

**Supplemental Table 1.** Differentially expressed transcripts in old (318 unique) and young (87 unique) adults 24 h after a bout of unaccustomed resistance loading.

Function	Common name	Description	Gene symbol	Old	Young
				Fold Change	Fold Change
Actin binding	NM_005022	Profilin 1	PFN1	1.2	1.1
	BC106020	Family with sequence similarity 39, member B, mRNA	FAM39B	-	-1.1
Amino acid transport	NM_152346	Solute carrier family 43, member 2	SLC43A2	-1.6	-
	NM_003046	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 2	SLC7A2	-1.3	-
	AF271775	DC49 mRNA, complete cds	LOC440354	1.2	-
	NM_031279	Alanine-glyoxylate aminotransferase 2-like 1	AGXT2L1	2.3	-
Apoptosis	NM_014417	BCL2 binding component 3	BBC3	-1.2	-
	NM_016009	SH3-domain GRB2-like endophilin B1	SH3GLB1	-1.1	-
	NM_003502	Axin 1	AXIN1	1.2	-
	NM_032346	Programmed cell death 2-like	PDCD2L	1.2	-
	ENST00000369797	Programmed cell death protein 11 (RRP5 protein homolog)	PDCD11	1.3	-
	NM_012396	Pleckstrin homology-like domain, family A, member 3	PHLDA3	1.5	-
	NM_001008895	Cullin 4A	CUL4A	-	-1.2
	NM_014061	Melanoma antigen family H, 1	MAGEH1	-	1.1
Binding	NM_006007	Zinc finger, AN1-type domain 5	*ZFAND5	-1.4	-
	NM_001025300	RAB12, member RAS oncogene family	RAB12	-1.2	-
	NM_015483	Kelch repeat and BTB (POZ) domain containing 2	KBTBD2	-1.2	-
	NM_014160	Makorin, ring finger protein, 2	MKRN2	-1.2	-
	NM_019072	Small glutamine-rich tetratricopeptide repeat (TPR)-containing, beta	SGTB	-1.2	-
	NM_024753	Tetratricopeptide repeat domain 21B	TTC21B	-1.1	-
	NM_001009944	Polycystic kidney disease 1 (autosomal dominant)	PKD1	-1.1	-
	NM_033414	Zinc finger protein 622	ZNF622	1.1	-
	NM_020962	Likely ortholog of mouse neighbor of Punc E11	NOPE	1.1	-
	NM_007266	XPA binding protein 1, GTPase	XAB1	1.2	-
	NM_201280	Muted homolog (mouse)	MUTED	1.2	-
	NM_025112	ZXD family zinc finger C	ZXDC	1.2	-
	ENST00000373748	Probable RNA-binding protein 18 (RNA-binding motif protein 18)	RBM18	1.2	-
	NM_015110	Structural maintenance of chromosomes 5	SMC5	1.3	-

Carbohydrate metabolism	NM_021203	Signal recognition particle receptor, B subunit	SRPRB	1.4	-
	NM_032810	ATPase family, AAA domain containing 1	ATAD1	-	1.2
	NM_015948	Solute carrier family 35, member B3	SLC35B3	1.2	-
	NM_032826	Solute carrier family 35, member B4	SLC35B4	1.2	-
	NM_018964	Solute carrier family 37 (glycerol-3-phosphate transporter), member 1	SLC37A1	1.3	-
	NM_199186	2,3-bisphosphoglycerate mutase	BPGM	1.5	-
	NM_005530	Isocitrate dehydrogenase 3 (NAD+) alpha	*IDH3A	1.7	-
	ENST00000229270	Triosephosphate isomerase (EC 5.3.1.1)	TIM	1.7	-
	NM_014631	SH3 and PX domains 2A	SH3PXD2A	-	-1.2
	NM_002359	v-maf musculoaponeurotic fibrosarcoma oncogene homolog G	*MAFG	-1.5	-
Cell communication Cell cycle and proliferation	NM_025195	Tribbles homolog 1	*TRIB1	-1.5	-
	NM_016272	Transducer of ERBB2, 2	TOB2	-1.3	-
	NM_006185	Nuclear mitotic apparatus protein 1	NUMA1	-1.3	-
	NM_198219	Inhibitor of growth family, member 1	ING1	-1.2	-
	NM_018719	Cell division cycle associated 7-like	CDCA7L	-1.2	-
	NM_006023	Cell division cycle 123 homolog	CDC123	1.1	-
	ENST00000367808	Golgin 45 (Basic leucine zipper nuclear factor 1) (JEM-1) (p45 basic leucine-zipper nuclear factor)	BLZF1	1.1	-
	NM_001363	Dyskeratosis congenita 1, dyskerin	DKC1	1.2	-
	NM_032778	MYC induced nuclear antigen	MINA	1.3	-
	NM_006325	RAN, member RAS oncogene family	RAN	1.3	-
	NM_020808	Signal-induced proliferation-associated 1 like 2	SIPA1L2	1.8	-
	NM_005978	S100 calcium binding protein A2	S100A2	1.8	-
	NM_001731	B-cell translocation gene 1, anti-proliferative	BTG1	-	-1.3
	NM_015330	SPECC1-like	SPECC1L	-	-1.2
	NM_001007793	BUB3 budding uninhibited by benzimidazoles 3 homolog	BUB3	-	1.2
	NM_001950	E2F transcription factor 4, p107/p130-binding	E2F4	-	1.2
	NM_152858	Wilms tumor 1 associated protein	WTAP	-	1.2
	NM_004184	Tryptophanyl-tRNA synthetase	WARS	-	1.3
	NM_024094	Defective in sister chromatid cohesion homolog 1	DCC1	-	1.4
	CA306742	UI-H-FT1-bht-f-03-0-UI.s1	CA306742	-	1.4
Cell differentiation	NM_002522	Neuronal pentraxin I	NPTX1	-2.4	-
	NM_182961	Spectrin repeat containing, nuclear envelope 1	SYNE1	-	-1.3
	NM_003412	Zic family member 1 (odd-paired homolog)	ZIC1	-	-1.3

Cell fusion	NM_004714	Dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	DYRK1B	-1.4	-
Cell growth	NM_053044	HtrA serine peptidase 3	HTRA3	-1.6	-
	NM_199320	PHD finger protein 17	PHF17	1.2	-
	NM_001267	Chondroadherin	CHAD	-	-1.6
Cell-cell adhesion	NM_015669	Protocadherin beta 5	PCDHB5	-1.5	-
	NM_002230	Junction plakoglobin	JUP	-1.5	-
	NM_001903	Catenin (cadherin-associated protein), alpha 1, 102kDa	CTNNA1	1.2	-
Electron transport	NM_144611	Cytochrome b5 domain containing 2	*CYB5D2	-1.2	-
	NM_024028	Prenylcysteine oxidase 1 like	PCYOX1L	1.2	-
	NM_004109	Ferrodoxin 1	FDX1	1.2	-
	NM_004718	Cytochrome c oxidase subunit VIIa polypeptide 2 like	COX7A2L	-	1.3
	NM_007022	Cytochrome b-561 domain containing 2	CYB561D2	-	1.3
Growth factor activity	NM_001001555	Growth factor receptor-bound protein 10	GRB10	-	-1.6
	NM_000875	Insulin-like growth factor 1 receptor	IGF1R	-	-1.4
	NM_004113	Fibroblast growth factor 12	FGF12	-	1.3
Inflammatory and stress response	NM_005952	Metallothionein 1X	*MT1X	-2.1	-
	NM_005950	Metallothionein 1G	MT1G	-2.0	-
	NM_005951	Metallothionein 1H	MT1H	-1.8	-
	NM_003407	Zinc finger protein 36, C3H type, homolog	ZFP36	-1.5	-
	NM_001718	Bone morphogenetic protein 6	BMP6	-1.5	-
	NM_000024	Adrenergic, beta-2-, receptor, surface	ADRB2	-1.4	-
	NM_005947	Metallothionein 1B	MT1B	-1.4	-
	NM_005946	Metallothionein 1A	MT1A	-1.4	-
	NM_003072	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4	SMARCA4	1.2	-
	NM_014888	Family with sequence similarity 3, member C	*FAM3C	1.2	-
	NM_032242	Plexin A1	PLXNA1	1.3	-
	NM_017413	Apelin, AGTRL1 ligand	APLN	1.3	-
	NM_032271	TNF receptor-associated factor 7	TRAF7	1.3	-
	NM_014143	CD274 molecule	CD274	1.3	-
	NM_004134	Heat shock 70kDa protein 9	HSPA9	1.3	-
	NM_005923	Mitogen-activated protein kinase kinase kinase 5	MAP3K5	1.4	-
	NM_213662	Signal transducer and activator of transcription 3 (acute-phase response factor)	STAT3	1.4	-

	NM_002157	Heat shock 10kDa protein 1 (chaperonin 10)	HSPE1	1.4	-
	NM_000595	Lymphotoxin alpha (TNF superfamily, member 1)	LTA	1.4	-
	NM_001540	Heat shock 27kDa protein 1	*HSPB1	1.5	-
	NM_006644	Heat shock 105kDa/110kDa protein 1	HSPH1	1.6	-
	NM_145109	Mitogen-activated protein kinase kinase 3	*MAP2K3	1.7	-
	NM_003498	Stannin	SNN	1.7	-
	NM_002218	Inter-alpha (globulin) inhibitor H4 (plasma Kallikrein-sensitive glycoprotein)	ITIH4	1.7	-
Intracellular organelle	NM_015368	Pannexin 1	PANX1	2.9	-
	NM_016614	TRAF and TNF receptor associated protein	TTRAP	-	1.2
	NM_004528	Microsomal glutathione S-transferase 3	MGST3	-	1.2
	NM_005527	Heat shock 70kDa protein 1-like	HSPA1L	-	1.4
	NM_004832	Glutathione S-transferase omega 1	GSTO1	-	1.4
	NM_144570	Hematological and neurological expressed 1-like	HN1L	1.2	-
	NM_014182	ORM1-like 2	ORMDL2	1.2	-
	NM_032357	Coiled-coil domain containing 115	CCDC115	1.3	-
	NM_014184	Cornichon homolog 4	CNIH4	1.5	-
	NM_015942	MTERF domain containing 1	MTERFD1	na	-
Ion Transport	NM_213649	Sideroflexin 4	SFXN4	1.2	-
	NM_001002234	Sodium channel modifier 1	*SCNM1	1.3	-
	NM_004594	Solute carrier family 9 (sodium/hydrogen exchanger), member 5	SLC9A5	1.3	-
	NM_021095	Solute carrier family 5 (sodium-dependent vitamin transporter), member 6	SLC5A6	1.4	-
	NM_138809	Carboxymethylenebutenolidase homolog	CMBL	-1.7	-
Kinase activity	AB023218	ARYLSULFATASE G	ARSG	1.2	-
	NM_002601	Phosphodiesterase 6D, cGMP-specific, rod, delta	PDE6D	1.2	-
	NM_148912	Abhydrolase domain containing 11	ABHD11	1.3	-
	NM_144589	Catechol-O-methyltransferase domain containing 1	COMTD1	1.7	-
	NM_017431	Protein kinase, AMP-activated, gamma 3 non-catalytic subunit	PRKAG3	-1.6	-
	NM_032717	Lung cancer metastasis-associated protein	MAG1	-1.6	-
	NM_004650	Patatin-like phospholipase domain containing 4	PNPLA4	-1.2	-
	NM_032737	Lamin B2	LMNB2	1.2	-
	NM_021727	Fatty acid desaturase 3	FADS3	1.2	-

	NM_014754	Phosphatidylserine synthase 1	PTDSS1	1.2	-
	AK091528	cDNA FLJ34209 fis, clone FCBBF3020599	AK091528	1.2	-
	NM_016203	Protein kinase, AMP-activated, gamma 2 non-catalytic subunit	PRKAG2	1.5	-
Localization	NM_006854	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2	KDELR2	1.2	-
	NM_007097	Clathrin, light chain (Lcb)	CLTB	1.2	-
	NM_020845	Phosphatidylinositol transfer protein, membrane-associated 2	PITPNM2	1.2	-
	NM_004604	Syntaxin 4	STX4	1.2	-
	NM_181519	Synaptotagmin XV	SYT15	1.2	-
	AK126587	chromosome 3 open reading frame 31	*C3orf31	1.2	-
	NM_001079537	Trafficking protein particle complex 6B	TRAPP C6B	1.3	-
	NM_006335	Translocase of inner mitochondrial membrane 17 homolog A	TIMM17A	1.3	-
	NM_016000	tRNA nucleotidyl transferase, CCA-adding, 1	TRNT1	1.4	-
	NM_002871	RAB interacting factor	*RABIF	1.4	-
Membrane constituent	NM_002264	Karyopherin alpha 1 (importin alpha 5)	KPNA1	1.5	-
	NM_153342	Transmembrane protein 150	TMEM150	-1.5	-
Membrane transport	NM_024074	Transmembrane protein 38A	TMEM38A	-1.3	-
	NM_018202	Transmembrane protein 57	TMEM57	-1.2	-
	NM_018475	Transmembrane protein 165	*TMEM165	1.2	-
	NM_024334	Transmembrane protein 43	TMEM43	1.4	-
	NM_178545	Transmembrane protein 52	TMEM52	-	-2.0
	NM_020698	Transmembrane and coiled-coil domain family 3	TMCC3	-	-1.2
	NM_001040431	Coiled-coil domain containing 56	CCDC56	-	1.2
	NM_199337	Homo sapiens transmembrane protein 179B	TMEM179B	-	1.2
	NM_018126	Transmembrane protein 33	TMEM33	-	1.2
	NM_015379	Brain protein I3	BRI3	-	1.2
	NM_030567	Proline rich 7	PRR7	-	1.7
	NM_147152	Intersectin 2	ITSN2	-1.3	-
	NM_003916	Adaptor-related protein complex 1, sigma 2 subunit	AP1S2	1.2	-
	NM_018303	Exocyst complex component 2	EXOC2	1.2	-
	NM_007247	AP1 gamma subunit binding protein 1	AP1GBP1	1.3	-
	NM_182924	MICAL-like 2	MICALL2	1.8	-

	NM_020689	Solute carrier family 24 (sodium/potassium/calcium exchanger), member 3	SLC24A3	-	-1.6
Metal ion binding	NM_173039	Aquaporin 11	AQP11	-	1.5
	NM_016953	Phosphodiesterase 11A	*PDE11A	-2.5	-
	NM_144650	Alcohol dehydrogenase, iron containing, 1	ADHFE1	-1.4	-
	NM_153367	Chromosome 10 open reading frame 56	C10orf56	-1.3	-
	NM_014214	Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	-1.2	-
	NM_144604	Conserved nuclear protein NHN1	NHN1	-1.1	-
	NM_203288	Retinitis pigmentosa 9 (autosomal dominant)	RP9	1.2	-
	NM_031435	THAP domain containing, apoptosis associated protein 2	THAP2	1.4	-
Development	NM_001746	Calnexin	CANX	1.2	-
	NM_003741	Chordin	*CHRD	1.2	-
	NM_133265	Angiomotin	AMOT	1.4	-
	NM_001463	Frizzled-related protein	*FRZB	1.4	-
	NM_003873	Neuropilin 1	NRP1	1.5	-
Muscle contraction	NM_000727	Calcium channel, voltage-dependent, gamma subunit 1	CACNG1	-1.3	-
	NM_001033580	Myosin head domain containing 1	MYOHD1	1.4	-
	NM_014332	Small muscle protein, X-linked	SMPX	1.5	-
Muscle development	NM_004543	Nebulin	NEB	1.2	-
	NM_003476	Cysteine and glycine-rich protein 3 (cardiac LIM protein)	CSRP3	1.4	-
Nucleoside-triphosphatase activity	NM_025188	Tripartite motif-containing 45	TRIM45	-1.2	-
	NM_006503	Proteasome (prosome, macropain) 26S subunit, ATPase, 4	PSMC4	1.2	-
	NM_012141	Integrator complex subunit 6	INTS6	1.3	-
	NM_032116	Katanin p60 subunit A-like 1	KATNAL1	1.4	-
Positive regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolic process	NM_007162	Transcription factor EB	TFEB	-1.4	-
	NM_002228	Jun oncogene	JUN	-1.4	-
	NM_005121	Thyroid hormone receptor associated protein 1	THRAP1	-1.3	-
	NM_002486	Nuclear cap binding protein subunit 1, 80kDa	NCBP1	1.2	-

Metabolic processes	NM_052937	Protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1	*PCMTD1	-1.6	-
	H40632	H40632 yp50g01.s1 Soares retina N2b4HR	H40632	-1.5	-
	NM_012229	5'-nucleotidase, cytosolic II	NT5C2	-1.4	-
	NM_203356	CTAGE family, member 5	*CTAGE5	-1.3	-
	BM983822	BM983822 UI-CF-DU1-aaY-e-18-0-UI.s1 UI-CF-DU1	BM983822	-1.2	-
	NM_139174	Testis nuclear RNA-binding protein-like	LOC161931	-1.1	-
	NM_017755	NOL1/NOP2/Sun domain family, member 2	NSUN2	1.2	-
	NM_005443	3'-phosphoadenosine 5'-phosphosulfate synthase 1	PAPSS1	1.2	-
	NM_018590	Chondroitin sulfate GalNAcT-2	GALNACT-2	1.2	-
	NM_003137	SFRS protein kinase 1	SRPK1	1.3	-
	NM_181597	Uridine phosphorylase 1	UPP1	1.4	-
	NM_032356	LSM domain containing 1	LSMD1	1.5	-
	NM_203467	Peptidylprolyl isomerase (cyclophilin)-like 5	PPIL5	1.6	-
	AK123066	cDNA FLJ41071 fis, clone 3NB692003538	AK123066	1.8	-
Muscle maintenance	NM_021204	Enolase-phosphatase 1	ENOPH1	1.1	-
	NM_014317	Prenyl (decaprenyl) diphosphate synthase, subunit 1	PDSS1	1.4	-
	ENST00000379534	Mitochondrial ornithine transporter 1 (Solute carrier family 25 member 15)	SLC25A15	1.5	-
	NM_004737	Like-glycosyltransferase	LARGE	1.5	-
	NM_145177	Dehydrogenase/reductase (SDR family) X-linked	DHRSX	-	1.3
	NM_014065	Asteroid homolog 1	ASTE1	-	1.3
Protein binding	NM_007178	Serine/threonine kinase receptor associated protein	*STRAP	1.2	-
	NM_001268	Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2	RCBTB2	-	-1.3
Proteolysis	NM_001333	Cathepsin L2	CTSL2	-1.5	-
	NM_003342	Ubiquitin-conjugating enzyme E2G 1	UBE2G1	-1.4	-
	NM_152586	Ubiquitin specific peptidase 54	USP54	-1.3	-
	NM_019116	Ubiquitin family domain containing 1	UBFD1	-1.2	-
	NM_006292	Tumor susceptibility gene 101	TSG101	1.2	-
	NM_022488	ATG3 autophagy related 3 homolog	ATG3	1.2	-
	NM_052936	ATG4 autophagy related 4 homolog A	ATG4A	1.3	-
	NM_173060	Calpastatin	CAST	1.3	-
	NM_017824	Membrane-associated ring finger (C3HC4) 5	MARCH5	1.3	-
	NM_173497	HECT domain containing 2	HECTD2	1.3	-
	NM_020886	Ubiquitin specific peptidase 28	USP28	1.5	-

	NM_014814	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	PSMD6	-	1.2
Protein metabolism	NM_130853	Protein tyrosine phosphatase, receptor type, S	PTPRS	-	-1.3
	NM_152673	Mucin 20, cell surface associated	MUC20	-	-1.3
	NM_014683	Unc-51-like kinase 2	ULK2	-	-1.2
	NM_012235	SREBF chaperone	SCAP	-	1.1
	NM_003193	Tubulin folding cofactor E	TBCE	-	1.1
	NM_030768	Integrin-linked kinase-associated serine/threonine phosphatase 2C	ILKAP	-	1.2
Protein modification	BC020242	Protein tyrosine phosphatase, mitochondrial 1	PTPMT1	-	1.2
	NM_014665	Leucine rich repeat containing 14	LRRC14	-	1.3
	NM_001084	Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3	PLOD3	1.1	-
	NM_000113	Torsin family 1, member A	TOR1A	1.2	-
	NM_030752	T-complex 1	TCP1	1.3	-
	NM_012073	Chaperonin containing TCP1, subunit 5 (epsilon)	*CCT5	1.4	-
Ribosomal biogenesis and assembly	NM_018428	UTP6, small subunit (SSU) processome component, homolog	UTP6	1.2	-
RNA recognition motif, RNP-2	NM_014473	DIM1 dimethyladenosine transferase 1-like	DIMT1L	1.2	-
	NM_002568	Poly(A) binding protein, cytoplasmic 1	*PABPC1	-1.2	-
RNA splicing	NM_004643	Poly(A) binding protein, nuclear 1	*PABPN1	-1.1	-
	NM_002092	G-rich RNA sequence binding factor 1	GRSF1	1.1	-
	NM_032361	THO complex 3	THOC3	-	-1.1
Signaling	NM_006625	FUS interacting protein (serine/arginine-rich) 1	FUSIP1	-	1.3
	NM_000272	Nephronophthisis 1	NPHP1	-1.6	-
	NM_022783	DEP domain containing 6	DEPDC6	-1.5	-
	NM_015071	Rho GTPase activating protein 26	ARHGAP26	-1.4	-
	NM_003565	Unc-51-like kinase 1	ULK1	-1.3	-
	NM_005619	Reticulon 2	RTN2	-1.2	-
	NM_004157	Protein kinase, cAMP-dependent, regulatory, type II, alpha	PRKAR2A	-1.1	-
	NM_032293	GTPase activating Rap/RanGAP domain-like 3	GARNL3	1.3	-
	NM_138689	Protein phosphatase 1, regulatory (inhibitor) subunit 14B	*PPP1R14B	1.4	-
	NM_003665	Ficolin (collagen/fibrinogen domain containing) 3 (Hakata antigen)	FCN3	1.5	-
	NM_006065	Signal-regulatory protein beta 1	SIRPB1	1.6	-

Structural integrity	NM_000092	Collagen, type IV, alpha 4	COL4A4	-1.7	-
	NM_000091	Collagen, type IV, alpha 3 (Goodpasture antigen)	COL4A3	-1.7	-
	NM_020987	Ankyrin 3, node of Ranvier (ankyrin G)	*ANK3	-1.4	-
	NM_025074	Fraser syndrome 1	FRAS1	-1.2	-
	NM_000232	Sarcoglycan, beta	SGCB	-1.2	-
	NM_018943	Tubulin, alpha 8	TUBA8	1.6	1.2
	BC012204	Fibronectin type III domain containing 3B	FNDC3B	1.6	-
	BX113452	BX113452 Soares infant brain 1NIB	BX113452	1.6	-
	NM_004997	Myosin binding protein H	MYBPH	4.1	-
	NM_024668	Ankyrin repeat and KH domain containing 1	ANKHD1	-	1.3
	NM_079836	Tubulin, alpha 3c	TUBA3C	-	1.4
	NM_006000	Tubulin, alpha 4a	TUBA4A	-	1.4
Transcription	NM_005253	FOS-like antigen 2	FOSL2	-1.4	-
	NM_201999	E74-like factor 2 (ets domain transcription factor)	ELF2	-1.3	-
	NM_003082	Small nuclear RNA activating complex, polypeptide 1	SNAPC1	-1.3	-
	NM_022841	Regulatory factor X domain containing 2	RFXDC2	-1.3	-
	NM_006164	Nuclear factor (erythroid-derived 2)-like 2	NFE2L2	-1.2	-
	NM_016423	Zinc finger protein 219	ZNF219	-1.1	-
	AK027214	CCR4-NOT transcription complex, subunit 6-like	CNOT6L	-1.1	-
	NM_015694	Zinc finger protein 777	ZNF777	-1.1	-
	AK057670	general transcription factor II, i	GTF2I	1.1	-
	NM_024863	Transcription elongation factor A (SII)-like 4	TCEAL4	1.1	-
	NM_032438	I(3)mbt-like 3	L3MBTL3	1.2	-
	NM_006828	Activating signal cointegrator 1 complex subunit 3	ASCC3	1.2	-
	ENST00000316634	snRNA-activating protein complex subunit 5	SNAPC5	1.2	-
	NM_031370	Heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa)	HNRPD	1.2	-
	NM_024341	Zinc finger protein 557	ZNF557	1.2	-
	NM_020863	ZFAT zinc finger 1	ZFAT1	1.3	-
	NM_014950	Zinc finger and BTB domain containing 1	ZBTB1	-	-1.4
	AK130071	ZBTB44 zinc finger and BTB domain containing 44	ZBTB44	-	-1.3
	NM_003434	Zinc finger protein 133	ZNF133	-	-1.2
	BC014095	V-rel reticuloendotheliosis viral oncogene homolog A, nuclear factor of kappa light polypeptide gene enhancer in B-cells 3, p65	RELA	-	1.2
Translation	NM_012086	General transcription factor IIIC, polypeptide 3, 102kDa	GTF3C3	-	1.2
	NM_000992	Ribosomal protein L29	RPL29	-1.1	-

	NM_013234	Eukaryotic translation initiation factor 3, subunit 12	EIF3S12	1.1	-
	NM_014175	Mitochondrial ribosomal protein L15	MRPL15	1.1	-
	NM_139242	Mitochondrial methionyl-tRNA formyltransferase	MTFMT	1.2	-
	NM_007208	Mitochondrial ribosomal protein L3	MRPL3	1.2	-
	NM_018135	Mitochondrial ribosomal protein S18A	MRPS18A	1.2	-
	NM_172195	Eukaryotic translation initiation factor 2B, subunit 4 delta, 67kDa	EIF2B4	1.3	-
	NM_020409	Mitochondrial ribosomal protein L47	MRPL47	1.3	-
	BC015230	Peptidyl-tRNA hydrolase 1 homolog	PTRH1	1.3	-
	NM_001968	Eukaryotic translation initiation factor 4E	*EIF4E	1.4	-
	NM_031464	Ribosomal protein S6 kinase-like 1	RPS6KL1	1.5	-
WD repeat	NM_017818	WD repeat domain 8	WDR8	1.2	-
	NM_005452	WD repeat domain 46	WDR46	1.4	-
	NM_004704	RRP9, small subunit (SSU) processome component, homolog	RRP9	1.4	-
	NM_181340	WD repeat domain 21A	*WDR21A	1.5	-
Unknown	NM_053282	SH2 domain containing 1B	SH2D1B	-1.9	-
	BC064430	cDNA clone IMAGE:5763979	LOC205251	-1.9	-
	NM_023076	Chromosome 16 open reading frame 28	C16orf28	-1.5	-
	THC2727226	Q2PDG6_FUGRU (Q2PDG6) Interleukin-20, partial (7%)	THC2727226	-1.4	-
	A_32_P197393	Unknown	A_32_P197393	-1.3	-
	BC070363	cDNA clone IMAGE:3960708, partial cds	*BC070363	-1.3	-
	NM_019099	Chromosome 1 open reading frame 183	C1orf183	-1.3	-
	A_32_P142521	Unknown	A_32_P142521	-1.3	-
	BE766438	BE766438 IL3-NT0104-020800-232-E09 NT0104	BE766438	-1.3	-
	AM393308	Synthetic construct Homo sapiens mRNA for hypothetical protein (KLHDC6 gene)	AM393308	-1.3	-
	BE175081	BE175081 QV2-HT0577-250400-166-d10 HT0577	BE175081	-1.2	-
	THC2557016	Q3F710_9BURK (Q3F710) Inner-membrane translocator, partial (6%)	THC2557016	-1.2	-
	NM_018169	Chromosome 12 open reading frame 35	C12orf35	-1.2	-
	AL133018	mRNA; cDNA DKFZp434F0327 (from clone DKFZp434F0327)	AL133018	-1.2	-
	A_24_P641673	Unknown	A_24_P641673	-1.2	-
	BC033983	cDNA clone IMAGE:5295564	BC033983	-1.2	-
	AF338232	CTAGE-4 protein	*CTAGE4	-1.2	-

NM_144962	Phosphatidylethanolamine-binding protein 4	PEBP4	-1.2	-
THC2546372	Q5I0G0_HUMAN (Q5I0G0) Ribosomal protein L3, isoform a, partial (82%)	THC2546372	-1.2	-
BC043153	CTAGE family, member 6	CTAGE6	-1.2	-
BX107836	BX107836 Soares_fetal_heart_NbHH19W	BX107836	-1.2	-
BC036527	CTAGE family pseudogene	CTAGEP	-1.2	-
NM_182597	Hypothetical protein FLJ39575	FLJ39575	-1.2	-
BC048794	LOC399491 protein	LOC399491	-1.2	-
THC2642409	ALU1_HUMAN (P39188) Alu subfamily J sequence contamination warning entry, partial (11%)	THC2642409	-1.2	-
A_23_P47220	Unknown	A_23_P47220	-1.1	-
NM_152384	Bardet-Biedl syndrome 5	BBS5	-1.1	-
NR_002211	Meis homeobox 3 pseudogene 1	MEIS3P1	-1.1	-
THC2501636	ALU1_HUMAN (P39188) Alu subfamily J sequence contamination warning entry, partial (14%)	THC2501636	-1.1	-
NM_001013685	Hypothetical LOC401357	LOC401357	-1.1	-
A_24_P144084	Unknown	A_24_P144084	-1.1	-
NM_017881	Chromosome 9 open reading frame 95	C9orf95	-1.1	-
A_24_P587882	Unknown	A_24_P587882	1.1	-
NM_152734	Chromosome 6 open reading frame 89	C6orf89	1.1	-
XR_018118	PREDICTED: Homo sapiens similar to eukaryotic translation initiation factor 3, subunit 12	LOC134505	1.1	-
XR_017130	PREDICTED: Similar to ribosomal protein L4	LOC158345	1.1	-
NM_022756	Chromosome 1 open reading frame 149	C1orf149	1.1	-
NM_024051	Chromosome 7 open reading frame 24	C7orf24	1.1	-
THC2526410	Q9BUZ3_HUMAN (Q9BUZ3) QARS protein (Fragment), partial (25%)	THC2526410	1.2	-
NM_032026	TatD DNase domain containing 1	TATDN1	1.2	-
AB028946	mRNA for KIAA1023 protein, partial cds	IQCE	1.2	-
XR_019441	PREDICTED: Similar to phosducin-like 3	LOC644850	1.2	-
CB987747	AGENCOURT_13631433 NIH_MGC_184	CB987747	1.2	-
AK057596	hypothetical protein LOC150759	LOC150759	1.2	-
NM_018530	Gasdermin-like	GSDML	1.2	-
A_24_P204015	Unknown	A_24_P204015	1.2	-
A_24_P58597	Unknown	A_24_P58597	1.2	-
NM_032853	Melanoma associated antigen (mutated) 1	MUM1	1.2	-
NM_152499	Coiled-coil domain containing 24	CCDC24	1.2	-

NM_017867	Chromosome 4 open reading frame 27	C4orf27	1.2	-
A_24_P467805	Unknown	A_24_P467805	1.2	-
NM_032860	LTV1 homolog	LTV1	1.2	-
AF462442	HEAT repeat containing 3	HEATR3	1.2	-
A_24_P306754	Unknown	A_24_P306754	1.2	-
NM_018024	Chromosome 8 open reading frame 32	C8orf32	1.2	-
NM_152261	Chromosome 12 open reading frame 23	C12orf23	1.3	-
NM_032890	Dispatched homolog 1	DISP1	1.3	-
THC2669419	ALU7_HUMAN (P39194) Alu subfamily SQ sequence contamination warning entry, partial (13%)	THC2669419	1.3	-
NR_003110	Chaperonin containing TCP1, subunit 6A (zeta 1) pseudogene 1	CCT6AP1	1.3	-
NM_022338	Chromosome 11 open reading frame 24	C11orf24	1.3	-
NM_024598	Chromosome 16 open reading frame 57	C16orf57	1.3	-
AK126242	cDNA FLJ44254 fis, clone TKIDN2009641	AK126242	1.3	-
NM_016472	Chromosome 14 open reading frame 129	*C14orf129	1.3	-
BC036246	Hypothetical protein FLJ32549	FLJ32549	1.4	-
A_24_P349756	Unknown	A_24_P349756	1.4	-
ENST00000359244	cDNA FLJ31209 fis, clone KIDNE2003377	LOC645332	1.4	-
NM_020179	Chromosome 11 open reading frame 75	C11orf75	1.4	-
AK021933	cDNA FLJ11871 fis, clone HEMBA1007052	AK021933	1.4	-
NM_032822	Hypothetical protein FLJ14668	FLJ14668	1.4	-
BC028174	cDNA clone IMAGE:5415767, with apparent retained intron	BC028174	1.5	-
BU153693	AGENCOURT_7782569 NIH_MGC_67	BU153693	1.5	-
NM_016575	5'-nucleotidase domain containing 3	NT5DC3	1.5	-
AA687964	cDNA clone IMAGE:1220127 3'	AA687964	1.5	-
ENST00000258884	cDNA FLJ35439 fis, clone SMINT2002899	FAM108C1	1.5	-
BC010126	cDNA clone IMAGE:3948082, partial cds	BC010126	1.6	-
ENST00000369562	Uncharacterized protein C6orf165	C6orf165	1.6	-
NM_178508	Chromosome 6 open reading frame 1	*C6orf1	1.6	-
NM_001011537	Forty-two-three domain containing 1	FYTTD1	1.6	-
NM_032331	Hypothetical protein MGC2408	MGC2408	1.7	-
NM_001010922	Chromosome 1 open reading frame 178	C1orf178	1.8	-
NM_001012423	Golgi autoantigen, golgin subfamily a, 8E	GOLGA8E	2.4	-
AK056971	cDNA FLJ32409 fis, clone SKMUS2000468	hCG_2019139	6.5	-
THC2645879	Unknown	THC2645879	-	-1.6

ENST00000331849	CDNA FLJ20581 fis, clone REC00491	FLJ20581	-	-1.6
NM_015683	Arrestin domain containing 2	ARRDC2	-	-1.5
THC2575678	Q753E4_ASHGO (Q753E4) AFR372Wp, partial (3%)	THC2575678	-	-1.5
AL833655	mRNA; cDNA DKFZp667O0320	AL833655	-	-1.5
THC2632909	Q6E5T4_FUGRU (Q6E5T4) Claudin 2, partial (5%)	THC2632909	-	-1.4
ENST00000372602	NB thymosin beta (Thymosin-like protein 8)	TMSL8	-	-1.4
CR933606	mRNA; cDNA DKFZp686M08106	C20orf80	-	-1.4
THC2678509	Unknown	THC2678509	-	-1.3
NM_001039846	Chromosome 19 open reading frame 36	C19orf36	-	-1.3
A_24_P936845	Unknown	A_24_P936845	-	-1.2
NM_199045	Hypothetical LOC440248	LOC440248	-	-1.2
AL050061	mRNA; cDNA DKFZp566J123	LOC157562	-	-1.2
ENST00000306502	ZN778_HUMAN Isoform 2 of Q96MU6	ZNF778	-	-1.2
AK131409	cDNA FLJ16151 fis, clone MESAN2015501, moderately similar to Zinc finger protein 91	LOC284371	-	-1.1
A_24_P534290	Unknown	A_24_P534290	-	1.1
XR_018094	PREDICTED: Homo sapiens similar to Histone-binding protein RBBP4 (Retinoblastoma-binding protein 4)	LOC442223	-	1.2
ENST00000259969	Nucleolar protein 7 (Nucleolar protein of 27 kDa)	NOL7	-	1.2
THC2628527	IRO548013 HMG20A {Homo sapiens} (exp=-1; wgp=0; cg=0), partial (35%)	THC2628527	-	1.2
NM_017822	Chromosome 12 open reading frame 41	C12orf41	-	1.3
NM_016305	Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	-	1.3
XR_017103	PREDICTED: Homo sapiens similar to Brain protein I3 (pRGR2)	LOC441630	-	1.3
AK022297	cDNA FLJ12235 fis, clone MAMMA1001243	AK022297	-	1.3
NM_144703	LSM14B, SCD6 homolog B	LSM14B	-	1.4
ENST00000361259	FKSG73	ENST00000361259	-	1.4
BC006438	cDNA clone MGC:13162 IMAGE:3010103, complete cds	BC006438	-	1.4
XR_018407	PREDICTED: Homo sapiens similar to ADP	LOC222005	-	1.5
BC001725	KIAA0258	KIAA0258	-	1.5

Data as shown are the average fold changes within each age group. Old, n=8; Young, n=8. <sup>†</sup>Common name is the gene identifier. \*Transcript represented by multiple probesets.