

**Supplementary Table 1: Upregulated Genes D6, shotgun analysis**

Gene names	Protein names	-LOG(P-value)	log <sub>2</sub> (ratio)	N: peptides	N: Seq. cov. [%]	N: Mol. weight [kDa]
Tnnt2	Troponin T, cardiac muscle	3.85	4.65	8	32	34
Tnni1	Troponin I, slow skeletal muscle	4.16	4.09	5	24	22
Mylpf	Myosin regulatory light chain 2, skeletal muscle isoform	3.73	3.60	10	75	19
Myh3	Myosin-3	4.73	3.56	69	40	224
Myl4	Myosin light chain 4	4.02	3.52	8	61	21
Tnnc1	Troponin C1	2.42	3.34	4	22	18
ES1 protein homolog	ES1 protein homolog, mitochondrial	1.46	2.82	3	21	28
Acaa1b	3-ketoacyl-CoA thiolase A, peroxisoma	1.52	2.63	2	10	45
Sord	Sorbitol dehydrogenase	4.53	2.62	16	49	38
Cd81	Tetraspanin;CD81 antigen	1.73	2.61	2	17	26
Myh1	Myosin heavy chain 1	2.12	2.61	3	2	223
Myl6b	Myosin light chain 6B	2.31	2.60	3	17	23
Calu	Calumenin	1.10	2.57	2	3	37
Limd2	LIM domain-containing protein 2	3.34	2.56	2	22	14
Ndufs4	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4	3.29	2.49	8	43	20
Cd200	OX-2 membrane glycoprotein	3.45	2.41	5	19	31
Col11a1	Collagen alpha-1(XI) chain	4.16	2.37	19	20	167
Acs13	Long-chain-fatty-acid--CoA ligase 3	4.75	2.35	11	23	79
Phldb1	Pleckstrin homology-like domain family B member 1	2.76	2.27	4	4	151
Tpm1	Tropomyosin alpha-1 chain	2.91	2.13	1	6	33
Ston1	Stonin 1	3.80	1.94	3	6	82
Mybph	Myosin-binding protein H	3.50	1.84	3	9	53
Enpp1	Ectonucleotide pyrophosphatase	1.36	1.84	3	6	99
Afap1l2	Actin Filament Associated Protein 1 Like 2	2.16	1.82	2	3	91
Ldhb	L-lactate dehydrogenase B chain	5.11	1.82	14	52	37
Col8a1	Collagen Type VIII Alpha 1 Chain	2.18	1.79	3	8	74
Pcyox1l	Prenylcysteine Oxidase 1 Like	2.03	1.79	2	7	55
Loxl2	Lysyl oxidase homolog 2	3.38	1.77	10	22	79
Akap12	A-kinase anchor protein 12	3.19	1.66	64	60	173
Synpo	Synaptopodin	3.64	1.64	15	22	97
Slc25a20	Mitochondrial carnitine	2.72	1.60	4	13	33

## Upregulated Genes D6, shotgun analysis (Cont.)

Gene names	Protein names	-LOG(P-value)	log <sub>2</sub> (ratio)	N: peptides	N: Seq. cov. [%]	N: Mol. weight [kDa]
Eln	Elastin	3.73	1.40	7	18	68
Tes	Testin	3.54	1.40	20	65	48
B2m	Beta-2-microglobulin	4.31	1.36	3	32	14
Gm2a	Ganglioside Activator	3.58	1.35	5	29	22
Uchl1	Ubiquitin carboxyl-terminal hydrolase isozyme L1	2.52	1.34	5	31	25
Csrp2	Cysteine and glycine-rich protein 2	3.94	1.34	9	59	21
Fhl2	Four and a half LIM domains protein 2	3.54	1.33	22	74	32
Ca3	Carbonic anhydrase 3	3.57	1.28	17	85	29
Hexb	Beta-hexosaminidase subunit beta	2.94	1.25	7	23	62
Hibadh	3-hydroxyisobutyrate dehydrogenase, mitochondrial	4.08	1.20	8	38	35

## Downregulated Genes D6, shotgun analysis

Gene names	Protein names	-LOG(P-value)	log <sub>2</sub> (ratio)	N: peptides	N: Seq. cov. [%]	N: Mol. weight [kDa]
Cryab	Alpha-crystallin B chain	3.37	-1.37	15	85	20
Mfge8	Lactadherin	3.72	-1.48	27	62	47
Smoc1	SPARC Related Modular Calcium Binding 1	4.40	-1.55	5	17	50
Rrm1	Ribonucleoside-diphosphate reductase	3.43	-1.58	5	7	90
Pcna	Proliferating cell nuclear antigen	4.18	-1.59	10	51	29
Hmgb2	High mobility group protein B2	2.98	-1.63	4	26	24
Prkcdbp	Protein kinase C delta-binding protein	4.26	-1.68	6	28	28
Mcm2	DNA helicase	4.03	-1.70	3	4	102
Lgalsl	Galectin	1.61	-1.77	3	26	19
S100a4	Protein S100-A4	2.31	-1.80	6	43	12
Cdk1	Cyclin-dependent kinase 1	4.09	-1.91	7	28	34
Mcm7	DNA helicase	2.46	-1.94	13	21	81
Mcm4	Minichromosome Maintenance Complex Component 4	3.08	-1.96	9	16	97
Grem2	Gremlin	3.59	-2.01	4	33	19
Mcm3	DNA helicase	3.24	-2.05	13	20	92
Adrm1	Proteasomal ubiquitin receptor ADRM1	1.62	-2.09	3	11	42
Anxa8	Annexin A8	1.26	-2.17	5	26	37
A1m	Alpha-1-macroglobulin	1.50	-2.20	4	2	167
Smc2	Structural maintenance of chromosomes protein	3.16	-2.26	3	5	134
Gpc6	Glypican 6	2.27	-2.33	4	14	63
Mad2l1	Mitotic spindle assembly checkpoint protein	3.23	-2.62	3	12	24
Spats2l	SPATS2-like protein	2.92	-2.74	3	5	66
Ptpn9	Tyrosine-protein phosphatase non-receptor type 9	1.90	-2.80	2	5	62
Mcm6	DNA helicase	2.76	-2.97	12	18	93
Gpx1	Glutathione peroxidase 1	3.73	-3.08	4	32	22