-1 heavy chain	1.29
Q13136	HUMAN	Liprin-alpha-1	1.35
P19105	HUMAN	Myosin regulatory light chain 12A	1.36
P35580	HUMAN	Myosin-10	1.38
P35749	HUMAN	Myosin-11	1.41
Q86UP2	HUMAN	Kinectin	1.47
P26038	HUMAN	Moesin	1.52
Q9P2D7	HUMAN	Dynein heavy chain 1, axonemal	1.71
ion transport(6)	#N/A		
P11607	PIG	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	0.72
Q00975	HUMAN	Voltage-dependent N-type calcium channel subunit alpha-1B	0.72
Q5VU97	HUMAN	VWFA and cache domain-containing protein 1	0.78
Q15413	HUMAN	Ryanodine receptor 3	0.79
O00299	HUMAN	Chloride intracellular channel protein 1	1.48
Q9BXN1	HUMAN	Asporin	1.59

Heatshock prote		#N/A		
Q9UBY9	HUMAN		Heat shock protein beta-7	1.28
Q12931	HUMAN		Heat shock protein 75 kDa, mitochondrial	1.33
P11142	HUMAN		Heat shock cognate 71 kDa protein	1.38
Q5S1U1	PIG		Heat shock protein beta-1	1.54
O14558	HUMAN		Heat shock protein beta-6	1.54
Q16082	HUMAN		Heat shock protein beta-2	1.61
O02705	PIG		Heat shock protein HSP 90-alpha	1.62
P08238	HUMAN		Heat shock protein HSP 90-beta	1.66
Q6S4N2	PIG		Heat shock 70 kDa protein 1B	1.67
Signal transduct		#N/A		
Q9P219	HUMAN		Protein Daple	0.70
Q9NYQ7	HUMAN		Cadherin EGF LAG seven-pass G-type receptor 3	0.71
Q86VI3	HUMAN		Ras GTPase-activating-like protein IQGAP3	0.72
P55196	HUMAN		Afadin	0.79
Q86SQ0	HUMAN		Pleckstrin homology-like domain family B member 2	1.26
Q8IZF6	HUMAN		Probable G-protein coupled receptor 112	1.32
Q9H082	HUMAN		Ras-related protein Rab-33B	1.53
Q6VAB6	HUMAN		Kinase suppressor of Ras 2	0.56
N/A(18)		#N/A		
Q8TC29	HUMAN		Enkurin	0.57
Q92804	HUMAN		TATA-binding protein-associated factor 2N	0.65
Q9Y6X0	HUMAN		SET-binding protein	0.67
Q6ZMN7	HUMAN		PDZ domain-containing RING finger protein 4	0.71
Q9P203	HUMAN		BTB/POZ domain-containing protein 7	0.72
Q4G0P3	HUMAN		Hydrocephalus-inducing protein homolog	0.77
A1XQR7	PIG		Protein QIL1	0.78
Q5PXT2	PIG		LIM and cysteine-rich domains protein 1	0.80
Q5K651	HUMAN		Sterile alpha motif domain-containing protein 9	1.25
Q8NBF2	HUMAN		NHL repeat-containing protein 2	1.27
Q5JV73	HUMAN		FERM and PDZ domain-containing protein 3	1.28
O95810	HUMAN		Serum deprivation-response protein	1.28
Q8NEF3	HUMAN		Coiled-coil domain-containing protein 112	1.31
A6QL64	HUMAN		Ankyrin repeat domain-containing protein 36A	1.33
Q9H987	HUMAN		Synaptopodin 2-like protein	1.36
Q9NR30	HUMAN		Nucleolar RNA helicase 2	1.37
P0C881	HUMAN		Radial spoke head 10 homolog B	1.41
Q86VV8	HUMAN		Rotatin	1.48