

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Probe Set ID	Gene Symbol	Gene Title
Bt.9807.2.S1_at	GPNMB	glycoprotein (transmembrane) nmb
Bt.9675.1.S1_at	LOC787253	similar to Extracellular proteinase inhibitor
Bt.9351.2.S1_at	MGC139990	similar to EVIN1
Bt.9082.1.S1_at	LGALS4	lectin, galactoside-binding, soluble, 4 (galectin 4)
Bt.8421.2.S1_at	---	Transcribed locus, strongly similar to NP_001002374.1 hypothetical protein LOC43
Bt.8328.1.S1_at	LOC521189	similar to NRAMP2
Bt.7210.1.S1_at	PRND	prion protein 2 (duplet)
Bt.6392.1.S1_at	LOC527597	similar to transient receptor potential cation channel subfamily M member 6
Bt.5373.1.S1_at	SLC11A1	solute carrier family 11 (proton-coupled divalent metal ion transporters), membe
Bt.502.1.A1_at	RGN	regucalcin (senescence marker protein-30)
Bt.4781.1.S1_at	ADAM10	ADAM metalloproteinase domain 10
Bt.4604.1.S1_a_at	BUCS1	butyryl Coenzyme A synthetase 1
Bt.422.1.S2_at	IGFBP3	insulin-like growth factor binding protein 3
Bt.390.1.S1_at	CALB3	calbindin 3, (vitamin D-dependent calcium binding protein)
Bt.361.1.S1_at	SLC1A3	solute carrier family 1 (glial high affinity glutamate transporter), member 3
Bt.352.1.S1_at	PTGFR	prostaglandin F receptor (FP)
Bt.3189.1.A1_at	LOC540831	similar to FLJ20273 protein
Bt.29882.1.S1_at	MITF	microphthalmia-associated transcription factor
Bt.29718.1.S1_a_at	GHR	growth hormone receptor
Bt.28685.1.S1_at	LOC540831	similar to FLJ20273 protein
Bt.2846.1.A1_at	MGC154996	similar to ras homolog gene family, member U
Bt.28393.1.S1_at	DAF	decay-accelerating factor 1
Bt.28073.1.S1_at	LOC523223	similar to macrophage actin-associated-tyrosine-phosphorylated protein
Bt.27893.3.S1_a_at	---	Transcribed locus, strongly similar to NP_055053.1 kinase suppressor of ras [Hom
Bt.26343.1.S1_at	MTP	microsomal triglyceride transfer protein
Bt.26041.1.A1_at	LOC538782	hypothetical LOC538782
Bt.25926.1.A1_at	LOC533323	similar to cyclic nucleotide phosphodiesterase
Bt.24864.2.A1_at	LOC508763	similar to Tissue factor pathway inhibitor precursor (TFPI) (Lipoprotein-associa
Bt.24830.1.A1_at	ITIH5	Inter-alpha (globulin) inhibitor H5
Bt.2481.1.A1_at	MGC128787	similar to CG3625-PB
Bt.24687.1.A1_at	LOC533427	hypothetical LOC533427
Bt.24238.1.A1_at	MPEG1	macrophage expressed gene 1
Bt.23523.1.S1_at	TUSC5	tumor suppressor candidate 5
Bt.23089.1.S1_at	LOC783547	similar to mannose receptor C1
Bt.22987.2.S1_at	PRG4	proteoglycan 4
Bt.22672.1.A1_at	PGDH	hydroxyprostaglandin dehydrogenase 15-(NAD)
Bt.22429.1.S1_at	LOC535378	similar to PAR3 beta
Bt.21962.1.S1_at	MGC165819	similar to ependymin related protein 1
Bt.21615.1.A1_at	MGC140693	similar to transmembrane protein 22
Bt.20381.2.S1_at	F2R	coagulation factor II (thrombin) receptor
Bt.19959.2.A1_at	LOC505317	similar to ankyrin-like protein
Bt.19945.1.A1_at	LOC616344	hypothetical LOC616344
Bt.1983.1.S1_at	LOC508459	similar to EMR1
Bt.19479.1.A1_at	LOC504217 ///	hypothetical LOC504217 /// hypothetical protein LOC788273
Bt.18072.1.A1_at	MGC148318	hypothetical protein LOC782788
Bt.17607.1.A1_at	PLD1	phospholipase D1, phosphatidylcholine-specific
Bt.17309.2.A1_at	LOC518403	hypothetical LOC518403
Bt.16048.1.S1_at	LOC509501	proteoglycan 1 precursor-like
Bt.15925.1.S1_at	EPHX2 ///	epoxide hydrolase 2, cytoplasmic /// hypothetical protein LOC785508
Bt.15895.2.S1_at	LOC614402	hypothetical LOC614402
Bt.15895.1.A1_at	LOC614402	hypothetical LOC614402
Bt.15731.1.A1_at	VSIG4	V-set and immunoglobulin domain containing 4
Bt.14566.2.S1_at	MGC157129	Similar to KIAA0936 protein
Bt.14143.1.S1_at	CPE	carboxypeptidase E
Bt.14056.1.A1_at	ARHGAP18	Rho GTPase activating protein 18
Bt.13996.3.A1_at	PLD1	phospholipase D1, phosphatidylcholine-specific
Bt.13542.1.S1_at	MGC137125	similar to Complement factor B precursor (C3/C5 convertase)
Bt.13330.2.A1_at	MGC166250	similar to pyruvate dehydrogenase kinase
Bt.12964.1.A1_at	GPM6B	Glycoprotein M6B
Bt.12768.1.S1_at	PCK1	phosphoenolpyruvate carboxykinase 1 (soluble)
Bt.12598.1.S1_at	LOC505573	similar to Cartilage intermediate layer protein, nucleotide pyrophosphohydrolase
Bt.12443.1.S1_at	CD82 ///	CD82 molecule /// similar to CD82 molecule
Bt.11576.1.S1_at	LOC783413	polyamine N-acetyltransferase
Bt.11019.1.S1_at	SSAT2	similar to KIAA1195 protein
Bt.10980.1.S1_at	LOC613597	similar to ATP-binding cassette, sub-family C, member 9 isoform SUR2B
Bt.10076.1.S1_at	LOC522913	similar to ATP-binding cassette, sub-family C, member 9 isoform SUR2B
Bt.10076.1.S1_at	RCS1	RCS1 domain containing 1
Bt.8141.1.S1_at	UGT8	UDP glycosyltransferase 8 (UDP-galactose ceramide galactosyltransferase)
Bt.5013.1.A1_at	LOC789183	similar to Mib
Bt.430.2.S1_a_at	CSH1 /// PRC11	chorionic somatomammotropin hormone 1 (placental lactogen) /// prolactin-related
Bt.3101.1.A1_at	LOC539379	similar to STARS
Bt.29752.1.A1_at	LOC613361	Hypothetical LOC613361
Bt.28735.1.A1_at	LOC781271	similar to Gag-Pro-Pol-Env protein
Bt.26959.2.S1_at	MVK	mevalonate kinase (mevalonic aciduria)
Bt.23852.1.A1_at	RPS4X ///	ribosomal protein S4, X-linked /// ribosomal protein S4, Y-linked 1
Bt.22555.2.S1_at	RPS4Y1	ribosomal protein S4, Y-linked 1
Bt.22555.2.S1_at	LOC514045	Hypothetical LOC514045
Bt.21798.1.S1_at	LOC528288	Similar to FLJ00102 protein
Bt.20832.1.S1_at	HNF-3a	hepatocyte nuclear factor 3 alpha
Bt.1978.14.A1_at	LOC613389	T-cell receptor beta chain V region
Bt.1920.1.S1_at	LOC514624	similar to Stard10 protein
Bt.16477.1.A1_at	LOC520327	Similar to Kynureninase (L-kynurenine hydrolase)
Bt.9838.1.S1_at	FABP6	fatty acid binding protein 6, ileal
Bt.9759.1.S1_at	NGDN	neuroguidin, EIF4E binding protein
Bt.9699.1.S1_at	CYP26	cytochrome P450 retinoic acid hydroxylase
Bt.9596.1.S1_at	MGC127202	similar to Chain A, High Resolution Solution Structure Of Human Intestinal Trefo
Bt.9233.2.S1_at	LOC506751	similar to Laminin alpha-5 chain
Bt.9225.1.A1_at	MGC152634	similar to Hexokinase 3 (white cell)
Bt.9075.1.S1_at	LOC510923	Similar to estrogen responsive finger protein

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Bt.9071.2.S1_a_at	MGC139710	similar to CG18177-PB
Bt.9053.2.S1_a_at	LRP16	LRP16 protein
Bt.9.2.S1_a_at	PRKG1	protein kinase, cGMP-dependent, type I
Bt.8957.1.S1_at	CXCR4	chemokine (C-X-C motif) receptor 4
Bt.8925.2.S1_at	TMEM15	transmembrane protein 15
Bt.879.1.S1_at	---	Transcribed locus, moderately similar to NP_001008802.1 type II keratin Kb1 [Rat
Bt.8788.2.S1_a_at	LOC514115	similar to Wdr33 protein
Bt.8719.1.S1_a_at	LOC511744	similar to L-seryl-tRNA(Ser/Sec) kinase (Phosphoseryl-tRNA(Ser/Sec) kinase)
Bt.8549.2.S1_at	MGC137169	hypothetical LOC511765
Bt.8504.1.A1_at	LOC507482	similar to fragile X mental retardation 1
Bt.8436.1.S1_at	IFI6	interferon, alpha-inducible protein 6
Bt.83.1.S1_a_at	DNAJC5	DnaJ (Hsp40) homolog, subfamily C, member 5
Bt.8286.1.S1_at	PKD2	pyruvate dehydrogenase kinase, isozyme 2
Bt.8250.1.S1_at	---	Transcribed locus, strongly similar to NP_776612.1 secreted phosphoprotein 1 [Bo
Bt.8247.1.A1_at	LOC518364	similar to OHCU decarboxylase
Bt.8238.1.A1_at	TRIB3	tribbles homolog 3 (Drosophila)
Bt.8080.1.S1_at	LOC531018	similar to putative membrane steroid receptor
Bt.8024.2.S1_at	LOC541155	similar to myotubularin-related protein 1
Bt.7555.2.S1_at	SMAP1L	stromal membrane-associated protein 1-like
Bt.7449.1.A1_at	RFWD2	ring finger and WD repeat domain 2
Bt.7339.1.S1_at	LOC513110	amino acid transporter
Bt.7337.1.A1_at	LOC781512	similar to ARAP2
Bt.7237.2.S1_a_at	HADHA	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzy
Bt.7161.2.A1_at	MGC139542	Similar to spermatid perinuclear RNA-binding protein
Bt.7056.2.A1_at	HBG	Hemoglobin, gamma
Bt.7003.1.S1_at	LPXN	leupaxin
Bt.687.1.S1_at	MGC165904	similar to caspase recruitment domain family, member 11
Bt.6851.1.S1_at	B4GALT5	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
Bt.6805.2.S1_at	SMNDC1	survival motor neuron domain containing 1
Bt.6775.1.S1_at	ANXA3	annexin A3
Bt.6646.2.S1_a_at	LOC516199	similar to nuclear LIM interactor-interacting factor
Bt.6586.2.S1_at	LOC789485	similar to Notch3
Bt.6556.1.S1_at	LOC504773	regakine-1 protein
Bt.6523.2.S1_at	LOC613977	similar to TPA-induced transmembrane protein
Bt.6434.1.S1_at	LOC506267	hypothetical LOC506267
Bt.6410.2.A1_s_at	LOC505518	Similar to placenta expressed transcript protein
Bt.6408.1.S1_at	LOC506809	similar to transcription factor GATA-2
Bt.6068.3.S1_a_at	MGC142307	similar to topoisomerase (DNA) III alpha
Bt.605.1.S1_at	GDF8	growth differentiation factor 8
Bt.6048.2.S1_at	LOC532237	similar to pleckstrin and Sec7 domain containing 4
Bt.6028.2.S1_at	LOC514160	similar to ubiquitin ligase
Bt.6012.1.S1_at	TNNC1	troponin C type 1 (slow)
Bt.5789.1.S1_at	SPNS1	spinster homolog 1 (Drosophila)
Bt.5503.2.S1_at	NME4	non-metastatic cells 4, protein expressed in
Bt.5193.2.S1_at	LOC517002	similar to uteroferrin
Bt.5152.1.S1_at	FECH	ferrochelatase
Bt.5151.1.S1_at	EFNA2	ephrin-A2
Bt.5141.1.S2_at	B4GALT1	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1
Bt.5003.1.S1_at	EMCN	endomucin
Bt.4977.1.S1_at	IGF2R	insulin-like growth factor 2 receptor
Bt.4856.1.S1_at	IL1B	interleukin 1, beta
Bt.4811.3.A1_at	MGC166020	Similar to Rac3
Bt.4811.1.S1_at	MGC166020	similar to Rac3
Bt.4774.1.S2_at	GNAT1	guanine nucleotide binding protein (G protein), alpha transducing activity polyp
Bt.4772.2.S1_a_at	MGC154983	Similar to ataxin-1 ubiquitin-like interacting protein
Bt.468.1.S1_at	CFTR	cystic fibrosis transmembrane conductance regulator
Bt.4675.1.S1_a_at	MX1	myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mous
Bt.4653.1.S2_at	PECAM1	platelet/endothelial cell adhesion molecule
Bt.462.1.S1_at	PRKAR2B	protein kinase, cAMP-dependent, regulatory, type II, beta
Bt.4547.1.S1_at	NTT73	homolog of rat orphan transporter v7-3
Bt.4529.1.S1_at	FNTB	farnesyltransferase, CAAX box, beta
Bt.4477.2.S1_at	C2orf24	chromosome 2 open reading frame 24
Bt.4462.1.S1_at	MGC140564	similar to Type-1 angiotensin II receptor-associated protein (AT1 receptor-assoc
Bt.4430.1.S1_at	ATP6V0A1 /// LOC785923	ATPase, H+ transporting, lysosomal V0 subunit a1 /// similar to vacuolar H+-ATPase
Bt.4389.1.S1_at	LOC404103	spleen trypsin inhibitor
Bt.4360.1.S1_at	CYB561	cytochrome b-561
Bt.4336.1.S1_at	DF	D component of complement (adipsin)
Bt.4153.1.S1_at	DUSP12	dual specificity phosphatase 12
Bt.4147.1.S1_at	PDE6A	phosphodiesterase 6A, cGMP-specific, rod, alpha
Bt.4109.1.S1_at	LOC510024	similar to A-kinase anchor protein 13
Bt.3885.2.S1_at	LOC784768	similar to calcium-activated chloride channel
Bt.3763.1.S1_at	MGC138063	hypothetical LOC533158
Bt.376.1.S2_at	NPR3	natriuretic peptide receptor C
Bt.3753.2.S1_at	LOC534434	Similar to KIAA0614 protein
Bt.373.2.S1_a_at	AMELX /// AMELY	amelogenin (amelogenesis imperfecta 1, X-linked) /// amelogenin, Y-linked
Bt.3717.1.A1_at	ZFAND5	Zinc finger, AN1-type domain 5
Bt.3460.1.A1_at	SH3BGRL	SH3 domain binding glutamic acid-rich protein like
Bt.3451.1.A1_at	LOC787340	hypothetical protein LOC787340
Bt.3402.1.S1_at	MGC165864	similar to Katanin p80 (WD repeat containing) subunit B 1
Bt.3362.1.S1_at	LOC522886	similar to periplakin
Bt.3273.2.S1_at	MGC139254	hypothetical LOC510183
Bt.3258.2.S1_at	ZNF435	zinc finger protein 435
Bt.3253.3.S1_at	LOC617871	hypothetical LOC617871
Bt.3238.1.S1_at	FLJ36874	hypothetical protein LOC537453
Bt.3236.2.S1_at	LOC782247	similar to RhoGEF protein
Bt.3052.1.S1_at	LOC509972	Similar to Ocil/Clrb-like protein
Bt.29963.1.S1_at	FGD1	FYVE, RhoGEF and PH domain containing 1
Bt.29878.1.A1_at	GR-A	alpha-glucocorticoid receptor
Bt.29824.1.S1_s_at	BOLA	MHC class I heavy chain

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.29806.1.S1_at	LOC407113 /// LOC407991	growth hormone receptor
Bt.29793.1.A1_at	IGHG1	Immunoglobulin heavy constant gamma 1
Bt.29786.1.S1_x_at	---	Glutathione-S-transferase (GST) specific immunoglobulin light chain variable region
Bt.29778.1.A1_at	bTrappin-5	trappin 5
Bt.29760.1.A1_s_at	LOC507050	Similar to T-cell receptor beta chain variable segment
Bt.29757.1.A1_x_at	LOC783911	Hypothetical protein LOC783911
Bt.29741.1.A1_at	---	Immunoglobulin heavy chain mRNA, variable region, partial cds, 5' end
Bt.29735.1.S1_at	---	Immunoglobulin variable region
Bt.29718.2.A1_at	GHR	growth hormone receptor
Bt.29717.2.A1_a_at	GHR	growth hormone receptor
Bt.29695.1.A1_s_at	TRGV3-2	T cell receptor gamma variable 3-2
Bt.29686.1.S1_at	FGFR2	fibroblast growth factor receptor 2
Bt.29666.1.A1_at	MGC138924	similar to G protein-coupled receptor 128
Bt.29328.1.S1_at	ASPH	aspartate beta-hydroxylase
Bt.29290.1.S1_at	LOC525143	similar to PI-3-kinase-related kinase SMG-1
Bt.29277.1.S1_at	LRRCS1	leucine rich repeat containing 51
Bt.29152.2.A1_at	TSPAN12	tetraspanin 12
Bt.29143.1.S1_at	MGC139389	similar to B-cell CLL/lymphoma 11A
Bt.29025.1.A1_at	LOC523809	similar to KIAA1959 protein
Bt.28871.1.A1_at	MGC152152	Similar to GINS complex subunit 1 (Psf1 homolog)
Bt.28792.1.S1_at	---	CDNA clone IMAGE:8310187
Bt.28780.2.A1_at	LOC505234	similar to FYVE, RhoGEF and PH domain-containing protein 4 (Actin filament-bindi
Bt.28744.1.S1_at	MGC157238	similar to mFLJ00316 protein
Bt.28667.2.S1_at	MGC159992	similar to Armadillo repeat-containing protein 6
Bt.28625.1.S1_at	LOC538219	similar to ARHGAP26 protein
Bt.28605.1.S1_at	MGC148293	similar to phospholipase inhibitor
Bt.28604.2.S1_a_at	MGC137499	hypothetical LOC511775
Bt.28494.7.A1_x_at	LOC524810	IgM
Bt.28459.1.S1_at	BMP4	bone morphogenetic protein 4
Bt.28446.1.S1_at	BVd1.25 /// LOC613744 /// LOC786775	T cell receptor delta chain variable region /// hypothetical LOC613744 /// hypot
Bt.28444.1.S1_at	LOC617281	similar to T-cell receptor beta chain variable segment
Bt.28438.2.S1_at	RGS13	regulator of G-protein signaling 13
Bt.28338.1.S1_at	MGC166160	hypothetical LOC514617
Bt.28313.1.S1_at	LOC512905	similar to CDNA sequence BC085284
Bt.28252.2.S1_a_at	LOC525379	similar to syntaxin 10
Bt.28225.2.S1_at	SAMSN1	SAM domain, SH3 domain and nuclear localization signals 1
Bt.28191.2.S1_at	LOC511230	similar to DENN/MADD domain containing 1C
Bt.28172.2.A1_at	VSIG1	V-set and immunoglobulin domain containing 1
Bt.28022.1.A1_s_at	BOLA-NC1	Non-classical MHC class I antigen
Bt.27983.1.S1_at	BMPRI3	bone morphogenetic protein receptor IB
Bt.27979.1.A1_at	cd4	CD4 antigen
Bt.27978.1.S1_at	ITGAM	integrin, alpha M (complement component 3 receptor 3 subunit)
Bt.27976.1.A1_at	TIMP1	TIMP metalloproteinase inhibitor 1
Bt.27974.1.A1_at	LOC407094	similar to heregulin-beta1
Bt.27866.1.A1_at	LOC508591	similar to myo-inositol oxygenase
Bt.27852.2.S1_at	PGPEP1	pyroglutamyl-peptidase I
Bt.27838.2.S1_a_at	LOC513374 /// MGC152326	similar to PHLDB3 protein /// similar to Pleckstrin homology-like domain family
Bt.27826.1.S1_at	RASGEF1B	RasGEF domain family, member 1B
Bt.27790.1.A1_at	MGC148413	Similar to dynactin 1 p150
Bt.27757.1.S1_at	LOC513513	similar to chitinase
Bt.27720.1.A1_at	Oasl	2'-5' oligoadenylate synthetase-like protein
Bt.27621.1.A1_at	MGC155048	similar to autoantigen
Bt.27616.1.A1_at	LOC541035	similar to zinc-finger protein of the cerebellum 3
Bt.27605.1.A1_at	MGC160064	similar to Potassium inwardly-rectifying channel, subfamily J, member 15
Bt.27538.1.A1_at	LOC509789	hypothetical LOC509789
Bt.27517.2.A1_at	LOC515764	similar to Pancreatic triacylglycerol lipase precursor (Pancreatic lipase) (PL)
Bt.27460.1.A1_at	LOC538665	similar to MAGEL2 protein
Bt.27442.1.S1_at	LOC535260	similar to AASA9217
Bt.27419.1.S1_at	SOX2	SRY (sex determining region Y)-box 2
Bt.27400.1.S1_at	PCDHA13	protocadherin alpha 13
Bt.2737.1.S1_at	MGC127744	similar to Carbonic anhydrase III (Carbonate dehydratase III) (CA-III)
Bt.27339.2.S1_at	LOC536741	similar to Mme protein
Bt.27338.1.S1_at	MGC139028	hypothetical LOC508965
Bt.27320.2.S1_at	LOC532412	similar to Shugoshin-like 2 (S. pombe)
Bt.27313.1.A1_at	CSPG5	chondroitin sulfate proteoglycan 5 (neuroglycan C)
Bt.27311.1.A1_at	GPR173	G protein-coupled receptor 173
Bt.27208.2.S1_at	AGPAT3	1-acylglycerol-3-phosphate O-acyltransferase 3
Bt.27163.1.A1_at	LOC784144	hypothetical protein LOC784144
Bt.26990.2.S1_at	LOC517833 /// LOC788103	similar to TWEAK
Bt.26968.1.S1_at	LOC518168	similar to VESPR
Bt.26929.1.S1_at	TUBGCP5	tubulin, gamma complex associated protein 5
Bt.26874.1.S1_at	DKFZP761E198	hypothetical protein LOC509087
Bt.26851.1.S1_at	DRAM	damage-regulated autophagy modulator
Bt.26690.1.S1_at	MGC148790	similar to CDC-like kinase 1
Bt.26613.1.A1_at	LOC615530	hypothetical LOC615530
Bt.2659.1.A1_at	LOC618375	similar to Fanconi anemia, complementation group A
Bt.26570.1.S1_at	LOC513885	similar to Chromosome 12 open reading frame 26
Bt.26545.1.A1_at	LOC536269	similar to methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2-like
Bt.26428.1.A1_at	MGC137752	similar to Y5F3AM.9
Bt.26309.1.A1_at	LOC781881	hypothetical protein LOC781881
Bt.26254.1.A1_at	LOC505383	similar to chapsyn-110
Bt.26235.1.A1_at	ELMO1	Engulfment and cell motility 1
Bt.26192.1.A1_at	LOC534164	similar to SLIT2
Bt.26155.1.A1_at	NPL	N-acetylneuraminatase pyruvate lyase (dihydrodipicolinate synthase)
Bt.26077.1.A1_at	NRXN3	neurexin 3
Bt.26046.1.A1_at	LOC507731	similar to cdc25 protein
Bt.2598.1.S1_at	ALOX15	arachidonate 15-lipoxygenase

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Bt.25880.1.A1_at	LOC537141	similar to mKIAA1921 protein
Bt.25874.3.S1_a_at	MST1	macrophage stimulating 1 (hepatocyte growth factor-like)
Bt.25874.2.S1_at	MST1	macrophage stimulating 1 (hepatocyte growth factor-like)
Bt.25846.1.A1_at	LOC525946	similar to Ephrin type-A receptor 1 precursor (Tyrosine-protein kinase receptor
Bt.25789.1.A1_at	LOC785219	Similar to Mono (ADP-ribosyl)transferase
Bt.25767.1.S1_at	LOC527517	similar to putative G protein-coupled receptor
Bt.25743.1.A1_at	UOX	urate oxidase
Bt.25690.1.S1_at	MGC45404	mitogen-activated protein kinase kinase kinase 7 interacting protein 3
Bt.25668.1.S1_at	MGC128628	similar to F37C4.6
Bt.25662.1.A1_at	MTG1	mitochondrial GTPase 1 homolog (<i>S. cerevisiae</i>)
Bt.256.1.S1_at	PAG4	pregnancy-associated glycoprotein 4
Bt.25587.1.A1_at	MGC157389	similar to SERPIN2 protein
Bt.25576.1.A1_at	LOC615880	similar to KIAA1910 protein
Bt.25550.1.A1_at	LOC534284	similar to senataxin
Bt.25422.1.A1_at	AP1G2	Adaptor-related protein complex 1, gamma 2 subunit
Bt.25404.2.S1_at	LOC531254	similar to alpha 1 type XXIV collagen
Bt.25393.1.A1_at	GABRA1	gamma-aminobutyric acid (GABA) A receptor, alpha 1
Bt.25374.1.A1_at	LOC789280	hypothetical protein LOC789280
Bt.25320.1.S1_at	SCRN3	secernin 3
Bt.25031.1.S1_at	LOC528870	similar to neuron navigator 3
Bt.25030.1.A1_a_at	MGC152009	similar to transmembrane 9 superfamily member 2
Bt.25008.1.A1_at	LOC534053	Similar to laminin B2
Bt.24997.1.S1_at	---	Transcribed locus, strongly similar to XP_996409.1 PREDICTED: similar to CG4502-
Bt.24884.1.A1_a_at	LOC511847	similar to GMCSFR receptor
Bt.24849.1.A1_at	FLAD1	FAD1 flavin adenine dinucleotide synthetase homolog (<i>S. cerevisiae</i>)
Bt.248.1.S1_at	CD38	CD38 molecule
Bt.24783.2.S1_at	LOC504869	similar to FRAP-related protein
Bt.24694.1.A1_at	LOC511689	Similar to KIAA1237 protein
Bt.24598.1.A1_at	MGC137508	similar to CG10053-PA
Bt.24583.1.A1_at	MGC157094	similar to NG7
Bt.24512.1.A1_at	LOC538746	similar to Membrane-associated transporter protein (Solute carrier family 45 mem
Bt.24467.1.S1_at	MGC128573	similar to radical S-adenosyl methionine domain containing 2
Bt.24318.1.A1_at	SLC22A9	solute carrier family 22 (organic anion/cation transporter), member 9
Bt.24288.2.S1_at	LOC513059	similar to ATP(GTP)-binding protein
Bt.24225.1.S1_at	---	Clone NG010006B11A03 mRNA, complete sequence
Bt.24133.1.A1_at	---	Transcribed locus, strongly similar to NP_777000.1 phosphoinositide-3-kinase, re
Bt.24098.1.A1_at	LOC535490	similar to melanoma differentiation associated protein-5
Bt.23912.1.A1_a_at	CYP2E1	cytochrome P450 subfamily IIE polypeptide 1
Bt.23775.1.A1_at	LOC520530	similar to HIC protein isoform p32
Bt.23729.1.A1_at	PLAC8	placenta-specific 8
Bt.23559.1.S1_at	TPK1	thiamin pyrophosphokinase 1
Bt.23523.2.S1_at	TUSC5	tumor suppressor candidate 5
Bt.23503.2.S1_a_at	DOM3Z	DOM-3 homolog Z
Bt.234.1.S1_at	IL18	interleukin 18 (interferon-gamma-inducing factor)
Bt.23355.1.S1_at	LOC615191	similar to protein tyrosine phosphatase-like protein PTPLA
Bt.2333.1.S1_at	LOC618893	similar to JNK MAP kinase scaffold protein JIP2
Bt.23055.3.S1_at	DLG5	discs, large homolog 5 (<i>Drosophila</i>)
Bt.22978.1.S1_at	IFITM1	interferon induced transmembrane protein 1 (9-27)
Bt.22832.1.S1_at	LOC513951	hypothetical LOC513951
Bt.22773.2.S1_at	SLC25A19	solute carrier family 25 (mitochondrial thiamine pyrophosphate carrier), member
Bt.22770.1.S1_at	LOC511229	similar to CARD8 protein
Bt.22768.1.A1_at	LOC781282	similar to polydom
Bt.22739.2.S1_at	SOCS4	suppressor of cytokine signaling 4
Bt.22726.3.S1_a_at	MGC157244	similar to Carbonic anhydrase-related protein (CARP) (CA-VIII)
Bt.22715.1.A1_at	ROPN1L	ropporin 1-like
Bt.227.3.A1_x_at	GSTA1	glutathione S-transferase A1
Bt.22692.1.A1_at	IL6R	interleukin 6 receptor
Bt.22647.3.A1_at	LOC532952	similar to membrane-associated guanylate kinase-related 3 (MAGI-3)
Bt.22629.1.A1_at	LOC515053	hypothetical LOC515053
Bt.22430.1.A1_at	CYBB	cytochrome b-245, beta polypeptide
Bt.22410.2.S1_at	ARF3	ADP-ribosylation factor 3
Bt.22285.2.S1_at	LSS	lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase)
Bt.22279.1.S1_at	LOC614739	hypothetical LOC614739
Bt.22264.1.S1_at	MGC140699	similar to p53-induced protein
Bt.22234.1.S1_at	LOC505901	similar to protein kinase C-theta
Bt.22119.1.S1_at	E2F1	E2F transcription factor 1
Bt.22058.1.A1_at	MGC151596	Similar to hect domain and RLD 5
Bt.22056.1.S1_a_at	MGC127615	similar to abhydrolase domain containing 1 (predicted)
Bt.21943.1.S1_at	LOC524460	similar to UDP-Gal:glucosylceramide beta-1,4-galactosyltransferase
Bt.21924.2.S1_at	LOC535975	similar to dermatan/chondroitin sulfate 2-sulfotransferase
Bt.21914.1.S1_at	LOC785293	similar to actin-binding protein
Bt.21845.1.S1_at	LOC614141	hypothetical LOC614141
Bt.2179.1.S1_at	MGC166009	similar to KIAA0360
Bt.21766.1.A1_at	MLF1	Myeloid leukemia factor 1
Bt.2172.1.S1_at	LOC510736	similar to HEPH
Bt.21706.2.A1_a_at	MGC152081	similar to carboxypeptidase A5
Bt.21673.1.S1_at	CSNK1E	casein kinase 1, epsilon
Bt.21672.1.S1_at	---	Transcribed locus, moderately similar to XP_993763.1 PREDICTED: hypothetical pro
Bt.21662.2.S1_at	ATP6V0E2	ATPase, H+ transporting V0 subunit e2
Bt.21658.1.S1_at	MGC139070	similar to inositol 1,4,5-trisphosphate 3-kinase C
Bt.21467.1.S1_at	MGC129017	similar to Conserved oligomeric Golgi complex component 4
Bt.21420.1.A1_at	LOC505228	Similar to thyroid hormone receptor associated protein 3
Bt.21366.1.A1_at	MGC166108	similar to GUF1 GTPase homolog (<i>S. cerevisiae</i>)
Bt.21354.1.A1_at	LOC514036	Similar to GDNF family receptor alpha 2 preproprotein
Bt.21300.1.S1_at	LOC513253	hypothetical LOC513253
Bt.21177.1.A1_s_at	LOC511229	similar to CARD8 protein
Bt.21113.1.S1_a_at	CPT1B	carnitine palmitoyltransferase 1B
Bt.20921.1.A1_at	BSG	basigin
Bt.209.2.S1_a_at	LYZ /// LYZ2 /// LYZ3	lysozyme C-2 /// lysozyme 3 /// lysozyme (renal amyloidosis)
Bt.20860.3.A1_at	MGC165794	similar to calcyphosine-like
Bt.20850.2.A1_at	LOC520186	similar to centrosomal protein 110kDa

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.20836.1.S1_at	LOC783547	similar to mannose receptor C1
Bt.20833.3.A1_at	MGC140213	hypothetical LOC534327
Bt.20833.1.S1_at	MGC140213	hypothetical LOC534327
Bt.20817.2.S1_at	POLA1	polymerase (DNA directed), alpha
Bt.20799.3.A1_at	DOCK1	dedicator of cytokinesis 1
Bt.20733.1.S1_at	LOC532836	similar to Adenosylhomocysteinase 3
Bt.20613.3.S1_at	BCAR3	breast cancer anti-estrogen resistance 3
Bt.20521.2.S1_at	LOC510910	similar to leukocyte differentiation antigen CD84
Bt.20520.1.S1_at	LOC506858	similar to Solute carrier family 25 (mitochondrial carrier; dicarboxylate transp
Bt.20416.1.S1_at	LOC524959	similar to transporter 1 ATP-binding cassette sub-family B
Bt.20381.1.A1_at	F2R	coagulation factor II (thrombin) receptor
Bt.20318.2.S1_at	NQO2	NAD(P)H dehydrogenase, quinone 2
Bt.20219.3.S1_at	LOC504724	similar to phosphatidylinositol glycan class T
Bt.20131.1.S1_at	MGC151555	similar to fatty acid desaturase domain family, member 6
Bt.20015.1.S1_at	CART	cocaine and amphetamine responsive transcript
Bt.20005.1.S1_at	LOC513482	putative oxidoreductase
Bt.20003.1.A1_at	TAT	tyrosine aminotransferase
Bt.19972.1.S1_at	PEPT1	proton-dependent gastrointestinal peptide transporter 1
Bt.19899.1.A1_at	HGD	homogentisate 1,2-dioxygenase (homogentisate oxidase)
Bt.19825.1.S1_at	LOC510467	similar to UDP glucuronosyltransferase 2 family, polypeptide B4
Bt.19790.1.A1_at	TRIM22	tripartite motif-containing 22
Bt.19647.2.S1_at	LOC529062	similar to Ankyrin repeat domain-containing protein 28
Bt.19620.1.A1_at	LOC508348 /// LOC781857	similar to Interferon-induced protein 44 (Antigen p44) (Non-A non-B hepatitis-as
Bt.1948.1.S1_at	MAEA	macrophage erythroblast attachor
Bt.1945.1.A1_at	LOC537451	similar to glycogen synthase
Bt.19408.1.A1_at	MGC148776	Hypothetical LOC535746
Bt.19305.1.A1_at	MGC139794	Similar to Transmembrane protein 17
Bt.19111.1.A1_at	MGC152108	similar to zinc finger protein 211
Bt.19083.1.S1_at	ANKRD22	ankyrin repeat domain 22
Bt.19028.1.A1_at	trp6	Transient receptor potential channel 6
Bt.19001.1.S1_at	MT-2	metallothionein-2
Bt.18918.1.S1_at	SEC22C	SEC22 vesicle trafficking protein homolog C (S. cerevisiae)
Bt.18895.1.A1_at	---	Transcribed locus, strongly similar to NP_001028686.1 G protein-coupled receptor
Bt.18860.1.A1_at	LOC531875	similar to protocadherin 10
Bt.18837.2.A1_at	LOC512304	similar to ENPP5
Bt.18827.1.A1_at	LOC529195	similar to PYRIN
Bt.18750.1.A1_at	LOC540473	similar to Achaete-scute complex homolog 1 (Drosophila)
Bt.18739.1.A1_at	MGC134379	Similar to serine active site containing 1
Bt.18710.2.A1_at	---	Transcribed locus, strongly similar to NP_056629.1 dickkopf homolog 3 [Mus muscu
Bt.18639.2.S1_at	FBXO32	F-box protein 32
Bt.18557.1.S1_at	C7	complement component 7
Bt.18526.1.A1_at	LOC617176	Hypothetical LOC617176
Bt.18476.1.A1_at	IRF5	interferon regulatory factor 5
Bt.18473.1.S1_at	MGC142910	similar to CSaids binding protein
Bt.18444.1.A1_at	LOC538492	Hypothetical LOC538492
Bt.18440.3.A1_at	LOC510382	hypothetical LOC510382
Bt.18426.1.A1_s_at	---	Transcribed locus, moderately similar to NP_001005369.1 mitochondrial translatio
Bt.18316.2.S1_at	LOC513587	similar to Adult retina protein
Bt.18292.1.A1_at	LOC616277	similar to MOK protein kinase
Bt.18116.3.A1_s_at	LOC513185	hypothetical LOC513185
Bt.18114.1.A1_at	---	Transcribed locus, strongly similar to NP_803474.1 uridine monophosphate synthet
Bt.18080.3.A1_at	LOC509794	similar to TESC protein
Bt.17994.2.A1_at	CENPO	Centromere protein O
Bt.17898.1.A1_at	LOC613821	similar to aster-associated protein
Bt.17878.1.A1_at	---	Transcribed locus, strongly similar to NP_001070405.1 hypothetical protein LOC61
Bt.17868.1.A1_at	LOC506859	similar to KIAA1588 protein
Bt.17854.1.A1_at	POU2AF1	POU class 2 associating factor 1
Bt.17805.1.S1_at	NUDT12	nudix (nucleoside diphosphate linked moiety X)-type motif 12
Bt.17758.1.S1_at	LOC541088 /// LOC784529	similar to BCL-6 corepressor
Bt.17754.1.A1_at	LOC515491	Similar to KIAA1412 protein
Bt.17731.2.S1_at	MGC148584	Similar to KIAA0843 protein
Bt.17701.1.A1_at	ZFP2	zinc finger protein 2 homolog
Bt.17685.1.A1_at	MGC133676	hypothetical LOC504348
Bt.17682.1.A1_s_at	LOC514596	similar to Chromosome 3 open reading frame 29
Bt.17594.1.S1_at	WDR5	WD repeat domain 5
Bt.17585.1.S2_at	ST3GAL-V	alpha2,3-sialyltransferase
Bt.17479.1.A1_at	MGC133968	similar to calcium-binding tyrosine-phosphorylation regulated protein
Bt.17468.1.A1_at	---	Transcribed locus, moderately similar to NP_694591.1 tudor domain containing 9 [
Bt.17311.2.S1_at	RP2	retinitis pigmentosa 2 (X-linked recessive)
Bt.17295.1.A1_at	LOC524465	Similar to CG9003-PA
Bt.17265.2.S1_at	NR1H3	nuclear receptor subfamily 1, group H, member 3
Bt.17227.1.A1_at	LOC532564	Similar to leishmanolysin-like (metallopeptidase M8 family)
Bt.17116.1.A1_at	LOC507749	similar to Complement component C6 precursor
Bt.16997.1.A1_at	LOC790043	Hypothetical protein LOC790043
Bt.16924.1.A1_at	SEPP1	selenoprotein P, plasma, 1
Bt.16838.1.S1_at	LOC512905	similar to CDNA sequence BC085284
Bt.16782.2.S1_at	MGC143433	similar to adenylosuccinate synthetase
Bt.16689.2.A1_at	LOC538447	Similar to serine/threonine kinase
Bt.16668.1.A1_at	TRIM45	tripartite motif-containing 45
Bt.16666.1.A1_at	LOC519739	hypothetical LOC519739
Bt.16495.2.A1_at	LOC511602	similar to alpha-5 type IV collagen
Bt.16481.2.A1_at	---	Transcribed locus, weakly similar to XP_001496051.1 PREDICTED: similar to zinc f
Bt.16450.2.A1_at	LOC540735	Similar to Protein KIAA0853
Bt.16350.1.S1_at	MGC142842	Similar to guanylate-binding protein 5
Bt.16331.1.S1_at	PDHB	Pyruvate dehydrogenase (lipoamide) beta
Bt.16291.1.A1_at	TEX12	testis expressed 12
Bt.16175.1.A1_at	LOC536187	similar to cytoplasmic activation/proliferation-associated protein 2
Bt.16119.1.S1_at	MGC157040	hypothetical LOC513646
Bt.1607.2.S1_at	LOC526310	similar to KIAA0722 protein
Bt.16046.1.A1_at	LOC532798	similar to Chromosome 1 open reading frame 96

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.16016.1.S1_at	P2RX5	purinergic receptor P2X, ligand-gated ion channel, 5
Bt.160.3.S1_a_at	DSC1	desmocollin 1
Bt.15987.1.S1_at	LOC784833 /// PAG19	pregnancy-associated glycoprotein 19 /// similar to pregnancy-associated glycop
Bt.15887.1.S1_at	LOC509076	hypothetical LOC509076
Bt.15836.2.S1_at	ANKRD1	ankyrin repeat domain 1 (cardiac muscle)
Bt.15797.1.S1_at	LOC507834	Hypothetical LOC507834
Bt.15788.3.S1_at	LOC507402	Similar to Bone marrow stromal cell antigen 2
Bt.15736.1.S1_at	LOC512972	similar to Histocompatibility (minor) HA-1
Bt.15653.1.S1_at	DSC2	desmocollin 2
Bt.1525.1.S1_at	Aqp1	aquaporin 1
Bt.152.1.S1_at	LOC282685	rhesus-like protein
Bt.14734.2.A1_at	MGC137099	hepatitis A virus cellular receptor 1 N-terminal domain containing protein
Bt.14568.1.A1_at	LOC508264	similar to afamin
Bt.145.1.S1_at	RGS9	regulator of G-protein signaling 9
Bt.14266.1.A1_a_at	LOC514509	similar to Agmatine ureohydrolase (agmatinase)
Bt.14238.1.A1_at	CRYAA	crystallin, alpha A
Bt.14153.1.S1_at	LOC407121	nebulin
Bt.13974.1.A1_at	LOC617055	similar to BANK
Bt.13968.2.S1_at	---	Transcribed locus, strongly similar to XP_989204.1 PREDICTED: similar to phospho
Bt.13940.1.S1_at	LOC535138	similar to CDC91 cell division cycle 91-like 1 (S. cerevisiae)
Bt.13850.3.S1_a_at	LYPLA1	lysophospholipase I
Bt.13807.1.S1_at	SART1	squamous cell carcinoma antigen recognized by T cells
Bt.13798.2.S1_at	LOC615685	hypothetical LOC615685
Bt.13651.1.S1_at	LOC504822	similar to aminopeptidase P
Bt.13629.1.A1_at	MGC139474	similar to Inward rectifier potassium channel 16 (Potassium channel, inwardly re
Bt.13624.2.S1_at	FBXO15	F-box protein 15
Bt.13617.2.S1_a_at	MGC139118	similar to RIKEN cDNA 2810451A06
Bt.1344.1.S1_at	MGC140553	similar to Iron-responsive element binding protein 1 (IRE-BP 1) (Iron regulatory
Bt.13434.3.A1_at	MKRN1	Makorin, ring finger protein, 1
Bt.13428.1.S1_at	FBP2	fructose-1,6-bisphosphatase 2
Bt.134.1.S1_at	EPB42	erythrocyte membrane protein band 4.2
Bt.1332.1.S1_a_at	LOC511440	hypothetical LOC511440
Bt.13147.1.S1_at	B4GALT5	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
Bt.13114.1.S1_at	TTPA	tocopherol (alpha) transfer protein
Bt.13106.1.A1_at	F9	coagulation factor IX
Bt.13079.1.S1_at	MYOG	myogenin (myogenic factor 4)
Bt.13069.3.A1_at	CACNA1D	calcium channel, voltage-dependent, L type, alpha 1D
Bt.13065.1.S1_at	KCNJ8	potassium inwardly-rectifying channel, subfamily J, member 8
Bt.13051.1.S1_at	POLR1B	polymerase (RNA) I polypeptide B
Bt.13031.1.A1_at	MTR	5-methyltetrahydrofolate-homocysteine methyltransferase
Bt.12938.1.S1_at	NRXN3	neurexin 3
Bt.12904.2.S1_at	LOC506290	Hypothetical LOC506290
Bt.12902.1.S1_at	MGC165678	similar to ZNF304 protein
Bt.12783.1.A1_at	PDC	phosducin
Bt.12641.2.S1_at	PLVAP	plasmalemma vesicle associated protein
Bt.126.1.S2_at	KCNJ2	potassium inwardly-rectifying channel, subfamily J, member 2
Bt.12589.1.S1_at	LOC532965	similar to alpha3A chain laminin
Bt.12574.2.S1_at	LOC508320	similar to serine/threonine kinase 19
Bt.12452.1.A1_at	LOC536143	similar to GCN1 general control of amino-acid synthesis 1-like 1
Bt.12345.2.S1_at	LOC506730	similar to microfilament and actin filament cross-linker protein
Bt.12261.2.S1_at	C20orf13	taspace 1
Bt.12196.1.S1_at	cd45	membrane tyrosine phosphatase
Bt.12186.1.S1_at	INSL3	insulin-like 3 (Leydig cell)
Bt.11907.1.A1_at	MCPH1	microcephalin 1
Bt.11759.1.A1_at	PAX6	paired box 6
Bt.11590.1.A1_at	COL11A1	collagen, type XI, alpha 1
Bt.11459.2.A1_at	MGC152256	Similar to CG16790-PA
Bt.11455.1.A1_at	LOC505600 /// LOC782675 /// UTP14C	UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast) /// similar to UT
Bt.1140.1.S1_at	MGC166188	similar to Non-metastatic cells 3, protein expressed in
Bt.11315.2.S1_at	LOC538958 /// LOC790188	similar to NCAG1
Bt.11262.1.S1_at	PEG3	paternally expressed 3
Bt.11218.1.S1_at	LRRC25	leucine rich repeat containing 25
Bt.11174.1.S1_at	KIR2DL1	killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1
Bt.11167.1.S1_at	LOC505935	hypothetical LOC505935
Bt.11152.1.S1_at	LOC785246	similar to SAMD1 protein
Bt.11130.1.S1_at	DNMT1	DNA (cytosine-5-)-methyltransferase 1
Bt.11103.2.S1_at	LOC505541	similar to Ras-interacting protein 1
Bt.11080.1.S1_at	IL2RG	interleukin 2 receptor, gamma
Bt.1106.1.S1_at	MGC128574	similar to hsp70-interacting protein
Bt.10981.1.A1_at	MGC128728	similar to RNA polymerase I associated factor 53
Bt.10811.1.S1_at	MAPRE3	microtubule-associated protein, RP/EB family, member 3
Bt.10543.1.S1_at	LOC784675	Similar to KIAA1462 protein
Bt.1047.1.S1_at	LOC508291	similar to Huntingtin-interacting protein 1-related protein (Hip1-related) (Hip
Bt.10144.1.A1_s_at	MGC142564	similar to T-lymphoma invasion and metastasis inducing protein 1 (TIAM1 protein)
Bt.10102.2.S1_a_at	CCDC84 /// LOC785267	coiled-coil domain containing 84 /// similar to DLNB14
Bt.10089.1.S1_at	MGC152258	hypothetical LOC535263
Bt.9849.1.A1_at	LOC508470	hypothetical LOC508470
Bt.9745.1.A1_at	LOC507464	similar to keratin 15
Bt.9576.3.S1_at	COMMD4	COMM domain containing 4
Bt.9564.1.S1_at	LYPLA3	lysophospholipase 3 (lysosomal phospholipase A2)
Bt.8946.2.S1_a_at	SLCO1A2	solute carrier organic anion transporter family, member 1A2
Bt.8798.1.S1_at	LOC507093 /// LOC534200	similar to retinaldehyde dehydrogenase 3 /// similar to aldehyde dehydrogenase 6
Bt.8797.1.S1_at	MGC139675	similar to Rap1 GTPase-activating protein 1 (Rap1GAP)
Bt.8451.2.S1_at	MMAB	methylmalonic aciduria (cobalamin deficiency) cblB type
Bt.8427.1.S1_at	LOC537594	similar to phosphatase and actin regulator 1
Bt.8166.2.S1_at	CXXC5	CXXC finger 5

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Bt.8144.1.S1_at	XCL1	chemokine (C motif) ligand 1
Bt.800.1.S1_at	MAPK13	mitogen-activated protein kinase 13
Bt.7919.1.A1_at	FXYD7	FXYD domain containing ion transport regulator 7
Bt.7873.1.S2_at	LU	Lutheran blood group (Auberger b antigen included)
Bt.7873.1.S1_at	LU	Lutheran blood group (Auberger b antigen included)
Bt.748.2.A1_at	POLR2J2	DNA directed RNA polymerase II polypeptide J-related gene
Bt.744.1.S1_at	ARID5A	AT rich interactive domain 5A (MRF1-like)
Bt.7346.1.S1_at	LOC507464	similar to keratin 15
Bt.7220.1.S1_at	BLA-DQB	MHC class II antigen
Bt.7056.5.A1_x_at	HBG ///	hemoglobin, gamma ///
Bt.701.1.S1_at	LOC788610	hemoglobin, gamma 2
Bt.6897.1.S1_at	LOC788007	similar to Fibronectin leucine rich transmembrane protein 1
Bt.6897.1.S1_at	LOC504848	similar to adaptor molecule-1
Bt.6702.1.S1_at	LOC538659	hypothetical LOC538659
Bt.6685.1.S1_at	MGC142685	similar to Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase,
Bt.6653.1.S1_at	ALKBH4	AlkB, alkylation repair homolog 4
Bt.6141.1.S1_at	DES	desmin
Bt.5951.1.S1_at	LOC512922	similar to SplA/ryanodine receptor domain and SOCS box containing 4
Bt.5934.1.S1_at	---	Transcribed locus, strongly similar to NP_002488.1 NIMA (never in mitosis gene a
Bt.5919.2.S1_at	GDAP1L1	ganglioside-induced differentiation-associated protein 1-like 1
Bt.5848.2.S1_at	ATP2A1	ATPase, Ca++ transporting, cardiac muscle, fast twitch 1
Bt.55.1.S1_at	PDE6B	phosphodiesterase 6B, cGMP-specific, rod, beta (congenital stationary night blin
Bt.5488.1.S1_at	LOC514313	similar to phosphofurin acidic cluster sorting protein 1
Bt.5427.1.A1_at	SCG2	secretogranin II (chromogranin C)
Bt.538.1.S1_at	IL3	interleukin 3
Bt.537.1.S1_at	CRYGD	crystallin, gamma D
Bt.5348.1.S1_at	H19 ///	hypothetical LOC511905 ///
Bt.5348.1.S1_at	LOC511905	H19, imprinted maternally expressed untranslated mRNA
Bt.508.1.A1_at	SPP2	secreted phosphoprotein 2, 24kDa
Bt.5050.1.A1_at	CDH16	cadherin 16, KSP-cadherin
Bt.5014.1.S1_at	FGFR1	fibroblast growth factor receptor 1
Bt.501.1.S1_at	CHRM3	cholinergic receptor, muscarinic 3
Bt.5003.2.S1_a_at	EMCN	endomucin
Bt.49.1.S1_at	TNFSF5	tumor necrosis factor (ligand) superfamily, member 5
Bt.4867.2.S1_at	MYH8	myosin, heavy chain 8, skeletal muscle, perinatal
Bt.4804.3.A1_at	CDKN1C	cyclin-dependent kinase inhibitor 1C
Bt.4799.1.S1_at	SLC4A1	solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein
Bt.4751.2.S1_at	BOLA-DQA2	major histocompatibility complex, class II, DQ alpha 2
Bt.4665.1.S1_at	GLYCAM1	glycosylation-dependent cell adhesion molecule 1
Bt.4662.1.S1_at	NOS3	nitric oxide synthase 3 (endothelial cell)
Bt.4536.1.S1_at	---	Transcribed locus, strongly similar to XP_606704.2 PREDICTED: similar to FLJ0010
Bt.4447.3.A1_at	CYP19	Cytochrome P450, family XIX (conversion of androgen to estrogen), aromatase
Bt.4303.1.S1_at	ADA	adenosine deaminase
Bt.4208.1.S1_at	IL8RB	interleukin 8 receptor, beta
Bt.4060.2.A1_at	LOC782642 ///	mal, T-cell differentiation protein ///
Bt.4060.2.A1_at	MAL	mal, T-cell differentiation protein // similar to Mal, T-cell differentiation p
Bt.37.2.A1_at	LHCGR	luteinizing hormone/choriogonadotropin receptor
Bt.3554.1.S1_at	LOC529049	similar to mannose receptor, C type 2
Bt.350.1.S1_at	BLA-DQB	MHC class II antigen
Bt.3307.1.A1_at	NDP	Norrie disease (pseudoglioma)
Bt.3282.1.S1_at	MGC126924	similar to dipeptidase 1 (renal)
Bt.3046.2.S1_at	FCNB	ficolin B
Bt.29884.1.S1_at	st6GalNAc-VI	beta-galactosamide alpha-2,6-sialyltransferase
Bt.29873.1.S1_at	MEST	mesoderm specific transcript homolog (mouse)
Bt.29856.1.S1_at	GNG7	guanine nucleotide binding protein (G protein), gamma 7
Bt.29853.1.S1_at	LOC407121	nebulin
Bt.29851.1.S1_at	BLA-DQB	MHC class II antigen
Bt.29838.1.A1_at	GlyT-1Ab	glycine transporter
Bt.29828.1.A1_at	---	Immunoglobulin light chain variable region
Bt.29813.1.S1_at	---	Hybridoma BL2C7 immunoglobulin heavy chain variable region
Bt.29813.1.A1_at	---	Hybridoma BL2C7 immunoglobulin heavy chain variable region
Bt.29811.1.A1_at	---	Hybridoma BL5H4 immunoglobulin heavy chain variable region
Bt.29788.1.S1_at	SIAT1	Sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase)
Bt.29786.1.A1_at	---	Glutathione-S-transferase (GST) specific immunoglobulin light chain variable reg
Bt.29765.1.S1_at	LOC505349	similar to TCRVB17
Bt.29758.1.S1_x_at	LOC506453 ///	similar to T-cell receptor beta chain V region C5 precursor ///
Bt.29758.1.S1_x_at	LOC514734 ///	hypothetical LOC
Bt.29758.1.S1_x_at	LOC613323 ///	
Bt.29758.1.S1_x_at	LOC613361 ///	
Bt.29758.1.S1_x_at	LOC617183 ///	
Bt.29758.1.S1_x_at	LOC783357	
Bt.29677.1.S1_at	OPTC	opticin
Bt.29389.1.S1_at	---	Transcribed locus, weakly similar to XP_942890.1 PREDICTED: similar to SET domai
Bt.2933.1.S1_at	LOC788205	hypothetical protein LOC788205
Bt.2927.1.A1_at	C20orf55	chromosome 20 open reading frame 55
Bt.29144.1.S1_at	CLRN3	Clarin 3
Bt.29099.1.S1_at	MGC152111	Hypothetical LOC507206
Bt.29011.1.A1_at	BCKDHA	branched chain keto acid dehydrogenase E1, alpha polypeptide
Bt.29000.1.S1_at	LOC539158	similar to HATH1
Bt.28983.1.A1_a_at	LOC515285	similar to Centrosomal protein 76kDa
Bt.28774.1.A1_at	EIF1	eukaryotic translation initiation factor 1
Bt.28742.1.S1_at	MGC155102	similar to Probable transcription factor CST (Castor-related protein)
Bt.28717.1.S1_at	USF1	upstream transcription factor 1
Bt.28534.2.S1_at	MGC142714	similar to pleckstrin 2
Bt.28518.1.S1_s_at	LOC404103 ///	spleen trypsin inhibitor ///
Bt.28518.1.S1_s_at	PTI	pancreatic trypsin inhibitor
Bt.28453.1.S1_at	VpreB	immunoglobulin light chain variable region
Bt.28453.1.A1_at	VpreB	immunoglobulin light chain variable region
Bt.28294.1.S1_at	LOC615733	similar to human immunity associated protein 1
Bt.28173.2.S1_at	LOC512700	similar to Flt3
Bt.28024.1.A1_at	LOC407111	Fas ligand
Bt.28020.1.S1_at	LOC407189	KERIA
Bt.28008.1.S1_s_at	KCNN2	potassium intermediate/small conductance calcium-activated channel, subfamily N,

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Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.28004.2.S1_a_at	LOC505306 /// LOC785621 /// TRD@	T-cell receptor delta chain /// hypothetical LOC505306 /// hypothetical protein
Bt.28003.1.S1_at	---	TCR mRNA for T cell receptor gamma chain, partial cds, clone: BTGV17
Bt.28003.1.A1_at	---	TCR mRNA for T cell receptor gamma chain, partial cds, clone: BTGV17
Bt.28001.1.S1_at	---	T cell receptor gamma TRGV5-1
Bt.28000.1.S1_at	TRGC4	T cell receptor gamma C4
Bt.27992.1.S1_at	5htr1d	5-hydroxytryptamine 1D receptor
Bt.27992.1.A1_at	5htr1d	5-hydroxytryptamine 1D receptor
Bt.27984.1.A1_x_at	---	Immunoglobulin heavy chain variable region (IGHV gene)
Bt.27981.1.S1_at	cd21	complement receptor type 2
Bt.27927.1.S1_at	LOC532674	similar to OTTHUMP00000016557
Bt.27855.1.S1_at	LOC788252	similar to latrophilin-1
Bt.27805.2.S1_a_at	CENPM	centromere protein M
Bt.27803.1.A1_at	LOC522810	similar to testis expressed sequence 14
Bt.277.1.S1_at	EXPI	extracellular proteinase inhibitor
Bt.27531.1.A1_at	LOC787969	similar to cancer susceptibility candidate 5
Bt.27334.1.A1_at	SLC35C1	solute carrier family 35, member C1
Bt.27333.1.S1_at	KRT17	keratin 17
Bt.27308.1.S1_at	MGC137932	similar to empty spiracles homolog 2
Bt.27296.1.S1_at	LOC404171	sodium chloride cotransporter
Bt.27134.1.A1_at	LOC522307	similar to DNA polymerase lambda
Bt.26886.1.S1_at	TOP3B	topoisomerase (DNA) III beta
Bt.26766.1.S1_at	---	Transcribed locus, moderately similar to NP_478067.2 chromosome 21 open reading
Bt.26644.2.S1_at	LOC613386	similar to fibroblast growth factor homologous factor 3
Bt.26637.2.S1_at	MGC138046	similar to chromatin modifying protein 4C
Bt.26590.1.A1_at	TRIM10	tripartite motif-containing 10
Bt.26583.1.S1_a_at	MGC157157	similar to euchromatic histone methyltransferase 1
Bt.26544.1.S1_at	LOC784636	hypothetical protein LOC784636
Bt.26506.1.S1_at	ORF1	ORF1 protein
Bt.26462.1.S1_at	MGC143242	similar to preproendothelin-3
Bt.26351.1.A1_at	LOC516661	similar to putative leucine-rich glioma inactivated 3
Bt.26255.1.S1_at	LOC528492	similar to c-myeloproliferative leukemia virus type P
Bt.26160.1.A1_at	MAEL	maelstrom homolog (Drosophila)
Bt.26080.3.S1_at	LOC532872	hypothetical LOC532872
Bt.26057.1.A1_at	ARL3	ADP-ribosylation factor-like 3
Bt.25983.1.A1_at	LOC510260	hypothetical LOC510260
Bt.25977.2.A1_at	LOC540703	similar to FOXJ2 forkhead factor
Bt.25875.1.A1_at	LOC506152	similar to Guanine nucleotide binding protein-like 3 (nucleolar)
Bt.25775.1.A1_at	PDE1B	phosphodiesterase 1B, calmodulin-dependent
Bt.25723.1.A1_at	LOC616656	hypothetical LOC616656
Bt.25706.1.A1_at	TARBP2	TAR (HIV-1) RNA binding protein 2
Bt.25543.1.A1_at	LOC518023	hypothetical LOC518023
Bt.25528.1.S1_at	PTP	pancreatic thread protein
Bt.25506.1.A1_at	EFCAB1	EF-hand calcium binding domain 1
Bt.25458.1.A1_at	---	Transcribed locus, moderately similar to NP_001025472.1 TIR domain containing ad
Bt.25428.1.A1_at	LOC781497	similar to HLH-PAS transcription factor NXF
Bt.25383.1.A1_at	LOC617967	similar to interleukin 21 receptor
Bt.25382.1.A1_at	LOC506037	similar to netrin receptor Unc5h1
Bt.25018.1.A1_at	MGC159655	similar to fibroblast growth factor 13
Bt.24854.1.A1_at	LOC618224	similar to peptidylarginine deiminase type I
Bt.24779.2.S1_at	CREM	cAMP responsive element modulator
Bt.24771.2.S1_at	CPNE6	copine VI (neuronal)
Bt.24663.1.A1_at	LOC540142	Similar to Forkhead-like 18 (Drosophila)
Bt.2462.1.S1_at	SH2D2A	SH2 domain protein 2A
Bt.24584.1.S1_at	MGC139629	similar to UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyl
Bt.24568.1.A1_at	MGC139944	similar to Kallikrein 10 precursor (Protease serine-like 1) (Normal epithelial c
Bt.24564.1.A1_a_at	LOC519331	similar to voltage-dependent calcium channel gamma-4 subunit
Bt.24542.2.S1_at	LOC512034	similar to neurotrypsin
Bt.24466.1.S1_at	MGC148717	similar to Transmembrane protein 130
Bt.24460.1.S1_at	MGC143376	similar to zinc finger, CCHC domain containing 12
Bt.24392.1.S1_at	LOC537808	similar to neurexin II
Bt.24341.1.S1_at	TSPAN2	tetraspanin 2
Bt.24298.1.A1_at	LOC617934	Hypothetical LOC617934
Bt.24218.2.S1_a_at	LOC515301	similar to Cdc6-related protein
Bt.24081.1.A1_at	TDO2	tryptophan 2,3-dioxygenase
Bt.23731.1.A1_at	TAT	Tyrosine aminotransferase
Bt.23703.1.A1_at	LOC508455	similar to Putative steroid dehydrogenase KIK-I
Bt.23658.2.S1_at	MGC139875	similar to anti-silencing function 1B
Bt.23521.2.S1_a_at	DUSP26	dual specificity phosphatase 26
Bt.23521.1.S1_at	DUSP26	dual specificity phosphatase 26
Bt.23465.1.S1_at	LOC785186 /// MGC139984	similar to keratin 25A /// hypothetical protein LOC785186
Bt.23349.1.A1_a_at	LOC509593	similar to Rho-GTPase-activating protein 8
Bt.23309.1.S1_at	MYPN	myopalladin
Bt.23195.2.S1_at	NR5A1	Nuclear receptor subfamily 5, group A, member 1
Bt.2314.1.S1_at	SELL	selectin L
Bt.23.2.S1_at	SLC6A2	solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2
Bt.23.2.S1_a_at	SLC6A2	solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2
Bt.22938.1.S1_at	CYLC2	cyclin, basic protein of sperm head cytoskeleton 2
Bt.22879.1.S1_at	HSD17B1 /// LOC785989	hydroxysteroid (17-beta) dehydrogenase 1 /// similar to Hydroxysteroid (17-beta)
Bt.22877.1.S1_at	CBP40	catecholamine binding protein CBP40
Bt.22873.1.A1_at	NTRK1	neurotrophic tyrosine kinase, receptor, type 1
Bt.22863.1.A1_at	C20ORF18	ubiquitin conjugating enzyme 7 interacting protein 3
Bt.22853.1.S1_at	MGC155311	similar to C22orf13 protein
Bt.22846.2.S1_a_at	TSPAN33	tetraspanin 33
Bt.22165.1.S1_at	MGC137948	similar to KIAA1914 protein
Bt.22163.1.S1_at	DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member 5
Bt.22083.2.S1_at	---	Transcribed locus, moderately similar to NP_003990.1 oncostatin M receptor [Homo
Bt.21773.2.S1_at	MGC142842	similar to guanylate-binding protein 5
Bt.21614.2.S1_at	LOC782984 ///	hypothetical LOC508790 /// hypothetical protein LOC782984

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.21579.2.S1_at	MGC148653	
Bt.21388.3.S1_at	LOC519461	similar to renal organic cation transporter
Bt.21252.2.S1_at	LOC617684	similar to Bromo adjacent homology domain containing 1
Bt.20968.1.S1_at	---	Transcribed locus, moderately similar to NP_032218.1 guanylate cyclase 2e [Mus m
Bt.20848.1.A1_at	VSNL1	visinin-like 1
Bt.20596.2.S1_at	LOC510592	similar to F52H3.5
Bt.20543.1.S1_at	EVA1	epithelial V-like antigen 1
Bt.20540.3.A1_at	LOC513662	hypothetical LOC513662
Bt.20403.1.S1_at	LOC509801	similar to immunoglobulin-associated beta
Bt.20359.1.S1_at	LOC789882	hypothetical protein LOC789882
Bt.20328.3.S1_at	MGC148465	similar to IKAROS family zinc finger 3 (Aiolos)
Bt.20228.1.S1_at	MGC166079	Similar to PHD finger protein 2
Bt.20136.1.S1_at	RTN2	reticulon 2
Bt.19930.1.A1_at	LOC529808	similar to KIAA0404
Bt.19877.1.A1_at	LOC505056	similar to GPR35
Bt.1978.9.S1_at	PSMC5	proteasome (prosome, macropain) 26S subunit, ATPase, 5
Bt.1976.2.S1_at	TRB@	T cell receptor, beta cluster
Bt.19750.1.A1_at	MGC139033	similar to suppression of tumorigenicity 5
Bt.197.1.S1_at	MGC140234	Similar to tRNA selenocysteine associated protein
Bt.19517.1.S1_at	SELE	selectin E
Bt.19295.2.S1_at	ERBB3	v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian)
Bt.18983.1.A1_at	LOC538827	similar to Apolipoprotein-L domain-containing protein 1 (Vascular early response
Bt.18962.1.A1_at	MGC159441	Hypothetical LOC511455
Bt.18325.2.A1_a_at	AOAH	acyloxyacyl hydrolase
Bt.18009.1.A1_at	MGC151537	microtubule-associated protein 7
Bt.17723.1.A1_s_at	C8orf13	chromosome 8 open reading frame 13
Bt.176.1.S1_at	MGC133619	hypothetical protein MGC133619
Bt.17599.1.A1_at	GAL	galanin
Bt.17314.2.A1_at	CDH8	cadherin 8, type 2
Bt.16873.1.S1_at	CLGN	calmegin
Bt.16735.1.A1_at	HSD17B2	hydroxysteroid (17-beta) dehydrogenase 2
Bt.16632.1.A1_at	LOC527732	Similar to plakophilin 4
Bt.16238.2.S1_at	LOC534842	similar to Roundabout homolog 2 precursor
Bt.16200.1.A1_at	LOC614598	similar to mitogen-activated protein kinase kinase 6
Bt.16103.1.S1_at	LOC506520	similar to WNK lysine deficient protein kinase 2
Bt.16062.1.A1_at	APOB	apolipoprotein B
Bt.16037.1.S1_at	LOC781013	hypothetical protein LOC781013
Bt.15988.1.S1_at	LOC783982 ///	
Bt.15986.1.S1_at	MGC140602	similar to globoside alpha-1,3-N-acetylgalactosaminyltransferase 1 /// hypotheti
Bt.15981.1.S1_at	PAG20	pregnancy-associated glycoprotein 20
Bt.15900.2.S1_at	PAG18	pregnancy-associated glycoprotein 18
Bt.15822.1.S1_at	GPR44	G protein-coupled receptor 44
Bt.15713.2.S1_at	LOC532836	similar to Adenosylhomocysteinase 3
Bt.15301.1.A1_at	MGC159776	similar to Proto-oncogene tyrosine-protein kinase FGR (P55-FGR) (C-FGR)
Bt.1493.1.S1_at	LOC518658	similar to Pleckstrin
Bt.14726.1.A1_at	DUSP3	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)
Bt.14202.2.S1_at	LOC536316	similar to polymerase (RNA) I polypeptide A, 194kDa
Bt.14139.1.A1_at	LOC510506	similar to carbamoyl phosphate synthetase 1
Bt.1366.1.S1_at	LGI4	leucine-rich repeat LGI family, member 4
Bt.13469.1.S1_at	C9	complement component 9
Bt.1333.1.S1_at	CLEC3B	C-type lectin domain family 3, member B
Bt.13211.1.A1_at	MGC159817	similar to Serine dehydratase-like
Bt.13105.1.S1_at	LOC505697	similar to Ryanodine receptor 1 (Skeletal muscle-type ryanodine receptor) (RyR1)
Bt.13102.1.S1_at	LOC509824	similar to Os08g0528700
Bt.13095.1.A1_at	ADRA2A	adrenergic, alpha-2A-, receptor
Bt.13055.1.S1_at	CACNG2	calcium channel, voltage-dependent, gamma subunit 2
Bt.13003.8.A1_at	HAS3	hyaluronan synthase 3
Bt.13003.4.S1_at	CACNA1L	alpha1I T-type calcium channel subunit
Bt.12930.1.S1_a_at	TRA@	T cell receptor, alpha
Bt.12928.1.S1_at	TRA@	T cell receptor, alpha
Bt.12847.1.S1_at	TAC1	tachykinin, precursor 1
Bt.12804.1.S1_at	IL13	interleukin 13
Bt.12781.2.S1_a_at	STATH	statherin
Bt.12537.1.S1_at	KIT	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
Bt.1232.1.S1_at	MYB	v-myb myeloblastosis viral oncogene homolog (avian)
Bt.12300.2.S1_at	ASB15	ankyrin repeat and SOCS box-containing 15
Bt.12240.1.A1_at	LOC511230	similar to DENN/MADD domain containing 1C
Bt.122.1.S1_at	LOC788772	similar to myosin heavy chain 2a
Bt.12083.1.S1_s_at	---	Transcribed locus, strongly similar to XP_001255051.1 PREDICTED: similar to OTTH
Bt.11675.1.A1_at	ATP1B2	ATPase, Na+/K+ transporting, beta 2 polypeptide
Bt.11666.3.S1_a_at	LOC507139	similar to Gca protein
Bt.11659.1.S1_at	LOC784738 ///	
Bt.11639.1.A1_at	RPS12	ribosomal protein S12 /// hypothetical protein LOC784738
Bt.11541.2.S1_at	MGC157202	similar to sterol response element binding protein cleavage-activating protein
Bt.11266.2.S1_s_at	MRP63	mitochondrial ribosomal protein 63
Bt.11215.1.S1_a_at	MGC140008	Similar to Myosin light chain 1, slow-twitch muscle A isoform (MLC1sa) (Alkali)
Bt.11214.1.S1_at	LOC516041	hypothetical LOC516041
Bt.11204.1.S1_at	LOC506374	hypothetical LOC506374
Bt.10921.1.S1_at	TNNT3	troponin T type 3 (skeletal, fast)
Bt.10696.1.S1_at	RP1	retinitis pigmentosa 1 (autosomal dominant)
Bt.10310.1.S1_at	PROKR2	prokineticin receptor 2
BtAffx.1.5.S1_at	TBX19	T-box 19
BtAffx.1.13.S1_at	CDCA3	cell division cycle associated 3
Bt.9944.1.S1_at	MYBPC1	myosin binding protein C, slow type
Bt.9909.1.S1_at	TRHR	thyrotropin-releasing hormone receptor
Bt.9850.1.A1_at	TAC3	tachykinin 3 (neuromedin K, neurokinin beta)
Bt.9736.1.S1_at	DPYSL5	dihydropyrimidinase-like 5
Bt.9735.2.A1_at	CCDC22	coiled-coil domain containing 22
Bt.9697.1.A1_at	PRP2	proline-rich protein PRP2
	LOC512548	hypothetical LOC512548
	APOM	apolipoprotein M
	MGC137543	similar to Alcohol dehydrogenase 6

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.9692.1.S1_at	BSP30C	common salivary protein BSP30 form C
Bt.965.1.S1_at	MATN1	matrilin 1, cartilage matrix protein
Bt.9648.1.S1_at	LOC505595	similar to Ost-II
Bt.9622.2.S1_at	LOC538901	hypothetical LOC538901
Bt.9599.3.S1_at	MGC128671	Similar to Inositol hexakisphosphate kinase 2 (InsP6 kinase 2) (Inositol hexakis
Bt.9590.1.S1_at	LOC530483	similar to C21orf108
Bt.9556.1.S1_at	MEST	mesoderm specific transcript homolog (mouse)
Bt.9535.1.S1_at	TRGC6	T-cell receptor gamma chain TRGC6
Bt.950.1.S1_at	ANKZF1	ankyrin repeat and zinc finger domain containing 1
Bt.9431.2.S1_at	LOC512048 /// LOC788506	similar to KIAA1138 protein /// similar to REX1, RNA exonuclease 1 homolog (S. c
Bt.9420.1.S1_at	LOC786966	similar to plectin 6
Bt.9390.1.S1_at	MGC160028	similar to tumor endothelial marker 7
Bt.9353.1.S1_at	EMILIN2	elastin microfibril interfacier 2
Bt.9308.1.S1_at	PTPRCAP	protein tyrosine phosphatase, receptor type, C-associated protein
Bt.9221.1.A1_at	LOC788760	similar to tangerin C
Bt.9163.2.S1_at	P2RY10	purinergic receptor P2Y, G-protein coupled, 10
Bt.9111.1.S1_at	LOC514967	similar to K+ channel tetramerization protein
Bt.9097.1.S1_at	GRAMD1A	hypothetical protein LOC507027
Bt.9035.1.S1_at	LOC506974	hypothetical LOC506974
Bt.9032.1.S1_a_at	TCRG	T-cell receptor gamma chain
Bt.9012.1.S1_at	LOC508247	similar to KIAA1639 protein
Bt.8984.1.S1_at	MGC152112	similar to MIB006
Bt.8967.1.S1_at	GDF8	growth differentiation factor 8
Bt.8946.1.S1_at	SLCO1A2	solute carrier organic anion transporter family, member 1A2
Bt.8941.1.S1_at	CHIA	chitinase, acidic
Bt.8861.1.S1_at	AIPL1	aryl hydrocarbon receptor interacting protein-like 1
Bt.8547.1.S1_at	SLAM	signaling lymphocytic activation molecule
Bt.8299.1.S1_at	MGC165989	similar to MGC2641 protein
Bt.8282.1.S1_at	DPP4	dipeptidyl-peptidase 4 (CD26, adenosine deaminase complexing protein 2)
Bt.8257.2.A1_at	LOC508697	similar to protein BAP28 (FLJ10359)
Bt.8247.2.S1_at	LOC518364	similar to OHCU decarboxylase
Bt.82.1.A1_at	CYP3A4	cytochrome P450, subfamily IIIA (niphedipine oxidase), polypeptide 4
Bt.8180.2.S1_at	LOC782388	similar to copine III-like related protein
Bt.8146.1.S1_at	EVC	Ellis van Creveld syndrome
Bt.8103.1.S1_a_at	LOC505556	similar to Valyl-tRNA synthetase
Bt.8090.1.A1_at	LOC513045	similar to Myb-binding protein 1A
Bt.8079.2.S1_at	LOC509045	similar to KIAA0138
Bt.8064.1.S1_at	LIMD2	LIM domain containing 2
Bt.8053.3.S1_at	LOC506045	hypothetical LOC506045
Bt.8048.1.S1_at	LOC506434 /// LOC790768	similar to troponin I
Bt.7988.1.A1_at	LOC614413	similar to Etr-3
Bt.7907.2.S1_a_at	CDK10 /// LOC785111	cyclin-dependent kinase 10 /// hypothetical protein LOC785111
Bt.7780.1.S1_at	UTF	Lactotransferrin
Bt.7763.1.S1_at	LOC514326	similar to TLE3 protein
Bt.771.2.S1_at	NFATC4	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4
Bt.771.1.S1_at	NFATC4	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4
Bt.7696.1.S1_at	RABGGTA	Rab geranylgeranyltransferase, alpha subunit
Bt.7597.1.S1_at	LOC537511	similar to polyhomeotic 2
Bt.7587.3.S1_a_at	PCBP4	poly(rC) binding protein 4
Bt.7435.1.S1_at	UNC119	unc-119 homolog (C. elegans)
Bt.7416.2.S1_at	LOC521413	similar to G protein-coupled receptor kinase 6, splice variant B; GRK6B
Bt.7404.1.S1_s_at	CENTB1	centaurin, beta 1
Bt.7356.2.S1_at	LOC535403	similar to MYST histone acetyltransferase (monocytic leukemia) 4
Bt.7304.1.S1_at	MGC129010	similar to eNOS interacting protein
Bt.7208.1.S1_at	ZP2	zona pellucida glycoprotein 2 (sperm receptor)
Bt.7207.1.S1_at	ZP4	zona pellucida glycoprotein 4
Bt.7197.2.A1_at	PRL	prolactin
Bt.7179.3.S1_a_at	MMP23B	matrix metalloproteinase 23B
Bt.7173.1.S1_at	LOC513500	similar to Chromosome 17 open reading frame 68
Bt.7172.1.S1_at	MOG	myelin oligodendrocyte glycoprotein
Bt.7150.3.A1_at	LOC533514	similar to KIAA1289 protein
Bt.7141.1.S1_at	LOC503858	aromatase cytochrome P450 pseudogene
Bt.7039.2.S1_at	MGC134398	similar to mitogen-activated protein kinase kinase 2
Bt.7016.1.S1_at	MGC126906	similar to MON1 homolog B
Bt.7013.1.S1_at	LOC505800	similar to interleukin 32
Bt.6886.1.S1_at	MGC137960	similar to ATP-binding cassette, sub-family F (GCN20), member 3
Bt.6823.1.S1_at	FGD3	FYVE, RhoGEF and PH domain containing 3
Bt.6650.1.S1_at	LOC525303	similar to human gamma-glutamyl hydrolase
Bt.6608.1.S1_at	LOC518168	Similar to VESPR
Bt.6583.1.S1_at	LOC511762	similar to ATP-binding cassette sub-family A member 7 (Macrophage ABC transporte
Bt.657.1.S1_at	LOC506074 /// LOC782744	similar to Chromosome 17 open reading frame 63
Bt.6509.1.S1_at	LOC511043	similar to laminin 5 gamma 2 subunit
Bt.6410.1.A1_at	LOC505518	similar to placenta expressed transcript protein
Bt.6409.1.S1_at	LOC532789	Similar to PAWR
Bt.6405.1.S1_at	MBP	myelin basic protein
Bt.6403.1.A1_at	LOC534923	Similar to protein serine/threonine kinase
Bt.6177.2.S1_at	SNX21	sorting nexin family member 21
Bt.6167.1.S1_at	LOC617087	similar to Transmembrane anchor protein 1
Bt.616.2.S1_a_at	MGC160024	similar to Ring finger protein 166
Bt.6151.1.S1_at	CSF1R	colony stimulating factor 1 receptor
Bt.6095.2.A1_at	GPR137	G protein-coupled receptor 137
Bt.6068.2.S1_at	MGC142307	similar to topoisomerase (DNA) III alpha
Bt.6067.2.S1_at	LOC515820	similar to SH2 domain containing 3C
Bt.6002.1.S1_at	LOC505787	similar to ABC-C transporter
Bt.5919.1.S1_at	GDAP1L1	ganglioside-induced differentiation-associated protein 1-like 1
Bt.583.1.S1_a_at	CSN3	casein kappa
Bt.580.1.S1_at	NEFL	neurofilament, light polypeptide
Bt.5768.2.S1_at	IRF7	interferon regulatory factor 7

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.570.1.S1_at	UMOD	uromodulin
Bt.5666.1.S1_at	MGC159743	similar to unnamed secretory protein
Bt.562.1.S1_at	PKFBF1	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1
Bt.5562.1.S1_at	PCSK1	proprotein convertase subtilisin/kexin type 1
Bt.555.1.S1_at	CA4	carbonic anhydrase IV
Bt.554.1.S1_at	DMP1	dentin matrix acidic phosphoprotein
Bt.5531.3.S1_at	BACE1	beta-site APP-cleaving enzyme 1
Bt.5497.1.S1_a_at	NRXN1	neurexin 1
Bt.5456.1.S2_at	AQP4	aquaporin 4
Bt.5456.1.S1_at	AQP4	aquaporin 4
Bt.5381.2.A1_at	CSN2	casein beta
Bt.5362.2.S1_at	SERPINA3-7	endopin 2
Bt.5353.1.S1_a_at	SSBP4	single stranded DNA binding protein 4
Bt.5336.1.A1_a_at	TF	transferrin
Bt.5333.3.S1_a_at	CRELD1	cysteine-rich with EGF-like domains 1
Bt.5306.1.S1_at	TCAP	titin-cap
Bt.5277.3.S1_at	CCRK	cell cycle related kinase
Bt.5219.1.S1_at	TCF21	transcription factor 21
Bt.5192.3.S1_at	LOC617546	similar to chromosome 6 open reading frame 47
Bt.5192.1.S1_at	LOC617546	similar to chromosome 6 open reading frame 47
Bt.5175.1.S1_at	RNH1	ribonuclease/angiogenin inhibitor 1
Bt.5130.1.A1_a_at	ALB	albumin
Bt.5126.2.S1_a_at	COMMD5	COMM domain containing 5
Bt.5116.2.S1_a_at	LOC506831	hypothetical LOC506831
Bt.5084.1.S1_at	CKB	creatine kinase, brain
	IL5 ///	
Bt.5.1.S1_at	LOC785154	interleukin 5 /// similar to interleukin-5
Bt.4993.1.S1_at	MGC142408	similar to protein kinase N1
Bt.4886.1.A1_at	LRRC17	leucine rich repeat containing 17
Bt.4833.3.S1_a_at	VRK3	vaccinia related kinase 3
Bt.4817.2.S1_at	MGC128478	similar to claudin 11
Bt.4795.1.S1_at	SLC6A4	solute carrier family 6 (neurotransmitter transporter, serotonin), member 4
Bt.4735.1.S2_at	ACACA	acetyl-coenzyme A carboxylase alpha
Bt.4734.1.S1_at	GNA14	guanine nucleotide binding protein (G protein), alpha 14
Bt.472.1.S1_at	GNAT2	guanine nucleotide binding protein (G protein), alpha transducing activity polyp
Bt.47.1.S1_at	CA6	carbonic anhydrase VI
Bt.467.1.S1_at	MAPT	microtubule-associated protein tau
Bt.4621.1.S1_a_at	SMTN	smoothelin
Bt.4619.2.S1_at	LOC514958	hypothetical LOC514958
Bt.4589.1.S1_at	MGC140424	similar to death effector domain-containing DNA binding protein 2
Bt.4588.1.S1_at	PLEKHQ1	pleckstrin homology domain containing, family Q member 1
Bt.4575.1.S1_at	LOC100125320	hypothetical protein LOC100125320
Bt.457.1.S1_at	SPADH1	spermadhesin 1
Bt.4559.1.S1_at	MGC151650	similar to SCG10-related protein HIAT3
Bt.4557.1.S1_at	IFNAR1	interferon, alpha; receptor
Bt.4553.1.S1_at	LOC526472	similar to CLIM2
Bt.4552.4.A1_at	PLCB4	phospholipase C, beta 4
Bt.4481.1.S1_at	DBH	dopamine beta-hydroxylase
Bt.4474.2.S1_a_at	LOC507590	similar to Protein C20orf35 (HSMNP1)
Bt.4461.1.S1_at	CKMT1	creatine kinase, mitochondrial 1 (ubiquitous)
Bt.44.1.S1_at	C4BPB	complement component 4 binding protein, beta
Bt.4397.2.S1_a_at	POMT1	protein-O-mannosyltransferase 1
Bt.438.1.S1_at	MYO1A	myosin IA
Bt.4378.1.S1_at	ECE1	endothelin converting enzyme 1
Bt.4357.1.S1_at	TSPAN7	tetraspanin 7
Bt.4307.1.S1_at	MGC140398	similar to GTPase
Bt.4293.1.S1_at	ICAM3	intercellular adhesion molecule 3
Bt.4238.1.S1_at	LOC616557	hypothetical LOC616557
Bt.4233.1.S1_at	SMYD5	SMYD family member 5
Bt.4219.1.A1_at	LOC528818	Similar to Fuzzy homolog (Drosophila)
	LOC539462 ///	
Bt.4196.1.S1_at	LOC790208	similar to Myelin P0 protein precursor (Myelin protein zero) (Myelin peripheral
Bt.4126.2.S1_at	MGC159729	similar to Cytochrome P450, family 4, subfamily A, polypeptide 11
Bt.412.1.S1_at	QPCT	glutaminy-peptide cyclotransferase (glutaminy cyclase)
	GCG ///	
Bt.410.1.S1_at	LOC789291	glucagon /// similar to Glucagon precursor
	LOC782204 ///	
Bt.4091.2.S1_at	MGC134173	similar to Epsin 1 /// hypothetical protein LOC782204
Bt.408.1.S1_at	GABRG2	gamma-aminobutyric acid (GABA) A receptor, gamma 2
Bt.4015.1.S1_at	MGC139434	similar to F46F6.4
Bt.4011.1.S1_at	LOC520173	similar to transmembrane protein induced by tumor necrosis factor alpha
	CYP17 ///	
	LOC782561 ///	
	LOC784256 ///	
	LOC784299 ///	
Bt.3985.1.S1_at	LOC785462	cytochrome P450, subfamily XVII /// similar to Cytochrome P450 17A1 (CYPXVII) (P
Bt.394.4.S1_a_at	CYM	chymosin
Bt.394.3.A1_a_at	CYM	chymosin
Bt.3875.1.S1_at	RLBP1	retinaldehyde binding protein 1
Bt.3841.2.S1_at	CD83	CD83 molecule
Bt.3787.1.A1_at	LOC785692	Hypothetical protein LOC785692
Bt.3683.1.S1_at	CSN1S1	casein alpha s1
Bt.368.1.S1_at	CENTA1	centaurin, alpha 1
Bt.353.1.S1_at	RPH3A	rabphilin 3A homolog (mouse)
Bt.348.2.S1_a_at	PTGER3	prostaglandin E receptor 3 (subtype EP3)
Bt.3415.1.A1_at	LOC504513	hypothetical LOC504513
Bt.34.1.S1_at	TSHR	thyroid stimulating hormone receptor
Bt.3372.3.S1_a_at	LOC511614	similar to putative lysophosphatidic acid acyltransferase
Bt.3313.1.A1_at	ARHGAP24	Rho GTPase activating protein 24
Bt.3306.1.S1_at	LOC512397	similar to ProSAPiP1 protein
Bt.329.1.S1_at	DNNT	deoxynucleotidyltransferase, terminal
Bt.3253.2.S1_at	LOC617871	hypothetical LOC617871

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.3242.1.S1_at	CLDN2	claudin 2
Bt.324.1.S1_at	LOC280905	seminalplasmin
Bt.3201.2.S1_at	MGC139107	similar to Glutamate-rich WD-repeat protein 1
Bt.3196.2.S1_a_at	STRA6	stimulated by retinoic acid gene 6 homolog
Bt.3189.2.S1_at	LOC540831	similar to FLJ20273 protein
Bt.3185.1.A1_at	MGC151883	similar to ectonucleoside triphosphate diphosphohydrolase 8
Bt.3093.1.S1_at	IMPACT	Impact homolog (mouse)
Bt.3066.1.A1_at	LOC539411	Hypothetical LOC539411
Bt.305.1.S1_at	PKP1	plakophilin 1 (ectodermal dysplasia/skin fragility syndrome)
Bt.29962.1.S1_at	MAP3K12	Mitogen-activated protein kinase kinase kinase 12
Bt.29931.2.S1_at	LOC514928	similar to Kinesin family member 1C
Bt.29912.1.S1_at	MGC159765	hypothetical LOC513430
Bt.29872.1.S1_at	CCNT1	cyclin T1
Bt.29871.1.S1_at	BOLA-DYA	major histocompatibility complex, class II, DY alpha
Bt.29870.1.S1_at	BOLA-DYB	major histocompatibility complex, class II, DY beta
Bt.29865.1.A1_at	CYP1A2	cytochrome P450, family 1, subfamily a, polypeptide 2
Bt.29848.1.S1_at	LOC407174	NTT4-like neurotransmitter transporter
Bt.29848.1.A1_at	LOC407174	NTT4-like neurotransmitter transporter
Bt.29842.1.A1_at	---	B4 cell-line anti-respiratory syncytial virus Ig lambda chain V region (IgL)
Bt.29841.1.A1_at	---	B4 cell-line anti-respiratory syncytial virus Ig lambda chain V region (IgL)
Bt.29820.1.S1_s_at	BOLA	MHC class I heavy chain
Bt.29780.1.A1_at	GJB1	gap junction protein, beta 1, 32kDa
Bt.29779.1.S1_s_at	bTrappin-4 /// bTrappin-5	trappin 5 /// trappin 4
Bt.29779.1.A1_at	bTrappin-4	trappin 4
Bt.29774.1.S1_at	LOC407162	chloride-bicarbonate exchanger
Bt.29773.1.A1_at	LOC407112	sodium proton exchanger
Bt.29771.1.A1_at	bsc1	apical Na(2Cl)K cotransporter
Bt.29758.1.A1_x_at	LOC783615	Similar to TRB@ protein
Bt.29755.1.A1_at	---	Cyp19 mRNA; untranslated exon 1 region, variant 1, placental transcript
Bt.29750.1.A1_x_at	LOC617169	Hypothetical LOC617169
Bt.29749.1.S1_x_at	LOC615995 /// LOC617169 /// LOC783128 /// LOC783206 /// LOC783317 ///	hypothetical LOC615995 /// hypothetical LOC617169 /// hypothetical protein LOC783128
Bt.29748.1.A1_at	LOC783317	Hypothetical protein LOC783317
Bt.29743.1.A1_at	---	Immunoglobulin heavy chain mRNA, variable region, partial cds, 5' end
Bt.29742.1.A1_at	---	Immunoglobulin heavy chain mRNA, variable region, partial cds, 5' end
Bt.29738.1.A1_at	---	B4 cell-line anti-respiratory syncytial virus Ig lambda chain V region (IgL)
Bt.29736.1.A1_at	---	Immunoglobulin variable region
Bt.29726.1.A1_at	---	B4 cell-line anti-respiratory syncytial virus Ig lambda chain V region (IgL)
Bt.29722.1.S1_at	at2	angiotensin receptor 2
Bt.29718.2.S1_at	GHR	growth hormone receptor
Bt.29702.1.A1_at	---	Immunoglobulin rearranged heavy chain variable region
Bt.29693.1.A1_at	TRGV7-1	T cell receptor gamma variable 7-1
Bt.29689.1.S1_s_at	LOC407199 /// TRD@	T-cell receptor delta chain /// T cell receptor delta chain
Bt.29681.1.A1_at	PRP6	prolactin-related protein VI
Bt.2964.2.S1_at	ZNF330	zinc finger protein 330
Bt.29634.1.A1_at	---	Transcribed locus
Bt.29614.1.A1_at	LOC511043	similar to laminin 5 gamma 2 subunit
Bt.29579.1.A1_at	LOC515340	N-acetylgalactosaminyltransferase A blood group-like
Bt.29528.1.A1_at	GPRC5A	G protein-coupled receptor, family C, group 5, member A
Bt.29509.1.A1_at	RNASE6	ribonuclease, RNase A family, k6
Bt.29479.1.S1_at	MGC179481	similar to carotene-9,10-monooxygenase
Bt.29365.1.A1_at	LOC513032	similar to Nedd4 binding protein 3
Bt.29351.1.A1_at	LOC510394	similar to serine protease PRSS22
Bt.293.1.S1_at	PAG21	pregnancy-associated glycoprotein 21
Bt.29281.1.S1_at	MGC127475	similar to Adaptor-related protein complex 1, mu 2 subunit (Mu-adaptin 2) (Adapt
Bt.29262.1.S1_at	LOC512001	similar to GDDR
Bt.29253.1.S1_at	PDIA5	protein disulfide isomerase family A, member 5
Bt.29219.1.A1_at	LOC514701	hypothetical LOC514701
Bt.29208.1.S1_at	LOC535967	similar to KIAA0715 protein
Bt.29198.1.S1_a_at	MEP1B	meprin A, beta
Bt.29157.1.A1_at	MGC140405	similar to Growth arrest-specific 2 like 1
Bt.29132.1.A1_at	LOC521868	similar to protein tyrosine phosphatase
Bt.2913.1.A1_at	CRYM	crystallin, mu
Bt.29113.1.A1_at	LOC505468	hypothetical LOC505468
Bt.29079.1.A1_at	UQCRC1	UQCRC1 protein
Bt.29068.1.A1_at	PLA2G7	phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)
Bt.29060.1.A1_at	HPS1	Hermansky-Pudlak syndrome 1
Bt.2902.2.S1_at	LOC613943	similar to ZDHHC22 protein
Bt.28974.1.A1_at	TMEM141	transmembrane protein 141
Bt.28967.1.S1_at	LOC408018	C-C motif chemokine receptor 3
Bt.28954.1.S1_at	MGC159504	Similar to DEP domain containing 6
Bt.28921.1.S1_at	LOC785197	similar to multi-specific organic anion transporter-E
Bt.2881.1.A1_at	REG4	Regenerating islet-derived family, member 4
Bt.28798.1.A1_at	ANKRD22	Ankyrin repeat domain 22
Bt.28781.1.A1_at	MGC155072	similar to NADPH oxidase activator 1
Bt.28776.1.A1_at	---	Transcribed locus, strongly similar to XP_215812.3 PREDICTED: similar to 53BP1 p
Bt.28734.1.S1_at	LOC617096	similar to cadherin-like 26
Bt.28727.1.A1_at	NFKBIL1	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-lik
Bt.28716.2.S1_at	MGC128448	similar to F26A3.7
Bt.28679.1.A1_at	LOC521542	similar to KIAA0645 protein
Bt.28663.1.A1_at	HNF-1a	hepatocyte nuclear factor 1 alpha
Bt.28647.1.S1_at	PAG15	pregnancy-associated glycoprotein 15
Bt.28537.1.S1_at	MGC138951	similar to harmonin-interacting ankyrin-repeat containing protein
Bt.28494.7.A1_at	LOC524810	IgM
Bt.28494.5.S1_at	LOC524810	IgM
Bt.28494.5.A1_at	LOC524810	IgM

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Bt.28494.2.A1_x_at	LOC524810	IgM
Bt.28446.1.S1_x_at	BVd1.25	T cell receptor delta chain variable region
Bt.28444.1.A1_x_at	---	T-cell receptor beta chain variable segment, clone C20
Bt.28439.2.S1_at	MGC139478	similar to lymphocyte antigen 9
Bt.28370.1.A1_at	CPB1	carboxypeptidase B1 (tissue)
Bt.28365.1.A1_at	LOC521163	similar to H+/K+-exchanging ATPase (EC 3.6.3.10) alpha chain
Bt.28364.1.S1_a_at	LOC613996	similar to FLJ10769 protein
Bt.28353.1.A1_at	LOC525692	similar to mucin 5
Bt.28347.1.S1_at	LOC540000	hypothetical LOC540000
Bt.28323.1.S1_at	LOC517820	similar to tumor-associated hydroquinone (NADH) oxidase tNOX
Bt.28317.1.S1_at	LOC511923	similar to p54/58N
Bt.28316.1.S1_at	SH2D3A	SH2 domain containing 3A
Bt.28246.1.S1_at	GPA33	glycoprotein A33 (transmembrane)
Bt.28236.2.A1_at	LOC521163	Similar to H+/K+-exchanging ATPase (EC 3.6.3.10) alpha chain
Bt.2823.3.S1_a_at	C1orf35	chromosome 1 open reading frame 35
Bt.28227.1.S1_at	LOC787926	similar to transmembrane mucin 12
Bt.28220.1.S1_at	LOC615263	hypothetical protein LOC615263
Bt.28216.1.S1_at	LOC783851	similar to RIKEN cDNA 1600020Q4 gene
Bt.28208.1.S1_at	MGC127579	similar to Fructose-1,6-bisphosphatase isozyme 2 (D-fructose-1,6-bisphosphate 1-
Bt.28192.1.S1_at	MGC143192	similar to Interferon regulatory factor 6 (IRF-6)
Bt.28150.1.S1_at	TRIM52	tripartite motif-containing 52
Bt.28140.2.S1_at	KCTD15	potassium channel tetramerisation domain containing 15
Bt.28132.1.S1_at	MGC165793	tRNA (adenine-N(1))-methyltransferase catalytic subunit TRM61
Bt.2813.1.A1_at	PRKCA	Protein kinase C, alpha
Bt.28103.1.S1_at	LOC535376	similar to transforming growth factor beta type II receptor, TGF beta R-II
Bt.28083.1.S1_at	MGC128725	similar to SH2 domain protein 1A
Bt.28069.1.S1_at	TMIGD	transmembrane and immunoglobulin domain containing
Bt.28033.1.S1_at	LOC788991	hypothetical protein LOC788991
Bt.28024.1.S1_at	LOC407111 /// LOC784352 /// LOC785839	Fas ligand /// similar to Fas-ligand
Bt.28009.1.S1_at	KRT8 /// LOC515823	keratin 8 /// similar to Keratin 8
Bt.28007.1.A1_s_at	BVd1.20	T cell receptor delta chain variable region
Bt.28006.1.S1_at	LOC407197	T cell receptor gamma chain
Bt.28006.1.A1_at	LOC407197	T cell receptor gamma chain
Bt.28005.1.S1_at	LOC509374	Similar to TCR delta
Bt.28005.1.A1_at	LOC509374	Similar to TCR delta
Bt.28004.2.A1_x_at	LOC505306	Hypothetical LOC505306
Bt.27999.1.S1_at	LOC444875	IgM
Bt.27994.1.S1_at	ANPEP	alanyl (membrane) aminopeptidase
Bt.27984.1.S1_x_at	---	Immunoglobulin heavy chain variable region (IGHV gene)
Bt.27981.1.A1_at	cd21	complement receptor type 2
Bt.27977.1.A1_at	IMPDH1	IMP (inosine monophosphate) dehydrogenase 1
Bt.27881.1.A1_at	LOC533085	similar to RanBP17
Bt.27853.1.S1_at	OSGEP	O-sialoglycoprotein endopeptidase
Bt.27850.2.S1_at	LOC535353	similar to Pleckstrin homology domain containing, family G (with RhoGef domain)
Bt.27834.1.A1_at	MGC137817	similar to CG7139-PA
Bt.27821.1.S1_at	MGC152614	similar to NOL1/NOP2/Sun domain family, member 5
Bt.27819.1.S1_at	LOC787487	similar to von Willebrand factor C and EGF domains
Bt.27767.2.S1_at	LOC784831 /// SLC28A3	solute carrier family 28 (sodium-coupled nucleoside transporter), member 3 /// s
Bt.27767.1.A1_at	LOC784831 /// SLC28A3	solute carrier family 28 (sodium-coupled nucleoside transporter), member 3 /// s
Bt.2771.1.A1_at	MGC142450	similar to seizure related gene 6
Bt.27692.1.A1_at	LOC613858	similar to splicing factor YT521-B
Bt.27643.1.A1_at	ZNF410	zinc finger protein 410
Bt.2761.1.S1_a_at	LOC614755	hypothetical LOC614755
Bt.27581.1.A1_at	LOC540175	similar to KIAA0514
Bt.27570.1.A1_at	LOC513236	similar to tigger transposable element derived 3
Bt.27525.1.S1_at	MGC165851	similar to serine/threonine protein kinase
Bt.27495.1.A1_at	LOC506293	similar to DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11
Bt.27468.1.A1_at	MGC179401	similar to acyl-CoA:cholesterol acyltransferase 2
Bt.27453.1.A1_at	MGC139257	hypothetical LOC520468
Bt.27444.1.A1_at	LOC506508	similar to phospholipase B1
Bt.27428.2.A1_at	GPM6A	Glycoprotein M6A
Bt.27428.1.A1_at	GPM6A	Glycoprotein M6A
Bt.27397.1.A1_at	LOC617312	similar to Centrosomal protein 72kDa
Bt.27389.2.S1_a_at	MGC159994	similar to KIAA0014
Bt.27378.1.A1_at	---	---
Bt.27364.1.S1_at	LOC518283	Platelet-activating factor receptor
Bt.27307.1.S1_at	---	Transcribed locus
Bt.27304.2.S1_at	MGC139492	similar to Poly(rC)-binding protein 3 (Alpha-CP3)
Bt.27304.1.S1_at	MGC139492	similar to Poly(rC)-binding protein 3 (Alpha-CP3)
Bt.27261.2.S1_at	LOC784347	Similar to multidrug resistance-associated protein
Bt.27254.1.A1_at	WNT2B	wingless-type MMTV integration site family, member 2B
Bt.27250.1.S1_at	LOC506751	similar to Laminin alpha-5 chain
Bt.27241.1.S1_at	LOC527711	similar to Spectrin beta chain, erythrocyte (Beta-I spectrin)
Bt.27234.1.S1_at	SPINT1	serine peptidase inhibitor, Kunitz type 1
Bt.27229.1.S1_at	MGC140809	similar to Folate transporter 1 (Solute carrier family 19 member 1) (Placental f
Bt.27175.2.S1_at	RELL2	RELT-like 2
Bt.27053.1.A1_at	LOC509707	similar to G protein-coupled receptor 1
Bt.27052.1.S1_at	PSCD4	pleckstrin homology, Sec7 and coiled-coil domains 4
Bt.27043.2.S1_at	LOC506783	similar to high affinity immunoglobulin E receptor alpha subunit
Bt.27029.1.S1_at	LOC784875 /// TMEM45B	transmembrane protein 45B /// similar to Transmembrane protein 45B
Bt.27015.1.A1_at	LOC516048	similar to ARF GTPase-activating protein GIT2
Bt.27001.1.S1_at	MGC139710	similar to CG18177-PB
Bt.26994.1.A1_at	KCNB2	potassium voltage-gated channel, Shab-related subfamily, member 2
Bt.26982.2.S1_at	LOC523815	similar to myeloid translocation gene-related protein 2 isoform MTG16a
Bt.26970.1.S1_at	LOC507860	similar to Phosphatidylinositol 4-kinase type II
Bt.26952.2.A1_at	LOC614351	similar to CGI-122 protein

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.26934.1.A1_at	LOC506914	similar to testis specific protein A14
Bt.26927.2.S1_at	C10orf77	similar to hypothetical protein FLJ22529
Bt.26927.2.S1_a_at	C10orf77	similar to hypothetical protein FLJ22529
Bt.26895.2.S1_at	LOC521099	hypothetical LOC521099
Bt.26865.3.S1_a_at	LOC785670	similar to Myosin head domain containing 1
Bt.26864.2.S1_at	LOC516012	hypothetical LOC516012
Bt.26860.1.A1_at	LOC521190	Similar to axonemal heavy chain dynein type 3
Bt.26859.2.S1_at	MGC143089	similar to family 3, member A protein
Bt.26852.1.S1_at	MGC143166	similar to Fetal brain protein 239 (239FB)
Bt.26832.1.S1_at	LOC518086	similar to CANT1 protein
Bt.26827.2.S1_at	KLHL12	kelch-like 12
Bt.26775.1.S1_at	LOC511514	similar to HIR (histone cell cycle regulation defective, <i>S. cerevisiae</i>) homolog
Bt.26757.2.A1_a_at	LOC515677	similar to chromosome 20 open reading frame 17
Bt.26737.1.S1_at	USP52	ubiquitin specific peptidase 52
Bt.26725.1.S1_at	LOC537773	growth factor independent 1B-like protein
Bt.26698.1.S1_at	LOC511966	similar to DLNB23
Bt.26691.3.S1_at	TNFSF13	tumor necrosis factor (ligand) superfamily, member 13
Bt.26674.1.S1_at	LOC517405	similar to Jagged2
Bt.26654.1.S1_at	LOC617764	hypothetical LOC617764
Bt.26629.1.S1_a_at	MGC139849	similar to F-box protein FBW7
Bt.26592.2.A1_at	GALGT	UDP-N-acetyl-alpha-D-galactosamine:(N-acetylneuraminy)-galactosylglucosylcerami
Bt.26591.1.S1_at	MGC152584	similar to TBC1 domain family, member 10C
Bt.26587.2.S1_at	MGC148838	similar to Histone deacetylase 11 (HD11)
Bt.26565.1.A1_at	LOC541226	similar to Zinc finger protein Helios (IKAROS family zinc finger protein 2)
Bt.26555.1.S1_at	GGTL3	gamma-glutamyltransferase-like 3
Bt.26546.1.S1_at	MUS81	MUS81 endonuclease homolog
Bt.26544.2.S1_at	LOC784636	hypothetical protein LOC784636
Bt.26537.1.S1_at	LRRC33	leucine rich repeat containing 33
Bt.26530.2.S1_at	LOC511425	similar to ACAD 10
Bt.26518.3.S1_a_at	MGC157040	hypothetical LOC513646
Bt.26409.1.A1_at	LOC787393	hypothetical protein LOC787393
Bt.26356.2.S1_at	MGC142602	similar to Glutamate decarboxylase 1 (Glutamate decarboxylase, 67 kDa isoform) (
Bt.26352.1.A1_at	LOC613428	Similar to Zinc finger FYVE domain-containing protein 9 (Mothers against decapen
Bt.26326.1.A1_at	LOC617904	similar to Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mous
Bt.26307.1.A1_at	LOC505477	similar to regulator of G protein signaling RGS12
Bt.26294.1.A1_at	LOC407169	12-lipoxygenase
Bt.26259.3.A1_at	LOC515561	similar to zinc finger protein 462
Bt.26204.1.A1_at	LOC532895	similar to C1orf17 protein
Bt.26197.1.A1_at	CARD9	caspase recruitment domain family, member 9
Bt.26180.2.A1_at	LOC504294	similar to KIAA1206 protein
Bt.26147.1.A1_at	LOC782935	similar to TFAA1
Bt.26128.1.A1_at	MGC157183	similar to class-I MHC-restricted T cell associated molecule
Bt.26125.1.A1_at	GFAP	glial fibrillary acidic protein
Bt.26101.1.A1_at	COLQ	collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcho
Bt.26075.1.S1_at	MGC143176	similar to Sorting nexin-11
Bt.26060.1.A1_at	BTK	Bruton agammaglobulinemia tyrosine kinase
Bt.26010.1.A1_at	LOC513625	similar to SPA-1-like 3
Bt.25958.2.S1_at	LOC514870	similar to WD repeat protein WDR3
Bt.25957.2.S1_at	VISA	virus-induced signaling adapter
Bt.25951.1.A1_at	MGC155119	similar to lethal giant larvae homolog 2
Bt.25947.1.A1_at	ITGB4BP	integrin beta 4 binding protein
Bt.25924.2.S1_at	MGC160119	similar to Family with sequence similarity 64, member A
Bt.25904.1.A1_at	LOC539074	similar to transient receptor potential V1
Bt.25882.1.A1_at	FHL3	four and a half LIM domains 3
Bt.25860.1.A1_at	MYBPC1	Myosin binding protein C, slow type
Bt.25856.1.A1_at	---	Transcribed locus, weakly similar to XP_001518985.1 PREDICTED: hypothetical prot
Bt.25807.1.A1_at	LOC540876	similar to proto-oncogene tyrosine-protein kinase
Bt.25804.1.A1_at	MGC139931	similar to PDZ domain containing ring finger 1
Bt.25773.2.S1_at	IQCA	IQ motif containing with AAA domain
Bt.25736.1.A1_at	MGC157237	hypothetical LOC511175
Bt.25732.1.A1_at	LOC618549	hypothetical LOC618549
Bt.25702.1.A1_at	TMEM145	transmembrane protein 145
Bt.25693.1.S1_at	LOC504530	similar to FLJ00018 protein
Bt.25668.2.S1_at	MGC128628	similar to F37C4.6
Bt.25648.1.A1_at	SPPL2B	signal peptide peptidase-like 2B
Bt.25628.1.A1_at	GMFG	glia maturation factor, gamma
Bt.25599.1.A1_at	LOC540087	similar to corticotropin releasing factor binding protein
Bt.25582.1.A1_at	CHRM4	Cholinergic receptor, muscarinic 4
Bt.25568.1.S1_at	MGC148650	similar to Gamma-aminobutyric acid (GABA) A receptor, delta
Bt.25530.1.A1_at	LOC615161	similar to FERM domain containing 5
Bt.25510.2.S1_at	LOC513740	hypothetical LOC513740
Bt.255.1.S1_at	SDR3	short-chain dehydrogenase/reductase
Bt.25486.1.A1_at	---	Transcribed locus, strongly similar to NP_001071589.1 hypothetical protein LOC76
Bt.25476.1.S1_at	LOC538433	hypothetical LOC538433
Bt.25473.1.A1_at	MGC151963	Similar to Metabotropic glutamate receptor 7 precursor (mGluR7)
Bt.25456.1.S1_a_at	LOC786296	hypothetical protein LOC786296
Bt.25447.1.A1_at	LOC538797	similar to receptor protein-tyrosine kinase
Bt.25423.1.S1_at	---	Transcribed locus, strongly similar to NP_999393.1 prostaglandin H2 D-isomerase
Bt.25420.1.A1_at	LOC408019	C-C motif chemokine receptor 4
Bt.25413.1.A1_at	GBL	G protein beta subunit-like
Bt.25411.1.A1_at	SLC17A6	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), m
Bt.25407.1.S1_at	LOC507696	similar to G-protein coupled receptor-associated sorting protein 1 (GASP-1)
Bt.25355.1.A1_at	NALP5	NACHT, leucine rich repeat and PYD containing 5
Bt.2532.1.S1_at	UBL7	ubiquitin-like 7 (bone marrow stromal cell-derived)
Bt.25279.1.A1_at	LRSAM1	Leucine rich repeat and sterile alpha motif containing 1
Bt.25088.1.A1_at	GCSH	Glycine cleavage system protein H (aminomethyl carrier)
Bt.25062.1.A1_at	FGF12	fibroblast growth factor 12
Bt.24995.1.A1_at	THEX1	Three prime histone mRNA exonuclease 1
Bt.24993.1.A1_at	LOC537017	Similar to CMP-N-acetylneuraminic acid hydroxylase
Bt.24962.1.A1_at	COL18A1	collagen, type XVIII, alpha 1
Bt.24875.1.S1_at	LOC617922	myeloid-associated differentiation marker-like
Bt.24813.3.S1_at	RTP4	receptor (chemosensory) transporter protein 4

Table 2: Complete list of genes that were down-regulated (> 3-fold) at week 6 with dynamic compressive loading compared to CM+ free-swelling control.

Bt.24786.1.S1_at	MGC142630	similar to syntaxin 1A (brain)
Bt.24771.1.A1_at	CPNE6	copine VI (neuronal)
Bt.24748.1.A1_at	AMOTL2	angiomin like 2
Bt.24742.1.S1_at	LOC505683	similar to Tubulin polyglutamylase complex subunit 1 (PGs1)
Bt.24737.1.S1_at	MGC143184	similar to Armadillo repeat containing 7
Bt.24675.1.S1_at	LOC614838	similar to p101 protein
Bt.24673.1.A1_at	---	Transcribed locus, strongly similar to XP_595458.3 PREDICTED: similar to LipI3 p
Bt.24665.1.S1_at	LOC508720	similar to (MHC) class II transactivator
Bt.24644.1.S1_at	CPXM	carboxypeptidase X
Bt.24627.2.A1_a_at	MGC128227	similar to GIY-YIG domain containing 2
Bt.24624.1.S1_at	MRPS9	mitochondrial ribosomal protein S9
Bt.24605.1.S1_at	LOC787326	similar to Gamma-glutamyltransferase-like activity 1
Bt.24573.2.S1_at	MGC143056	similar to polynucleotide kinase-3-phosphatase
Bt.24565.1.S1_at	LOC507256	similar to RAI16 protein
Bt.24521.2.S1_at	LOC539174	similar to myotubularin related protein 9
Bt.24513.1.S1_at	USP12	ubiquitin specific peptidase 12
Bt.24475.1.S1_at	LOC515758	hypothetical LOC515758
Bt.24445.1.A1_at	LOC513676	similar to sine oculis homeobox homolog 5
Bt.24442.3.S1_at	LOC511220	Similar to Rho guanine nucleotide exchange factor (GEF) 11
Bt.24441.3.S1_at	---	CDNA clone IMAGE:7956285
Bt.24438.1.S1_a_at	LOC511511	similar to granulocyte colony stimulating factor receptor 25-1
Bt.24426.1.A1_at	---	Transcribed locus, strongly similar to XP_218506.3 PREDICTED: similar to carbohy
Bt.24399.1.A1_at	LOC537964	Similar to odz, odd Oz/ten-m homolog 1(Drosophila)
Bt.24396.3.A1_at	NUDT11	nudix (nucleoside diphosphate linked moiety X)-type motif 11
Bt.24378.1.S1_at	MAPK8IP3	mitogen-activated protein kinase 8 interacting protein 3
Bt.2436.1.A1_at	GH	growth hormone
Bt.24359.3.S1_at	ALS2CL	ALS2 C-terminal like
Bt.24351.1.A1_at	MGC142689	similar to limb expression 1
Bt.24323.1.A1_at	LOC528040	similar to Chain A, Structure Of Mammalian C3 With An Intact Thioester At 3a Res
Bt.24293.1.A1_at	BHMT	betaine-homocysteine methyltransferase
Bt.2426.2.S1_at	MGC137376	hypothetical LOC515507
Bt.2421.1.A1_at	LOC782309	similar to Pleckstrin homology domain containing, family F (with FYVE domain) me
Bt.24201.1.A1_at	F9	coagulation factor IX
Bt.24176.1.A1_at	MGC143302	similar to Interleukin-1 receptor accessory protein precursor (IL-1 receptor acc
Bt.24101.1.A1_at	LOC533798	hypothetical LOC533798
Bt.24020.1.A1_at	LOC533203	Similar to matrix metalloproteinase 19 isoform rasi-6
Bt.24.1.S1_at	OPCML	opioid binding protein/cell adhesion molecule-like
Bt.23987.1.A1_at	EIF3S7	eukaryotic translation initiation factor 3, subunit 7 zeta, 66/67kDa
Bt.23963.1.A1_s_at	SULT2A1	sulfotransferase family, cytosolic, 2A, dehydroepiandrosterone (DHEA)-preferring
Bt.23872.1.A1_at	MGC128787	Similar to CG3625-PB
Bt.23855.1.A1_at	ALB	Albumin
Bt.23853.3.S1_a_at	FES	feline sarcoma oncogene
Bt.23827.1.A1_at	LOC616400 /// PAPOLB	poly(A) polymerase beta (testis specific) /// similar to Chain A, Crystal Struct
Bt.238.1.S1_at	HOXB7	homeobox B7
Bt.23750.1.A1_at	GJA1	Gap junction protein, alpha 1, 43kDa
Bt.2373.2.S1_at	PAQR6	progesterin and adipoQ receptor family member V1
Bt.23608.1.S1_s_at	KRT8	keratin 8
Bt.23602.2.A1_at	LOC539205	similar to BRUNO-like 6 RNA-binding protein
Bt.23583.1.S1_at	IL21	interleukin 21
Bt.23565.1.S1_at	LOC533909	hypothetical LOC533909
Bt.23501.2.S1_at	LOC616142	hypothetical protein LOC616142
Bt.23501.1.S1_at	LOC616142	hypothetical protein LOC616142
Bt.23298.1.S1_at	CCDC84	coiled-coil domain containing 84
Bt.23246.1.S1_at	CDH5	cadherin 5, type 2, VE-cadherin (vascular epithelium)
Bt.23205.1.S1_s_at	LOC787239	similar to Synaptotagmin-1 (Synaptotagmin I) (Syt1) (p65)
Bt.23174.1.S1_at	MGC127643	similar to CD74 antigen
Bt.23153.1.S1_at	DSSDR2	double substrate-specificity short chain dehydrogenase/reductase 2
Bt.23079.2.A1_at	ORP150	Oxygen regulated protein, 150 kDa
Bt.23079.1.S1_at	LOC508773	similar to Hyou1 protein
Bt.22992.2.S1_at	LOC527819	similar to keratin 4
Bt.22984.1.S1_a_at	GCNT3	glucosaminyl (N-acetyl) transferase 3, mucin type
Bt.22973.1.S1_at	MYF6	myogenic factor 6 (herculin)
Bt.22967.1.A1_at	SPAM1	sperm adhesion molecule 1
Bt.22876.1.A1_at	SOX9	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-revers
Bt.22875.1.A1_at	CACNA1E	calcium channel, voltage-dependent, R type, alpha 1E subunit
Bt.22861.1.S1_at	GRP	gastrin-releasing peptide
Bt.22788.1.S1_at	RAF1	v-raf-1 murine leukemia viral oncogene homolog 1
Bt.227.3.A1_a_at	GSTA1 /// GSTA2	glutathione S-transferase A2 /// glutathione S-transferase A1
Bt.22692.2.S1_at	IL6R	interleukin 6 receptor
Bt.2266.3.S1_at	TRAF3IP3	TRAF3 interacting protein 3
Bt.22646.2.S1_at	LOC539884	similar to binding regulatory factor
Bt.2258.1.A1_at	LOC523809	Similar to KIAA1959 protein
Bt.22545.1.S1_a_at	MGC148755	similar to fibulin-1 C
Bt.22541.1.A1_at	ARF1 /// ARF3 /// LOC785421	ADP-ribosylation factor 1 /// ADP-ribosylation factor 3 /// similar to ADP-ribos
Bt.22475.1.S1_at	LOC539413	similar to aortic preferentially expressed gene 1
Bt.22400.1.A1_at	LOC615883	similar to SLIT3
Bt.22325.1.S1_at	MGC151722	hypothetical protein LOC783439
Bt.22277.1.S1_at	LOC538843	similar to LRMR5827
Bt.22264.2.A1_a_at	MGC140699	similar to p53-induced protein
Bt.22223.2.S1_at	JOSD1	Josephin domain containing 1
Bt.22221.1.S1_at	LOC540530	similar to fibronectin type III and SPRY domain containing 2
Bt.22180.1.S1_at	LOC507332	similar to DTTR431
Bt.22128.2.S1_at	LOC507361	hypothetical protein LOC507361
Bt.2212.1.S1_at	LOC616136	similar to OTTHUMP00000017061
Bt.22104.1.S1_at	IHH	indian hedgehog
Bt.22094.2.S1_at	MGC142386	similar to chromosome 9 open reading frame 26 (NF-HEV)
Bt.22048.1.S1_at	LOC615922	similar to KIAA1793 protein
Bt.21997.1.S1_at	PPM1K	protein phosphatase 1K (PP2C domain containing)
Bt.21980.1.S1_at	LOC783725	similar to B-cell differentiation antigen CD72 (Lyb-2)

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Bt.21959.3.S1_at	LOC536822	Hypothetical LOC536822
Bt.21939.2.S1_at	LOC537594	similar to phosphatase and actin regulator 1
Bt.21926.2.S1_a_at	LOC508142	similar to translocase of outer mitochondrial membrane 34
Bt.21918.1.S1_at	CARS2	cysteinyl-tRNA synthetase 2, mitochondrial (putative)
Bt.21903.1.S1_at	MOBK2C	MOB1, Mps One Binder kinase activator-like 2C
Bt.219.1.S1_at	AKAP3	A kinase (PRKA) anchor protein 3
Bt.21851.2.S1_at	---	Transcribed locus, moderately similar to NP_001096709.1 F-box protein 17 [Bos ta
Bt.21827.2.S1_at	THOP1	thimet oligopeptidase 1
Bt.21731.2.S1_a_at	DBN1	drebrin 1
Bt.21722.1.S1_at	MGC137405	GTPase, IMAP family member
Bt.21706.2.A1_at	MGC152081	similar to carboxypeptidase A5
Bt.21655.1.S1_at	FUT2	fucosyltransferase 2 (secretor status included)
Bt.21570.3.A1_at	LOC533096	Similar to CD39L4
Bt.2156.2.S1_a_at	LOC508598	hypothetical LOC508598
Bt.21534.3.S1_a_at	LOC533826	similar to TIP120-family protein TIP120B
Bt.21501.2.S1_a_at	DECR2	2,4-dienoyl CoA reductase 2, peroxisomal
Bt.21498.1.S1_at	CPSF4	cleavage and polyadenylation specific factor 4, 30kDa
Bt.21482.2.S1_at	LOC538384	similar to beta-interferon gene positive-regulatory domain 1 binding factor
Bt.21407.2.S1_at	TNMD	tenomodulin
Bt.21360.1.S1_at	LOC539901	hypothetical LOC539901
Bt.21308.1.A1_at	RAPGEF3	Rap guanine nucleotide exchange factor (GEF) 3
Bt.21221.1.S1_at	LOC615744	similar to Lst-1 gene product
Bt.21215.2.S1_at	LOC506721	similar to ALL1 responsive protein ARP1c
Bt.21215.1.A1_at	LOC506721	similar to ALL1 responsive protein ARP1c
Bt.2114.1.S1_at	---	CDNA clone IMAGE:8220921
Bt.21126.2.S1_at	SNCB	synuclein, beta
Bt.210.1.S1_at	PRH	preproprolactin-releasing peptide
Bt.20999.1.S1_at	COLEC11	collectin sub-family member 11
Bt.20921.1.S1_at	BSG	basigin
Bt.20901.1.A1_at	LOC507162	Similar to Apobec3G
Bt.20884.1.S1_at	MGC137881	Similar to RNA-binding protein 5 (RNA-binding motif protein 5) (Putative tumor s
Bt.20867.1.A1_at	RPUSD3	RNA pseudouridylyl synthase domain containing 3
Bt.20850.1.S1_at	LOC520186	similar to centrosomal protein 110kDa
Bt.20828.1.A1_at	LOC617365	similar to Chromosome 14 open reading frame 143
Bt.20795.1.A1_at	PARDA6	par-6 partitioning defective 6 homolog alpha (C. elegans)
Bt.20771.2.S1_at	LOC505771	similar to Pex1pL664P
Bt.20723.1.A1_at	LOC514108	Similar to Eukaryotic translation initiation factor 4E transporter (eIF4E transp
Bt.20698.1.A1_at	ETAA16	ETAA16 protein
Bt.20653.1.A1_at	LOC539392	similar to programmed death ligand 2
Bt.20522.1.S1_at	---	Transcribed locus, moderately similar to XP_943264.1 PREDICTED: similar to Serin
Bt.20513.2.S1_a_at	MGC140219	similar to Serine/threonine-protein kinase MARK2 (MAP/microtubule affinity-regul
Bt.20513.1.S1_at	MGC140219	similar to Serine/threonine-protein kinase MARK2 (MAP/microtubule affinity-regul
Bt.20491.1.S1_at	---	Transcribed locus, strongly similar to XP_342578.2 PREDICTED: similar to RIKEN c
Bt.20478.2.S1_at	LOC512021	similar to Rho guanine exchange factor 15
Bt.20471.2.S1_a_at	SHARPIN	SHANK-associated RH domain interactor
Bt.20455.1.S1_at	MAPT	Microtubule-associated protein tau
Bt.20453.1.S1_at	LOC515122	similar to Abhydrolase domain containing 14A
Bt.20431.2.S1_at	MGC140538	similar to Max interacting protein 1
Bt.2039.2.S1_at	LOC514971	similar to cytochrome P450 2S1
Bt.2039.1.S1_at	LOC514971	similar to cytochrome P450 2S1
Bt.20388.1.S1_at	TM4SF4	transmembrane 4 L six family member 4
Bt.20362.1.S1_at	LOC516567	similar to KIAA0365 protein
Bt.20361.3.S1_at	FBXL2	F-box and leucine-rich repeat protein 2
Bt.20241.1.S1_at	LOC510602 /// LOC786774	similar to 3-hydroxyanthranilate 3,4-dioxygenase (3-HAO) (3-hydroxyanthranilic a
Bt.20232.1.S1_at	LOC511420	hypothetical LOC511420
Bt.20212.1.S1_at	MGC152565	similar to adenylate cyclase type IV
Bt.20180.1.S1_at	RAB25	RAB25, member RAS oncogene family
Bt.20178.2.S1_at	MGC152142	similar to nuclear factor of kappa light polypeptide gene enhancer in B-cells in
Bt.20120.3.S1_at	LOC511801	Similar to ubiquitin-conjugating enzyme E2D 4 (putative)
Bt.20092.2.S1_at	MGC140362	similar to Rab GTPase-binding effector protein 2 (Rabaptin-5beta)
Bt.20088.2.S1_a_at	TPPP	tubulin polymerization promoting protein
Bt.20085.2.S1_at	LOC510966	hypothetical LOC510966
Bt.20081.1.S1_at	MGC137224	similar to PET112-like
Bt.20058.1.S1_at	MGC138975	Similar to mitochondrial ribosomal protein L14
Bt.20018.2.S1_a_at	LOC100126544	hypothetical LOC100126544
Bt.20012.1.S1_at	LOC516256	similar to glucocorticoid-induced TNFR-related protein
Bt.19980.1.A1_at	ApoN	ovarian and testicular apolipoprotein N
Bt.19884.2.S1_at	PLA1A	phospholipase A1 member A
Bt.19795.1.S1_at	BREH1	retinyl ester hydrolase type 1
Bt.1978.9.A1_at	TRB@	T cell receptor, beta cluster
Bt.1978.8.A1_at	LOC507049	T-cell receptor beta chain V region
Bt.1978.10.A1_a_at	TRB@	T cell receptor, beta cluster
Bt.19753.1.S1_at	LOC783335	similar to IL-17RE
Bt.19717.1.S1_at	LOC785809	similar to Family with sequence similarity 109, member A
Bt.19629.3.A1_at	HSPH1	heat shock 105kDa/110kDa protein 1
Bt.19619.1.A1_at	HRMT1L2	HMT1 hnRNP methyltransferase-like 2
Bt.19578.1.S1_at	LOC618914	hypothetical LOC618914
Bt.195.2.S1_at	LOC540141	similar to F-box and leucine-rich repeat protein 11
Bt.19470.1.A1_at	MGC166329	hypothetical LOC525941
Bt.19334.3.S1_at	JUND	jun D proto-oncogene
Bt.19309.3.A1_at	LOC616742	similar to Ephrin-A5 precursor (EPH-related receptor tyrosine kinase ligand 7) (
Bt.19296.2.S1_a_at	SLC39A3	solute carrier family 39 (zinc transporter), member 3
Bt.19274.1.A1_at	C1QTNF7	C1q and tumor necrosis factor related protein 7
Bt.19232.1.A1_at	---	Transcribed locus, strongly similar to NP_001071497.1 hypothetical protein LOC54
Bt.19148.1.S1_a_at	KHDRBS1	KH domain containing, RNA binding, signal transduction associated 1
Bt.191.1.S1_at	IL1A	interleukin 1, alpha
Bt.19060.1.A1_at	LOC523081	similar to Solute carrier family 23 (nucleobase transporters), member 3
Bt.1905.1.S1_at	MYL2	myosin, light chain 2, regulatory, cardiac, slow
Bt.19008.1.A1_at	---	Transcribed locus, weakly similar to NP_001028798.1 fibrinogen A-alpha chain [Bo
Bt.18927.1.A1_at	KIAA1189	hypothetical protein LOC617274
Bt.18901.1.S1_at	LOC539749	similar to Homeobox protein SIX6 (Sine oculis homeobox homolog 6) (Optic homeobo

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Bt.18868.1.S1_at	---	Transcribed locus, strongly similar to NP_001098481.1 tripartite motif-containin
Bt.18864.1.A1_at	---	Transcribed locus, weakly similar to NP_001073867.1 KIAA0368 protein [Homo sapie
Bt.18804.2.S1_at	LOC784914	similar to Zinc finger protein 26
Bt.18804.1.A1_at	LOC784914	similar to Zinc finger protein 26
Bt.18793.2.S1_at	SVOP	SV2 related protein
Bt.18752.1.S1_at	MGC143150	similar to SET and MYND domain containing protein 2 (HSKM-B)
Bt.18735.2.S1_at	ITGB3BP	integrin beta 3 binding protein
Bt.18682.1.A1_at	CST6	cystatin E/M
Bt.18571.2.S1_at	MGC155295	similar to disks large-associated protein 4
Bt.18522.1.A1_at	---	Transcribed locus, strongly similar to NP_056558.1 nuclear receptor subfamily 4,
Bt.18506.1.S1_at	DLG5	discs, large homolog 5 (Drosophila)
Bt.18487.3.S1_at	MGC140386	hypothetical LOC527134
Bt.18487.2.S1_at	LOC617939	similar to FLJ00248 protein
Bt.18422.1.S1_at	LOC515581	similar to MGC21874 protein
Bt.18418.1.A1_at	LOC532674	similar to OTTHUMP00000016557
Bt.18342.2.A1_at	---	Transcribed locus, strongly similar to XP_986810.1 PREDICTED: similar to HECT do
Bt.18290.2.S1_at	LOC506182	similar to Tnf receptor-associated factor 3
Bt.18285.1.A1_at	LOC531695	similar to homeodomain protein
Bt.18238.1.S1_at	MGC152584	similar to TBC1 domain family, member 10C
Bt.18231.1.S1_at	CYP2C87	cytochrome P450, family 2, subfamily C, polypeptide 87
Bt.18189.1.A1_at	LOC504803	similar to 12R-lipoxygenase
Bt.18180.1.A1_at	LOC781707	hypothetical protein LOC781707
Bt.18120.1.A1_at	DDX5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5
Bt.18085.2.A1_at	MGC157202	Similar to sterol response element binding protein cleavage-activating protein
Bt.17935.1.S1_at	LOC514212	similar to myosin, heavy chain 14
Bt.17792.1.S1_at	LOC506859	similar to KIAA1588 protein
Bt.17780.2.S1_at	LOC510185	similar to IL2RB
Bt.1776.2.S1_a_at	LOC509964	hypothetical LOC509964
Bt.17756.2.S1_at	LOC616498	similar to piggyBac transposable element derived 5
Bt.17742.1.A1_at	LOC507082	Akt substrate AS250
Bt.17737.1.A1_at	---	Transcribed locus, weakly similar to NP_001012749.1 hypothetical protein LOC2838
Bt.17711.1.A1_at	LOC533355	similar to ENaCB, amiloride sensitive sodium channel beta subunit
Bt.17673.1.A1_at	LOC788986	Similar to HZFW1
Bt.17642.1.A1_at	LOC784036	similar to Zinc finger protein 323
Bt.17537.1.A1_at	SAA4	serum amyloid A4, constitutive
Bt.17520.1.S1_at	LOC506571	hypothetical LOC506571
Bt.1748.2.S1_a_at	KLC4 ///	kinesin light chain 4 /// similar to LOC767885 protein
Bt.174.1.S1_at	GABRA2	gamma-aminobutyric acid (GABA) A receptor, alpha 2
Bt.1739.3.S1_at	---	Transcribed locus, strongly similar to NP_989430.1 frizzled homolog 4 [Gallus ga
Bt.17332.1.S1_at	LOC613833	similar to mineralocorticoid receptor
Bt.17305.1.A1_at	MGC152385	similar to Fragile X mental retardation 1 neighbor
Bt.17291.1.A1_at	TEX12	Testis expressed 12
Bt.1726.2.S1_at	MGC179414	hypothetical LOC514858
Bt.1722.3.S1_a_at	LOC538270	similar to skeletrophin
Bt.17187.1.A1_at	ARRB1	Arrestin, beta 1
Bt.17170.1.A1_at	LOC504622	similar to killer cell lectin-like receptor family I member 1
Bt.17133.1.A1_at	MGC143419	Similar to KIAA1819 protein
Bt.17078.1.S1_at	LOC516019	similar to semaphorin SEMA6A1
Bt.17059.2.S1_at	LOC618228	similar to nucleolar protein with MIF4G domain 1
Bt.17054.2.A1_at	LOC528960	Hypothetical LOC528960
Bt.17048.1.S1_at	SPATS1	spermatogenesis associated, serine-rich 1
Bt.16964.1.A1_at	---	Transcribed locus, strongly similar to NP_776378.2 prolactin precursor [Bos taur
Bt.16930.1.A1_at	LOC531942	similar to B-cell lymphoma 3-encoded protein (Protein Bcl-3)
Bt.16903.1.A1_at	XAB2	XPA binding protein 2
Bt.1688.1.A1_at	LOC514669 ///	hypothetical LOC514669 /// hypothetical protein LOC789691
Bt.16874.1.A1_at	LOC617120	Hypothetical LOC617120
Bt.16822.1.S1_at	MGC157129	similar to KIAA0936 protein
Bt.16810.1.S1_at	LOC509616	similar to Wbscr27 protein
Bt.16801.1.A1_at	MGC151542	Similar to COPG2 protein
Bt.16795.1.A1_at	SPAG6	sperm associated antigen 6
Bt.16789.1.A1_at	MGC137384	similar to Protein C12orf11 (Sarcoma antigen NY-SAR-95)
Bt.16785.1.A1_at	LOC505819	similar to mannan-binding lectin serine protease 2
Bt.16761.1.S1_a_at	100125581 /// LOC614260 /// LOC783192	similar to zinc finger protein 75 /// hypothetical protein LOC783192 /// hypothe
Bt.16748.1.A1_at	---	---
Bt.16747.1.A1_at	LOC524776	similar to chromodomain helicase DNA binding protein 6
Bt.16745.1.A1_at	CCL28	Chemokine (C-C motif) ligand 28
Bt.16727.2.S1_at	MGC139174	similar to CLN8 protein
Bt.16713.1.A1_at	LOC510356	similar to Non-receptor tyrosine-protein kinase TNK1 (CD38 negative kinase 1)
Bt.16712.1.A1_at	LOC782368	similar to aquaporin 5
Bt.16632.1.A1_at	LOC613276	hypothetical LOC613276
Bt.1661.1.S1_at	LOC100124517	hypothetical protein LOC100124517
Bt.16596.2.S1_at	MGC165823	similar to leucine-rich repeat domain-containing protein
Bt.16583.1.S1_at	MGC126930	similar to Voltage-dependent calcium channel gamma-like subunit (Neuronal voltag
Bt.16580.3.A1_at	MGC139899	similar to leader-binding protein 32
Bt.16532.1.A1_at	LOC506965	similar to DEAH (Asp-Glu-Ala-His) box polypeptide 34
Bt.16498.1.A1_at	LOC615968	similar to chromosome 9 open reading frame 11
Bt.16469.3.S1_at	TRABD	TraB domain containing
Bt.16390.2.A1_at	---	---
Bt.16362.1.S1_at	LOC512324	similar to CG32732-PA
Bt.16307.1.A1_s_at	MGC140803	similar to Pulmonary surfactant-associated protein B precursor (SP-B) (6 kDa pro
Bt.16279.1.A1_at	MGC148626	Similar to Regulated endocrine specific protein 18 precursor
Bt.16211.2.S1_at	LOC789894	similar to PAP-associated domain-containing protein 5 (Topoisomerase-related fun
Bt.16206.1.A1_at	LOC618234	similar to zinc finger protein 258
Bt.16173.1.A1_at	LOC782597	hypothetical protein LOC782597
Bt.16098.1.S1_at	LOC617882	hypothetical LOC617882
Bt.16057.1.S1_at	MGC159903	hypothetical LOC540019
Bt.16042.1.S1_at	LOC539467	hypothetical LOC539467
Bt.16004.1.A1_at	MYH8	myosin, heavy chain 8, skeletal muscle, perinatal

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Bt.16003.1.S1_at	PYGM	phosphorylase, glycogen; muscle (McArdle syndrome, glycogen storage disease type
Bt.160.2.S1_x_at	DSC1	desmocollin 1
Bt.15989.1.S1_at	IRF2	interferon regulatory factor 2
Bt.15965.1.S1_at	LOC505878	similar to hSOX20 protein
Bt.15950.2.S1_at	GORASP1	Golgi reassembly stacking protein 1, 65kDa
Bt.15914.2.S1_at	KHK	ketohehexokinase (fructokinase)
Bt.15907.1.A1_at	MMACHC	methylmalonic aciduria (cobalamin deficiency) cblC type, with homocystinuria
Bt.15827.1.S1_a_at	LOC534944	similar to Pxaa1p
Bt.1567.2.S1_a_at	LOC508510	similar to secretory carrier membrane protein 5
Bt.15666.1.S1_at	PXMP2	peroxisomal membrane protein 2, 22kDa
Bt.1559.3.S1_a_at	THAP3	THAP domain containing, apoptosis associated protein 3
Bt.15405.1.A1_at	PRP9	prolactin-related protein IX
Bt.15401.1.S1_at	PAG1B	pregnancy-associated glycoprotein 1
Bt.1536.3.S1_at	LOC506727	similar to nuclear factor of kappa light polypeptide gene enhancer in B-cells in
Bt.14681.1.A1_at	ARG1	arginase, liver
Bt.14637.1.A1_at	CARKL	carbohydrate kinase-like
Bt.14590.1.A1_at	MGC142356	similar to Tyrosine-protein kinase BLK (B lymphocyte kinase) (p55-BLK)
Bt.14576.1.A1_at	LOC515324	similar to Prospero-related homeobox 1
Bt.141.2.S1_a_at	BSM	submaxillary mucin 2
Bt.13990.2.S1_at	LOC539598	similar to zinc finger, CCHC domain containing 8
Bt.13845.2.S1_at	LOC786764 /// MGC151851	similar to HSPC230 /// similar to ATP sulfurylase/APS kinase
Bt.13771.2.S1_at	MGC152529	Similar to CD134 homologue