

**Table S1: List of 702 genes up-regulated in MH, ML and SN patients.**

These genes were extracted by SAM with a False Discovery Rate&lt;5% and a FC&gt;1,8.

Name	GenBank	MH		ML		SN	
		FC	FDR	FC	FDR	FC	FDR
Interferon-induced protein 44	AA034349	1,88	0,51				
Lectin, mannose-binding, 1	AA057813	1,95	2,32	2,11	2,89		
Transcribed locus	AA182818			2,37	0,59	2,06	0,77
ATP/GTP-binding protein	AA188236			2,19	1,09	2,16	0,66
Chloride intracellular channel 1	AA291390			1,98	2,30	1,95	2,44
RAD52 homolog	AA306663			2,10	1,09	2,11	0,49
Formin binding protein 4	AA424932			2,05	1,76	1,99	0,66
Myxovirus resistance 1 (interferon-inducible protein p78)	AA477235	1,94	0,51				
PHD finger protein 11	AA502343			1,87	2,89		
Angel homolog 1	AA527389			2,13	1,98	1,98	0,66
Interleukin 1, beta	AA577318			2,38	0,59	1,84	1,42
Proteasome 26S subunit, non-ATPase, 4	AA604027			2,18	1,09	1,88	0,91
Proteasome 26S subunit, ATPase, 3	AA604188			1,88	2,30		
Zinc finger protein 220	AA777633			1,96	1,09	2,04	0,49
Oxidative-stress responsive 1	AA780605					1,89	0,66
B-cell translocation gene 1, anti-proliferative	AA807633			2,54	0,59	1,98	0,66
Delta/YY1/NF-E1/UCRBP transcription factor	AAA40477			12,0	2,97		
Carbohydrate-binding recepto	AAA40892					3,18	2,86
Sob protein (zinc finger protein)	AAC47282	1,99	1,40				
Zinc finger protein 23	AAH07256			1,99	2,30		
Embryonic poly(A) binding proteir	AAK29408			2,20	1,09		
Kinesin family member 3B	AB002357			1,91	1,98		
Catenin (cadherin-associated protein), delta 1	AB002382	1,92	2,32			1,93	0,66
Signal-induced proliferation-associated gene 7	AB005666			2,07	1,09	1,96	0,66
Aquaporin 7	AB006190					2,64	4,96
Cytoplasmic linker 2	AB006629	2,12	0,51				
Suppressor of cytokine signaling 3	AB006967			2,16	1,09		
KIAA0427 protein	AB007887					1,81	1,08
Low density lipoprotein receptor-related protein 3	AB009462			2,81	0,59	1,87	0,77
Hedgehog gene	AB010994			1,81	3,45		
KIAA0574 protein	AB011146					2,01	0,66
KIAA0631 protein	AB014531					1,95	0,66
KIAA0664 protein	AB014564					1,90	0,77
F-box and leucine-rich repeat protein 7	AB020647	1,91	1,27				
Pleckstrin homology domain containing, family M member 2	AB020649					1,84	1,43
Chromosome 22 open reading frame 9	AB023147					1,93	0,66
Fibronectin type III domain containing 3	AB023187	2,02	1,27				
Heat shock 70kDa protein 4	AB023420	2,21	2,49			2,05	0,49
KIAA1059 protein	AB028982			2,08	2,97		
ErbB2 interacting protein	AB033051					1,85	1,08
Ribonucleotide reductase M2 B (TP53 inducible)	AB036063	2,21	0,51				
Nucleolar protein family A, member 3	AB043104			1,83	3,79	2,01	0,91
Disabled homolog 1 (DAB1)	AB055282			1,96	1,09	1,81	1,08
Possible morphine-related gene	AB056657					1,80	1,42
Chromosome 16	AC004232			1,81	2,66	1,82	1,42
Copper chaperone for superoxide dismutase	AF002210			2,11	1,09	1,87	1,42
Homeodomain-interacting protein kinase 3	AF004849			1,87	2,97	1,83	1,42
Claudin 3 (CLDN3) gene	AF007189					1,97	1,42
Protein kinase CK2 catalytic subunit alpha gene	AF011920					1,85	1,23
TYRO protein tyrosine kinase binding protein (DAP12)	AF019562	1,89	2,32			2,00	0,66
Meltrin-L precursor (ADAM12)	AF023476					2,04	0,66
Vascular endothelial growth factor (VEGF)	AF024710			4,03	2,97		
Interferon-inducible protein (AIM2)	AF024714	2,09	1,27	2,44	0,59	1,99	0,66
Histone acetyltransferase (GCN5)	AF029777					1,91	0,66
Similar to 26S proteasome subunit p45	AF035309			2,04	1,09	2,25	0,49
Peptidylprolyl isomerase E (cyclophilin E)	AF042386			1,90	2,30		
Chemokine (C-X-C motif) ligand 13 (CXCL13)	AF044197	2,82	0,51	1,97	2,66	1,95	0,66
SEC6-like 1	AF055006			1,95	1,98		
Hypothetical protein LOC151162	AF055029			1,94	1,76		
V-maf musculoaponeurotic fibrosarcoma oncogene homolog	AF055376					1,87	0,91

Interferon gamma receptor 1	AF056979		2,12	1,09			
Zinc finger protein 145	AF060568		1,90	4,43			
Zinc finger protein 145	AF060568		1,93	1,98			
Heterogeneous nuclear ribonucleoprotein M	AF061832		2,14	1,09	1,94	0,77	
Ig superfamily, member 4B	AF062733	1,83	4,43				
Cullin 3	AF064087		1,86	1,98	2,08	0,49	
SNC73 protein (Ig H alpha 1)	AF067420	2,03	2,32			2,19	0,49
Mitochondrial 28S ribosomal protein S22	AF070618	1,81	2,49				
Regulatory factor X-associated ankyrin-containing protein	AF077196		1,82	2,66			
Potassium channel, subfamily K, member 5 (TASK2)	AF084830	2,02	1,27				
Solute carrier family 21, member 3	AF085224	1,98	0,51	1,89	2,66		
Heart and neural crest derivatives expressed :	AF087940	1,89	2,49				
Flotillin 1	AF089750		1,86	1,98			
L-3-hydroxyacyl-CoA dehydrogenase, short chain	AF095703		2,23	0,59			
Host cell factor 2 (HCF-2)	AF117210		1,88	3,45			
Ig lambda 1 variable region	AF124182	1,91	1,40				
SH2-containing protein Nsp3	AF124251				1,92	0,77	
Prohibitin 2	AF126021		2,33	0,59	1,89	0,66	
Beta-transducin repeat containing	AF129530				1,83	1,42	
Serpine1 mRNA binding protein 1	AF131807				1,92	1,08	
similar to guanine nucleotide exchange factor p53	AF131824		1,84	2,30			
Tubulin, alpha 3	AF141347		2,04	1,09			
Olfactory receptor, family 52, subfamily K, member 3	AF143328		2,09	1,09			
Coatomer protein complex, subunit zeta 1	AF151878		2,21	1,09	1,81	1,43	
Protocadherin gamma subfamily A, 12	AF152318		1,99	2,97	2,00	1,23	
PEA15 protein (PEA15)	AF153274				1,95	0,66	
G-protein signalling modulator 3 (AGS3-like)	AF155657		1,99	1,09	1,86	1,24	
Serum/glucocorticoid regulated kinase family, member 3	AF169035	2,15	3,23		1,93	0,77	
LIN-7 homolog 1 (MALS-1)	AF173081	1,97	2,99				
Talin 1	AF177198		1,86	3,45			
Ion channel homolog (IWU1)	AF177940	2,20	0,51				
Rho guanine nucleotide exchange factor (GEF) 12	AF180681		2,08	1,09	1,94	0,66	
PI-3-kinase-related kinase SMG-1	AF186377		2,17	1,09	1,99	0,66	
Heat shock 70kDa protein 5	AF188611		1,89	1,98			
Ubiquilin 2	AF189009		1,92	2,30			
Stomatin (EPB72)-like 2	AF190167		2,11	1,09	1,83	0,91	
Fuse-binding protein-interacting repressor	AF190744				1,81	1,23	
Heat shock 22kDa protein 8 (E2IG1)	AF191017				2,17	0,49	
Makorin, ring finger protein, 1	AF192784				2,41	0,49	
F-box and leucine-rich repeat protein 4	AF199355				13,7	0,49	
Early B-cell transcription factor (EBF)	AF208502	2,07	0,51				
SEC11-like 3	AF212233		1,86	2,07	2,09	0,49	
Glutathione S-transferase omega 1	AF212303				1,84	0,77	
HSCARG protein	AF225419		1,86	2,30			
Sodium channel, voltage-gated, type III, alpha 3	AF225986		2,11	1,09	1,88	1,93	
Leucine-rich repeats and death domain containing	AF229178		1,91	1,98	2,03	0,49	
Rab-related GTP-binding protein	AF235022	2,01	2,99		2,00	0,66	
Na+,K+-ATPase gamma-subunit (FXVD2) gene	AF241235		2,12	1,09			
ATP binding cassette 7 (ABC7) gene	AF241883		1,83	2,97			
NADPH oxidase 4	AF261943		2,08	1,98			
Alpha-2A adrenergic receptor	AF284095	1,86	3,56				
CIG30 gene	AF292387		2,19	1,09			
Toll-like receptor 10	AF296673	2,09	0,51				
LIM domain only 6	AI017508				1,81	1,24	
v-jun avian sarcoma virus 17 oncogene homolog	AI051628	1,97	2,99				
CD99 antigen	AI061430		1,83	2,30	1,86	0,66	
Glycophorin A (includes MN blood group)	AI133438		3,16	1,09			
Dual-specificity tyrosine phosphorylation-regulated kinase 1/	AI174234		1,88	2,30	1,81	1,93	
MHC class II, DQ alpha 1	AI249268		2,46	0,59			
Family with sequence similarity 89, member B	AI280835		1,82	2,66			
E74-like factor 2 (ets domain transcription factor)	AI299518		2,11	1,09			
TRM1 tRNA methyltransferase 1 homolog	AI333215		1,82	2,66			
Ribosomal protein L23	AI349581		1,83	2,30			
Calcium channel, voltage-dependent, L type, alpha 1S subunit	AI417964	2,01	2,99	2,15	1,09		
Splicing factor 4	AI453069		1,82	2,97			
Spermidine synthase	AI499647		1,91	2,07			
HERPUD1	AI590087	2,07	0,51		1,90	0,66	

Ig heavy constant mu	AI634950	5,06	0,51	2,09	2,97	2,76	0,49
Neuronatin	AI638471			2,19	1,09	2,10	0,49
Carbonyl reductase 3	AI658832			1,86	2,30		
Epidermal growth factor receptor pathway substrate 4	AI679737	2,30	0,51			1,89	1,23
TBP-associated factor, RNA polymerase II 20kDa (TAF12)	AI681931			1,91	2,07	1,81	1,42
Peptidyl-prolyl isomerase G (cyclophilin G)	AI742687			2,11	1,09	2,25	0,49
Mitogen-activated protein kinase kinase 4	AI752491					1,82	2,25
Translocated promoter region (to activated MET oncogene)	AI765790			1,80	3,78	1,81	1,23
Cyclin D3	AI803460			2,04	1,09		
RAN binding protein 2-like 1	AI859613					1,88	0,91
Surfeit 5	AI884541			1,87	2,30	2,20	0,49
Chromosome X open reading frame 5	AI888578			1,99	1,76	1,92	1,08
Kinectin 1 (kinesin receptor)	AI916662			1,88	2,07	1,94	0,66
Splicing factor SF1 (ZNF162)	AJ000052	1,85	2,32				
Pleckstrin homology, Sec7 and coiled-coil domains 1	AJ005197			1,89	2,30		
Ig kappa constant	AJ010442	2,64	0,51			2,49	0,49
p10 for chaperonin 10 and p60 for chaperonin 60	AJ250915			2,18	1,09		
L(3)mbt-like 2	AJ305227					2,05	0,66
NAT1 gene for arylamine N-acetyltransferase 1	AJ307007			2,21	1,09		
Chromosome 10 open reading frame 26	AK000161			1,91	1,76		
Nucleolin	AK000221					1,92	0,66
Solute carrier family 16, member 5	AK000416					1,86	0,91
Hypothetical protein FLJ20551	AK000558			2,05	1,09		
Hypothetical protein FLJ13868	AK000679			1,81	2,30		
Serologically defined colon cancer antigen 5	AK001296			1,88	4,43		
KIAA1052 protein	AK001412					2,06	0,66
Chromosome 20 open reading frame 14	AK001554			1,96	2,30		
FLJ25476 protein	AK021842	2,04	2,49				
TBC1 domain family, member 15	AK022147	1,83	4,43				
Clone MAMMA1001397	AK022309			1,84	2,30		
Putative acyl-CoA dehydrogenase	AK022654			1,91	2,07		
WD repeat domain 54	AK023015			1,87	2,30	1,81	1,42
Sorting nexin 22	AK024014			2,18	1,09		
Chromosome 1 open reading frame 115	AK024208			1,86	2,30		
Zinc finger protein 496	AK024643					2,22	1,93
KIAA0284 protein	AK025023	2,58	0,51				
Autism susceptibility candidate 2	AK025298			3,32	0,59	2,25	0,49
KIAA0703 protein	AK025424			1,81	2,30		
Acidic nuclear phosphoprotein 32 family, member E	AK025624			1,83	3,45	2,07	0,66
CTP synthase II	AK025654					2,35	0,49
Syntaxin 16	AK026970			1,93	2,66	2,25	0,49
TGF beta 1 induced transcript 4	AK027071	3,21	2,99				
Hypothetical protein FLJ23436	AK027089			1,92	2,30	2,32	0,49
Acyl-CoA dehydrogenase family, member 1	AK027186					1,82	1,42
NFATC2IP	AK027545					1,89	0,77
Neurogenic locus notch homolog protein 4 precursor	AK027618	1,95	1,55				
Hippocampus abundant transcript-like 1	AK027659			1,87	2,30	2,29	0,49
Clone RP5-1042K10 on chromosome 22q13.1-13.2	AL022238			1,81	2,30	2,12	0,49
Zinc finger protein 337	AL049942			1,85	2,30	2,05	0,49
Clone DKFZp586G021	AL050127	1,93	1,40	2,17	1,09	2,22	0,66
Homeo box A2	AL079274			2,12	1,09		
REV3-like, catalytic subunit of DNA polymerase zeta	AL096744			1,99	2,30		
Vacuolar protein sorting 39	AL117456					2,06	2,00
MOB1, Mps One Binder kinase activator-like 1E	AL122062			1,89	2,30	1,88	0,77
WD repeat domain 75	AL122097					1,83	2,25
Transducer of ERBB2, 2	AL133080					1,82	1,08
Tigger transposable element derived 1	AL136539			2,11	2,97		
Collagen, type XXI, alpha 1	AL136624			1,97	1,09		
Hypothetical protein FLJ13576	AL136626			1,94	2,30	1,87	2,86
Factor for adipocyte differentiation 158	AL136919	2,18	0,51				
Myosin IXA	AL137287	1,93	0,51				
Nuclear receptor binding protein 2	AL137662					1,87	3,16
Ral GEF with PH domain and SH3 binding motif 2	AL137687			1,86	2,89		
TBC1 domain family, member 16	AL512709			1,85	4,43		
ArsA arsenite transporter, ATP-binding, homolog 1	AL519675					1,91	2,00
Forkhead box M1	AL525810			2,02	1,76	1,85	0,91
Zinc finger protein 22 (KOX 15)	AL528233					1,95	0,91

Cytochrome P450, family 3, subfamily A, polypeptide 7	AL531737					1,86	1,83
Peptidylprolyl isomerase F (cyclophilin F)	AL531948			1,89	2,30		
Ribosomal protein S7	AL535356	2,97	0,51	2,27	1,09	2,70	0,49
Serine proteinase inhibitor, clade F, member 1	AL541945	2,15	0,51	2,39	0,59	2,57	0,49
CD74 antigen (MHC class II antigen-associated)	AL543515	1,84	3,56				
Myeloid/lymphoid or mixed-lineage leukemia:	AL544994					2,06	1,24
Frizzled-related proteir	AL546699			1,92	1,98	1,87	1,08
Connective tissue growth factor	AL547439	1,86	1,55				
Surfeit 1	AL549808					1,98	0,66
TGF beta-induced factor	AL549846	2,07	0,51	1,95	1,76	2,16	0,49
Fibulin 5	AL570066					2,26	0,49
Farnesyltransferase, CAAX box, alpha	AL574829					1,83	0,77
Leukocyte-associated Ig-like receptor 1	AL575990			2,18	0,59	2,26	0,49
Ring finger protein 1	AL576514			1,92	1,77	2,08	0,49
Microspherule protein 1	AL581415					1,92	0,66
2',5'-oligoadenylate synthetase 1	AL582281	2,47	0,51				
Mannosidase, alpha, class 1B, member 1	AL583481			2,16	1,76	1,85	4,13
PEPP subfamily gene 2	AL590526			1,86	1,98	1,81	1,43
Myosin, light polypeptide 1, alkali; skeletal, fas	AL598805					1,89	0,91
Liprin, alpha 1 (PPFIA1)	AL600593			1,90	2,30	1,85	0,86
Clone DKFZp313J0242 5	AL601447					2,15	1,83
Clone KB1125A3 on chromosome 22q11.2	AP000350			1,97	1,09	2,31	0,49
Chromosome 3p21.3, anti-oncogene region	AP000500			1,98	1,76		
Chromosome 3p21.3, anti-oncogene region	AP000500					2,00	0,66
Clone KB1440D3 on chromosome 22q11.2	AP000553					1,82	2,86
Chromosome 21q, section 58/105	AP001714			1,95	2,30		
Chromosome 21q, section 60/105	AP001716					1,96	1,06
Chromosome 21q, section 62/105	AP001718			1,88	2,30		
Clone KB1184D12 on chromosome 8q23	AP003351					1,83	1,08
Ral GEF with PH domain and SH3 binding motif 2	AU119325					2,19	0,49
Methionyl aminopeptidase 2	AU119678			2,17	1,09		
Desmoglein 2	AU124258	1,89	3,56	2,07	1,09	2,06	0,66
Caspase 3, apoptosis-related cysteine peptidas	AU125557					1,93	1,23
Adducin 3 (gamma)	AU134494					1,95	1,23
Kruppel-like factor 6	AU139931			2,46	0,59	2,48	0,49
Casein kinase 1, alpha 1	AU139950					2,03	0,66
ATP synthase, mitochondrial, alpha chain (ATP5A1)	AU143486					1,96	1,93
Glutamyl-peptide cyclotransferase (glutamyl cyclase)	AV707013					1,84	1,42
Apolipoprotein C-I	AV709433			1,99	1,09		
S100 calcium-binding protein A4	AV713821	2,64	0,51	1,92	2,07	2,22	0,49
Vesicle-associated membrane protein 8 (endobrevin)	AV716151			1,86	2,30		
Thymosin, beta 10	AV717021			2,04	1,09	1,81	4,96
Nucleolin	AV724878			1,81	4,60	2,36	0,66
Clone CS0CAP007YH10	AV740966			2,05	1,09		
v-fos FBJ murine osteosarcoma viral oncogene homolog	AV747778	4,15	0,51	4,20	0,59	2,48	0,49
Translation initiation factor 4A, isoform 1	AV756187			1,89	2,30	1,82	1,23
Tropomyosin 3	AW024537			2,08	1,09	1,95	0,66
Interferon-induced protein 41	AW024557					2,16	0,49
RNA guanylyltransferase and 5'-phosphatas	AW069237			2,00	1,09		
Keratin 16	AW082035					2,65	0,66
Stem-loop (histone) binding proteir	AW150631			2,34	0,59	1,95	0,66
Potassium voltage-gated channel, subfamily G, member 4	AW162513	2,03	2,32				
Dynamin 1	AW206374			2,44	0,59	2,10	0,49
Zinc finger protein 36, C3H type-like 2	AW262861			2,77	0,59	2,16	0,49
Diubiquitin	AW270961	1,86	2,49				
dUTP pyrophosphatase	AW276291					2,01	0,66
BCL2-antagonist/killer 1	AW276601					1,86	2,25
Sprouty-related, EVH1 domain containing 2	AW296083					1,86	2,00
SON DNA binding protein	AW328025					1,86	1,55
Presenilin 1 (Alzheimer disease 3)	AW376952					1,85	0,86
Corticotropin releasing hormone	AW513199	2,24	3,23				
Solute carrier family 1, member 4	AW612968			2,20	3,45		
BRCA1 associated proteir	AW804509	2,50	0,51				
Ig lambda-like polypeptide 1, pre-B-cell specific	AW898081			2,03	1,09	2,04	0,49
Bromodomain containing 3	AW953714			1,93	2,30	1,86	2,25
Carbohydrate sulfotransferase 10	AW956276					2,22	4,13
Death-inducing-protein	AW962464					1,85	0,77

Interferon consensus sequence binding protein 1	AW964220	2,16	0,51				
Myeloid differentiation primary response gene	AW965179			2,33	0,59	1,86	0,66
NADH dehydrogenase 1, subcomplex unknown, 1	AW965948			1,93	1,76	1,81	1,93
Golgi SNAP receptor complex member 1	AW970923			1,99	1,09		
Glutaredoxin 2	AY038988	1,95	2,49				
KIAA0412 protein	BAA24842	1,92	4,43				
Keratin 6	BAA85657	1,82	2,99				
Unnamed protein	BAB27795			2,11	1,76		
Unnamed protein	BAB32173			5,37	2,30		
KIAA0174 protein	BC000116			1,80	2,97		
Splicing factor, arginine/serine-rich 10	BC000160			1,82	2,30	2,30	0,49
NADH dehydrogenase (ubiquinone) Fe-S protein 2	BC000170			1,83	2,89		
NADH dehydrogenase (ubiquinone) Fe-S protein 2	BC000170					1,84	2,25
Protease, serine, 15	BC000235					1,89	2,00
Aldo-keto reductase family 1, member B1	BC000260			1,86	2,07		
Flap structure-specific endonuclease 1	BC000323					1,91	1,66
Pyruvate dehydrogenase (lipoamide) bet	BC000439					1,83	1,83
Mitochondrial ribosomal protein L28	BC000507					1,92	2,86
Proteasome, subunit, beta type, 1	BC000508			1,96	1,76	2,05	0,66
2',5'-oligoadenylate synthetase 1	BC000562	1,92	0,51				
Keratin 8	BC000654					2,00	0,66
Solute carrier family 25, member 19	BC001075					2,01	2,25
RAS-like, family 11, member B	BC001087					9,33	2,25
Deoxyguanosine kinase	BC001121			1,96	1,98		
RNA binding motif protein 15B	BC001367			1,87	3,45	2,00	0,66
Succinate dehydrogenase complex, subunit 4	BC001380			2,18	0,59	1,83	0,86
Dimethylarginine dimethylaminohydrolase 2	BC001435					1,84	2,25
Linker for activation of B cells (LAB)	BC001609	1,86	0,51				
F11 receptor	BC001699			2,02	1,09		
Wingless-type MMTV integration site family, member 5E	BC001749			1,85	2,30	2,23	0,49
Myeloid ecotropic viral integration site 1 homolog 2	BC001844			1,83	3,45		
Etoposide induced 2.4 mRNA	BC002390			1,92	1,98	2,04	0,49
Kelch-like ECH-associated protein 1	BC002417					2,02	0,91
v-rat murine sarcoma 3611 viral oncogene homolog 3	BC002466			1,94	2,30		
Chromatin modifying protein 2A	BC002502					1,96	0,66
Niemann-Pick disease, type C2	BC002532			1,96	1,76		
Cathepsin S	BC002642					1,94	0,66
Keratin 14	BC002690					1,86	1,42
Keratin 7	BC002700					2,00	4,96
BoIA-like 1	BC002771					1,82	1,55
Tropomyosin 4	BC002827					1,84	1,43
Hypothetical protein MGC10433	BC002868			2,01	1,98		
Cholinergic receptor, nicotinic, alpha polypeptide 3	BC002996			1,89	1,98	1,82	1,23
Lectin, galactoside-binding, soluble, 3 binding protein 1	BC002998			1,86	4,75		
NTF2-like export factor 1	BC003410			1,81	2,30		
Glycosyltransferase MGAT1	BC003575			2,22	1,09	2,26	0,49
Metastasis associated 1 family, member 3	BC004227			1,88	2,07	2,15	0,49
Hypothetical protein MGC10986	BC004400			2,14	1,77		
ATPase, H+ transporting, lysosomal, V1 subunit E isoform 1	BC004443			2,14	1,09	1,91	0,77
Peptidylprolyl isomerase F (cyclophilin F)	BC005020			2,05	3,78		
Ubiquitin fusion degradation 1 like	BC005087			1,83	3,79		
Ig kappa constant	BC005332	3,30	0,51	3,40	0,59		
CDC-like kinase 3	BC006103			1,93	1,76	2,02	0,66
SH3-domain binding protein 5 (BTK-associated)	BC006169			1,82	4,43	1,91	1,42
Guanylate kinase 1	BC006249			1,87	2,30		
Clathrin, light polypeptide (Lcb)	BC006332					1,94	1,08
PHD finger protein 20	BC006415			1,96	2,97		
U2-associated SR140 protein	BC006474					2,10	0,66
H2.0-like homeo box 1	BC007294			1,87	3,45		
Actin, gamma 1	BC007442			1,89	2,07		
Protein phosphatase 1, regulatory (inhibitor) subunit 2	BC007655					1,84	1,06
Ubiquitin-like 7 (bone marrow stromal cell-derived)	BC007913			2,01	1,20	1,80	1,08
Insulin-like growth factor binding protein 5	BC008099			2,01	1,76		
Hypothetical protein LOC339803	BC008254	2,06	0,51				
Chemokine (C-C motif) ligand 5 (CCL5)	BC008600			1,99	1,20		
Casein kinase 1, alpha 1	BC008717			2,30	3,45		
Nardilysin (N-arginine dibasic convertase)	BC008775					1,99	0,66

Integrin, alpha L	BC008777					1,84	1,42
Cold shock domain protein A	BC008801					1,90	0,66
Rho GDP dissociation inhibitor (GDI) beta	BC009200			1,82	2,30	1,81	1,08
Formin binding protein 1	BC009262			2,03	1,09	1,80	1,24
Hippocalcin-like 1	BC009846	1,96	2,49	2,32	0,59	2,10	0,49
Translation elongation factor 1 delta	BC009907					2,71	1,83
CK2 interacting protein 1	BC010149			2,30	1,09	2,66	0,49
Proline-, glutamic acid-, leucine-rich protein 1	BC010457					1,94	0,66
Proprotein convertase subtilisin/kexin type 1	BC010696			2,18	1,09		
Transmembrane 9 superfamily member 1	BC010856			32,94	1,77		
Acetyl-CoA acyltransferase 1	BC011977			1,87	2,30	2,04	0,66
Zinc finger protein 3 (A8-51)	BC013603					1,89	1,23
Promethin	BC015812			1,83	4,60		
RAB11A, member RAS oncogene family	BE122870			1,90	2,97		
Serpins B13	BE148534	1,91	1,55	2,00	1,98		
Annexin A11	BE294577			1,87	1,98		
WD repeat and FYVE domain containing 1	BE301038					1,83	1,08
Interferon (alpha, beta and omega) receptor 1	BE315416					1,89	0,91
TAP binding protein (tapasin)	BE394234			2,39	0,59	1,91	0,66
Regulator of G-protein signalling 14	BE394825			1,81	4,43	2,14	0,49
Myeloid cell leukemia sequence 1 (BCL2-related)	BE408610	2,08	0,51				
N-acetylneuraminic acid synthase	BE614630			2,10	1,09	2,00	0,49
Chromobox homolog 7	BE644965			2,10	1,09		
Proteasome 26S subunit, ATPase, 4	BE728626			1,97	1,09	2,09	0,49
Calcium homeostasis endoplasmic reticulum protein	BE741277			1,86	2,30	2,05	0,49
Tubulin, alpha 1 (testis specific)	BE742772					2,20	0,77
Acid phosphatase 2, lysosoma	BE745075					1,83	1,08
Proline arginine-rich end leucine-rich repeat protein	BE836107	1,90	3,23				
Nuclear DNA-binding protein	BE857571					1,92	1,93
Tropomyosin 2 (beta)	BE876028					1,99	1,23
Translation initiation factor 4E-like 3	BE886748					1,83	3,16
Ubiquitin associated domain containing 1	BE892211					2,51	0,49
Clathrin, light polypeptide (Lca)	BE909056			1,84	2,30	1,86	0,77
Carnitine palmitoyltransferase II	BF026359	1,80	2,32			1,81	2,44
Inositol 1,4,5-trisphosphate 3-kinase B	BF108757			1,81	2,89		
Myotubularin related protein 1	BF110149			1,96	2,30		
PTK9L protein tyrosine kinase 9-like	BF220316			2,15	1,09	2,44	0,49
Beta-1,4-galactosyltransferase 5	BF229298			2,39	0,59	2,00	0,49
Myosin, heavy polypeptide 9, non-muscle	BF304650					2,08	0,49
Histone deacetylase 5	BF305705	2,07	4,95	2,51	1,09	2,43	0,49
Ig lambda joining 3	BF338816	2,07	0,51			1,83	0,77
PHD finger protein 1	BF475261			2,02	1,76		
Alpha-N-acetylglucosaminyl phosphodiesterase (NAGPA)	BF594186			2,04	2,30		
Translocation associated fusion protein IRTA1/IGA1	BF663123					1,96	0,66
Ribosomal protein, large, PC	BF669160			1,80	2,89		
Actin, alpha 2, smooth muscle, aorta	BF681347					1,87	3,72
Plexin A3	BF725116	1,91	2,32			1,89	1,42
MHC class II, DR alpha	BF795929	2,47	0,51	2,27	1,09	2,85	0,49
Erythrocyte membrane protein band 4.1-like 2	BF799654	2,01	2,99			1,96	1,83
Splicing factor, arginine/serine-rich 4	BF855449			1,87	2,30	2,37	0,49
Aspartyl-tRNA synthetase	BF969463			1,93	1,98		
Tyrosine 3/tryptophan 5-monooxygenase activation protein	BF969911			2,18	1,09		
Cell division cycle 25B	BF976307			2,19	1,09	2,21	0,49
Glucagon	BF980737	2,22	0,51				
Myosin light chain 1 slow a	BF981829					1,84	3,07
CD20 antigen (B-lymphocyte cell-surface antigen B1)	BG024663	2,71	0,51	2,04	1,09	2,37	0,49
Phosphatidylinositol 4-kinase, catalytic, beta polypeptide	BG025389					1,86	3,07
Beclin 1 (coiled-coil, myosin-like BCL2 interacting protein)	BG025795			1,89	1,76		
Proteasome 26S subunit, non-ATPase, 13	BG035188			2,24	1,09	2,14	0,49
v-yes-1 Yamaguchi sarcoma viral related oncogene homolog	BG108304	1,81	3,23				
Tyrosine 3/tryptophan 5-monooxygenase activation protein,	BG111102					1,87	0,66
KRIT1, ankyrin repeat containing	BG163551			1,87	2,30	2,03	0,49
TBP-associated factor, RNA polymerase II 32kDa (TAF9)	BG164482					2,08	0,66
Interferon receptor 1-bound protein	BG167159					1,97	1,55
Radical fringe homolog	BG169279					2,02	0,86
ATX1 antioxidant protein 1 homolog	BG170911			1,81	2,30		
MHC class II, DO beta	BG176768	2,43	0,51			1,83	1,23

Tumor necrosis factor receptor superfamily, member 17	BG183381			1,95	2,07				
Src family associated phosphoprotein 1	BG183963			1,99	1,09				
Mitochondrial ribosomal protein L3	BG185576					2,27	0,49		
Formin-like 1	BG235961					1,93	0,66		
Prostatic binding protein	BG252637	1,96	4,95	2,56	0,59	3,03	0,49		
BCL2 binding component 3	BG258126			2,09	1,09	1,97	0,66		
Phosphate cytidylyltransferase 1, choline, alpha	BG260122					1,92	0,66		
Lysophospholipase	BG287039			2,08	1,77	1,82	2,44		
Catalase	BG287806			1,81	2,66	1,89	0,66		
Methyltransferase like 3	BG287883			2,00	1,09	2,31	0,49		
Insulin-like growth factor 2 receptor	BG325212	2,67	0,51	2,11	1,09	2,08	0,66		
Ras homolog gene family, member G (rho G)	BG338917					2,04	0,49		
Transcriptional adaptor 3 (NGG1 homolog)-like	BG389122			2,15	0,59				
Hydroxyacyl dehydrogenase, subunit 1	BG477867					1,91	2,44		
Translation initiation factor 3, subunit 2 beta	BG484643					1,86	1,83		
ALL1-fused gene from chromosome 1q	BG498770					1,86	0,77		
Ubiquitin B	BG546472			2,02	1,98	2,01	0,49		
Serpin A3	BG567810	1,81	2,32						
Thyroid hormone receptor interactor 1C	BG575020					1,91	1,08		
Hermansky-Pudlak syndrome (HPS1)	BG576390	1,81	3,56						
Secretory carrier membrane protein 1	BG613898	1,97	1,55						
MHC class II, DQ beta 1	BG619272	2,31	1,27	2,72	0,59	2,98	0,49		
Trinucleotide repeat containing 5	BG675987			1,93	2,30	1,81	3,16		
TNF receptor-associated factor 2	BG677004			1,91	2,30				
MCM7 minichromosome maintenance deficient 7	BG683250			2,33	1,09	2,14	0,66		
DiGeorge syndrome critical region gene 5	BG698445			2,10	1,09	1,89	1,42		
Ectonucleoside triphosphate diphosphohydrolase 1	BG742963					2,20	0,49		
Tyrosine kinase, non-receptor, 2	BG742978			2,00	1,98	1,99	0,66		
Thyroid hormone-binding protein p5E	BG744516					1,83	1,83		
Ligase I, DNA, ATP-dependent	BG744633			2,20	1,98	2,49	0,49		
Endoplasmic reticulum protein retention receptor 1 (KDELR1)	BG745129			2,08	1,09	2,09	0,66		
Mitochondrial ribosomal protein S27	BG746580					1,96	0,66		
Cytochrome b-245, alpha polypeptide	BG751568					2,89	0,66		
Non-metastatic cells 1 (NM23A)	BG753664			2,08	1,09	1,92	0,66		
Spi-B transcription factor (Spi-1/PU.1 related)	BG754034	1,82	2,49	2,15	0,59				
T-cell leukemia/lymphoma 1A	BG757974	2,13	0,51	1,94	1,98				
CD79A antigen (Ig-associated alpha)	BG759817	3,38	0,51	2,20	0,59	2,64	0,49		
T-cell leukemia/lymphoma 1A	BG760057	3,72	0,51	2,38	0,59	2,14	0,49		
Vesicle amine transport protein 1 homolog	BG760616			2,07	1,20				
Gelsolin (amyloidosis, Finnish type)	BG763361			2,28	1,09	2,34	0,66		
Prohibitin 2	BG771222					1,81	1,23		
CD44 antigen	BG822701	1,80	3,23						
Ribosomal protein S6 kinase, 90kDa, polypeptide 1	BG878337			1,93	1,76	2,23	0,49		
Lactoferrin	BI021407			2,00	1,20				
Translation elongation factor 1 gamma	BI084568			2,05	1,09				
Discs, large homolog 7	BI087140					1,95	0,66		
Upstream binding transcription factor, RNA polymerase	BI088564			2,01	1,98	2,46	0,49		
Fuse-binding protein-interacting repressor 1	BI197161			1,82	3,45				
O-6-methylguanine-DNA methyltransferase	BI225271					2,00	2,75		
Myosin IXB	BI255960			2,08	2,66				
Uracil-DNA glycosylase 2	BI259616	2,73	0,51	3,19	0,59	1,99	0,66		
Procollagen C-endopeptidase enhancer 1	BI520001	2,06	2,49						
Lysosomal-associated membrane protein 2	BI549272			1,89	1,98	2,11	0,49		
Mesoderm specific transcript homolog	BI551502					2,15	0,66		
Riboflavin kinase	BI752967			1,88	1,98				
Pre-B-cell leukemia transcription factor interacting protein 1	BI754234			2,00	2,97	2,00	1,42		
Islet cell autoantigen 1	BI824141			1,83	2,66	1,96	0,91		
Chemokine (C-C motif) ligand 21 (CCL21)	BI837774	5,32	0,51	3,47	0,59				
Sorting nexin 3	BI856940			1,94	1,98	1,84	1,23		
Activating transcription factor 4	BI858594			1,82	2,66	2,13	0,49		
Cerebellar degeneration-related protein 1	BI869500					1,95	0,66		
Integrin beta 4 binding protein	BI908045			1,84	2,30				
Ig heavy constant mu	BM008087	3,42	0,51	2,53	0,59	3,84	0,49		
Protein tyrosine phosphatase, non-receptor type 1	BM015957			1,91	2,66				
Keratin 4	CAA30534					1,98	3,07		
Unnamed protein	CAC21785	2,20	0,51						
Similar to Neutralized (Neu)	CAC36018					2,08	0,49		

Aminomethyltransferase (glycine cleavage system protein T	D13811		1,92	2,30			
Peptidase (mitochondrial processing) alpha	D21064				1,94	3,72	
Actin filament associated protein	D25248				2,05	0,49	
L-isoaspartyl/D-aspartyl methyltransferase	D25545	1,82	2,66		1,97	0,91	
Kinesin family member 14	D26361				2,04	0,49	
MCM7 minichromosome maintenance deficient 7	D28480				1,99	0,49	
Rho GTPase activating protein 2f	D29642	1,87	3,56				
Helicase with zinc finger	D29677			1,95	1,98		
Basic transcription element binding protein 1	D31716	3,56	0,51	4,03	0,59	2,46	0,49
ADP-ribosylation factor-like 6 interacting protei	D31885					1,99	1,23
Thromboxane A2 receptor	D38081	1,87	1,40				
Runt-related transcription factor 1	D43969					1,85	0,77
Potassium inwardly-rectifying channel, subfamily J, member E	D50312					1,84	1,24
KIAA0143 protein	D63477			1,86	2,66		
KIAA0152 protein	D63486			1,85	2,30	1,89	0,77
SH2 domain binding protein 1	D63875					1,86	1,24
Calmeglin	D86322			1,88	2,30		
Melanoma associated gene	D86983	1,94	2,49				
Ig lambda	D87023	2,09	0,51	2,65	0,59	2,09	0,66
Solute carrier family 23 (nucleobase transporters), member 2	D87075					1,88	0,77
Paralemmin	D87460			1,84	2,66	1,94	0,77
polymerase (RNA) II (DNA directed) polypeptide I	F24474			2,07	1,09	1,95	0,66
Interferon (alpha, beta and omega) receptor 1	J03171			12,30	2,89		
Complement component receptor 2 (CD21)	J03565	3,00	0,51				
Annexin A5	J03745					1,97	0,66
Cytochrome P450, subfamily XIX	J04127	1,85	4,43				
Interferon-inducible protein (9-27)	J04164	2,00	0,51				
90 kD heat shock protein	J04988			1,86	2,97		
Complement component 3	K02765	2,94	0,51	2,16	1,09	2,05	0,49
Protein kinase C, theta	L01087			1,93	2,07		
RD RNA binding protein	L03411					1,86	0,91
Chemokine (C-C motif) receptor 7 (CCR7)	L08176			2,14	1,09	1,95	0,66
Growth arrest-specific gene-1	L13698	1,81	4,95				
Tight junction protein 2	L27476					2,29	0,49
Cartilage oligomeric matrix protein	L32137					3,05	1,55
Chemokine (C-X-C motif) ligand 12 (CXCL12)	L36033			1,95	3,45		
Hypothetical protein LOC162427	L38935			1,94	2,97	2,21	0,91
ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	L41680			1,84	2,30		
Sialyltransferase 8A	L43494	1,88	2,49				
Protein tyrosine phosphatase type IVA, member 2	L48722			1,81	2,30		
FBJ murine osteosarcoma viral oncogene homolog E	L49169	3,18	0,51	3,50	0,59		
Hydroxyprostaglandin dehydrogenase 15-(NAD	L76465					1,98	0,66
Alpha-2-macroglobulin	M11313			1,96	1,98	1,98	0,66
Cerebellar degeneration-related protein	M16965					2,29	0,49
Protein kinase, cAMP-dependent, regulatory, type I, alpha	M18468					2,16	0,49
Cytochrome b-245, alpha polypeptide	M21186			2,04	3,45		
MHC class I, E (HLA-E)	M21533			2,16	4,60	2,24	3,07
Guanine nucleotide-binding protein alpha-subunit gene	M21740			1,95	1,76		
Kallikrein 3, (prostate specific antigen)	M21895			1,82	2,97		
Beta-hexosaminidase beta-subunit (HEXB) gene	M23294			1,87	2,30		
MHC class I (HLA-B13)	M24041					2,58	0,66
MHC class II, DQ beta 1	M24364	2,13	0,51	1,97	4,75	1,89	0,86
MHC class II, DQ beta 1	M24364			2,18	0,59	2,05	0,49
Interferon-induced protein with tetratricopeptide repeats	M24594	2,65	0,51				
Chemokine (C-C motif) ligand 3 (CCL3)	M25315	1,97	1,40	2,02	2,30		
ATPase, Ca++ transporting, plasma membrane 4	M25874			1,88	1,98	2,52	0,49
CD20 antigen (B-lymphocyte cell-surface antigen B1)	M27394	1,98	4,43	2,23	0,59	2,18	0,49
MHC class II, DP alpha 1	M27487			1,82	2,30	2,74	0,49
CD1a antigen	M28825			2,00	1,76	1,94	0,77
XRCC5 DNA repair gene	M30938			2,38	0,59	2,24	0,49
Transcription factor 3 (Ig enhancer binding factors)	M31523			2,25	0,59	1,81	1,23
B-cell CLL/lymphoma 3	M31732	1,92	3,23	1,84	2,89		
Alpha-2-macroglobulin	M36501			1,87	2,30		
Macrophage-specific colony-stimulating factor (CSF-1)	M37435					2,08	1,83
H2A histone family, member Z	M37583					2,00	0,66
Ribosomal protein S4, Y-linked 1	M58459			1,97	2,30	2,15	0,49
CD63 antigen (melanoma 1 antigen)	M58485			2,20	1,09	2,02	1,23



Retinal degeneration, slow	M62958			2,44	1,76		
Ig kappa chain variable region (IGKV gene	M63438	2,17	0,51	2,99	0,59	2,29	0,49
Ig kappa chain variable region (IGKV gene	M63438	2,63	0,51	3,43	0,59	2,11	0,49
Flavin containing monooxygenase 1	M64082			1,84	2,66	1,87	0,91
Protein tyrosine phosphatase, non-receptor type 7	M64322					1,81	1,93
Steroid-5-alpha-reductase, alpha polypeptide 1	M74047					1,93	0,77
TB1 gene	M74089	1,82	3,23				
CD79B antigen (Ig-associated beta 1)	M80461	1,90	3,23				
CD79B antigen (Ig-associated beta 2)	M80461	2,02	2,32				
Early growth response 1	M80583			2,26	0,59		
AHNAK nucleoprotein (desmoyokin)	M80899			1,86	2,07		
E74-like factor 1 (ets domain transcription factor)	M82882					1,94	0,66
E74-like factor 1 (ets domain transcription factor)	M82882			1,97	1,09	2,02	0,49
CD19 antigene	M84371	2,63	0,51	1,99	2,97	1,88	1,08
Connexin 26 (GJB2)	M86849			2,26	0,59	2,93	0,49
Ig lambda locus	M87790					1,95	0,66
DNA-binding protein (ZNF)	M88363			2,13	2,30		
Zinc finger transcriptional regulator (GOS24) gene	M92844	2,12	1,40				
Zinc finger transcriptional regulator (GOS24) gene	M92844	2,41	0,51	3,06	0,59	2,25	0,49
Capping protein (actin filament), gelsolin-like	M94345			1,84	2,66		
Calnexin	M94859			1,92	2,30	1,98	0,77
Purine-rich element binding protein A	M96684	2,07	4,06				
GOS19-3 gene	M96852	2,45	0,51				
Keratin 2A	NM_000423					2,59	2,86
Galactosamine (N-acetyl)-6-sulfate sulfatase	NM_000512			1,98	1,76	1,83	0,91
Adenosine A3 receptor	NM_000677	1,94	1,55				
Activin A receptor, type IIE	NM_001106			1,86	3,78		
Alkaline phosphatase, intestina	NM_001631					6,40	2,00
FK506-binding protein 4 (59kD)	NM_002014			1,81	2,97		
Guanylate binding protein 1 (interferon-inducible)	NM_002053	2,50	0,51				
Interleukin 13	NM_002188					1,99	0,66
Solute carrier family 34 (sodium phosphate), member 1	NM_003052			1,96	2,30		
Transcription factor 7 (T-cell specific, HMG-box)	NM_003202					1,88	1,42
Zinc finger protein 177	NM_003451	3,63	0,51	3,45	0,59	3,70	0,49
O-linked N-acetylglucosamine (GlcNAc) transferase	NM_003605					1,92	1,83
Diacylglycerol kinase, epsilon	NM_003647			1,87	2,97		
CD84 antigen (leukocyte antigen)	NM_003874					2,08	0,49
Airway trypsin-like protease	NM_004262	2,55	0,51				
Forkhead box A3	NM_004497			1,87	2,89		
Angiotensin receptor 1	NM_004835	1,95	0,51				
RNA binding motif protein, Y-linked, family 1, member A1	NM_005058	2,08	0,51				
Solute carrier family 15, member 1	NM_005073	1,95	2,49				
ROD1 regulator of differentiation 1	NM_005156			1,88	2,89	2,24	0,49
Nuclear receptor coactivator 4	NM_005437					1,86	0,91
Hexamethylene bis-acetamide inducible 1	NM_006460					1,91	0,86
Serologically defined colon cancer antigen 1	NM_006643			1,84	3,45		
Protein disulfide isomerase	NM_006849	1,91	1,40				
Leukocyte Ig-like receptor, subfamily B, member 3	NM_006864			1,85	2,97		
Presenilin 2 (Alzheimer disease 4)	NM_012486			1,87	2,07		
Vinculin	NM_014000					1,83	1,42
SAC1 suppressor of actin mutations 1-like	NM_014016					2,04	0,49
Solute carrier family 6, member 7	NM_014228			1,89	2,07		
KIAA0101 protein	NM_014736					1,96	0,66
Mitochondrial ribosomal protein L19	NM_014763					2,56	1,55
Proteasome 26S subunit, non-ATPase, epsilon	NM_014814					1,82	1,42
Defensin, alpha 5, Paneth cell-specific	NM_021010			1,98	1,76		
ELK4, ETS-domain protein (SRF accessory protein 1)	NM_021795	1,98	1,27				
Hypothetical protein FLJ13868	NM_022744			1,87	2,07	1,92	0,77
Potassium channel tetramerisation domain containing 17	NM_024681			2,15	1,09	1,92	1,83
SWI/SNF complex, subfamily a, member 2	R56503	1,94	4,95	2,06	1,76	2,01	1,43
Ig kappa constant	S49006	2,45	0,51				
Ig kappa chain V-IV region B17 precursor	S50732	2,47	0,51				
Guanylate cyclase 2C	S57551	2,03	1,27				
Microseminoprotein, beta-2	S67815			47,3	2,30		
Natural killer cell group 7 sequence	S69115	1,89	1,40			1,92	0,77
E2F transcription factor 4, p107/p130-binding	S75174			1,90	1,77	1,83	0,86
Integrin beta 7 subunit	S80335	1,95	4,06				

Calponin 3, acidic	S80562					1,97	0,66
Prohibitin	S85655			2,99	3,78		
Isoleucyl-tRNA synthetase	U04953	2,25	2,99				
Fas ligand	U08137	2,26	0,51				
Thymopoietin	U09088					2,00	0,66
Defensin-related pseudogene sequence	U10267	2,44	4,95	1,87	3,78		
Ankyrin 3, node of Ranvier (ankyrin G)	U13616			1,85	2,30		
Bak-2	U16812			1,95	2,30		
RAR-related orphan receptor C	U16997			1,94	2,89	1,88	2,86
Suppression of tumorigenicity 13 (Hsp70 interacting protein)	U17714			1,87	1,98		
G protein-coupled receptor 3	U18550			1,93	2,30		
Baculoviral IAP repeat-containing 1	U19251			2,06	1,09	1,99	0,66
Radical fringe homolog	U20285			2,52	0,59	1,88	1,24
Transcription factor junB (junB)	U20734	2,94	0,51	2,26	1,09	2,16	0,66
Microtubule-associated protein, RP/EB family, member 1	U24166					1,92	0,77
Laminin gamma2 chain (LAMC2)	U31200			1,83	3,78		
Transglutaminase 4 (prostate)	U31905					4,91	0,77
Peptidylprolyl isomerase (cyclophilin)-like 3	U37221			2,31	3,45		
Zinc finger protein 211	U38904			2,02	1,09	1,87	1,43
Zinc finger protein, subfamily 1A, 1 (Ikeros)	U40462					1,82	1,83
Rho-associated, coiled-coil containing protein kinase 1	U43195			1,84	2,89		
Breast cancer cytosolic NADP(+)-dependent malic enzyme	U43944	1,81	2,49				
SMAD, mothers against DPP homolog 4	U44378					1,90	1,23
GOK (STIM1)	U52426					1,83	0,86
Potassium channel beta subunit	U61537			2,47	0,59		
ST3 beta-galactoside alpha-2,3-sialyltransferase 3	U63090			2,00	1,98		
CSF-1 receptor (FMS)	U63963	1,96	2,49			1,96	0,66
SWI/SNF complex subfamily c, member 1	U66615	1,89	2,99	2,07	1,09	2,28	1,83
Copper transport protein HAH1 (HAH1)	U70660			2,17	0,59	1,81	1,24
Phospholemman chloride channel	U72245	1,80	3,23	1,96	1,98	1,91	0,77
BTK, GLA, L44L and FTP3 genes	U78027			1,80	2,66		
Thioredoxin 2	U78678			2,03	1,09	1,82	1,23
MHC class II, DQ beta 1	U83582			1,98	1,77	2,03	0,66
Inositol polyphosphate-5-phosphatase	U84400					2,02	1,08
Olfactory receptor (OR7-86) pseudogene	U86282	1,96	3,56				
Chromosome 11 open reading frame 32	U90916					2,30	0,49
Hereditary haemochromatosis region	U91328			1,82	3,78		
Gamma-aminobutyric acid (GABA) A receptor, pi subunit	U95367	1,86	2,99				
TBP-associated factor, RNA polymerase II 28kDa (TAF11)	W63567			2,30	0,59	2,04	0,49
MHC class II, DQ alpha 2	X00033	2,23	0,51			2,05	0,77
Retinol binding protein (RBP)	X00129	2,11	1,40				
* MHC class II alpha chain gene DZ-alpha	X02882	2,04	0,51				
Complement component 2	X04481	2,20	0,51				
Amylase, alpha 2B; pancreatic	X07057					2,56	1,83
Abhydrolase domain containing 2	X12433			2,12	1,09		
Interleukin 6 receptor	X12830	2,77	0,51			2,01	0,66
Casein kinase 2, beta polypeptide	X16312			1,80	3,45		
Actin, gamma 2, smooth muscle, enteric	X16940					2,21	2,86
Integrin, beta 4	X51841					6,53	2,00
Lymphocyte-activation gene 3	X51985	2,03	2,32				
Lymphocyte-activation gene 3	X51985	2,62	0,51				
Five-lipoxygenase activating protein (FLAP)	X52195			1,88	2,30		
Killer cell lectin-like receptor subfamily C, member 1	X54867			1,92	2,30		
Upstream transcription factor 1	X55666			1,85	2,97		
NODAL modulator 3	X57398	1,84	4,43			2,01	0,66
Ig lambda constant 2	X57812	1,88	0,51	2,18	1,09		
Ig lambda constant 2	X57812	1,99	0,51	2,20	4,43		
Cyclin D1	X59798			1,92	1,98	1,92	0,91
CD9 antigen	X60111					1,91	0,66
Activin A receptor, type II	X63128	1,85	1,55				
Early growth response 3	X63741	1,80	1,27	2,04	1,09	1,85	1,08
Nucleoporin	X64228					2,20	0,49
Spi-B transcription factor (Spi-1/PU.1 related)	X66079	2,30	0,51				
Interferon, alpha-inducible protein 27 (ISG12)	X67325					1,87	0,77
Contactin 2 (axonal)	X67734			17,0	1,09		
Isocitrate dehydrogenase 2 (NADP+), mitochondria	X69433			1,91	2,30	1,89	0,77
Mitochondrial ATP synthase c subunit (P1 form)	X69907			2,06	1,09		

Son-pseudogene	X71604			1,82	2,30				
Retinoblastoma binding protein 7	X72841					2,14	0,49		
Id3 gene for HLH type transcription factor	X73428					1,93	0,77		
Mannose phosphate isomerase	X76057			2,13	1,98				
Zinc finger protein 345	X78933			1,98	2,30	1,93	0,66		
Connective tissue growth factor	X78947			1,92	1,76				
TPM3R1 DNA sequence	X79909			2,01	1,09				
Archain 1	X81198					1,91	0,66		
Staf50	X82200	2,06	2,32	2,11	1,09	2,26	0,49		
Zinc finger, MYND domain containing 11	X86098			2,09	1,20				
Chromosome 16 open reading frame 35	X90857			1,89	2,30				
CYP2D7-CYP2D6 intergenic region	X90926	1,95	0,51	2,11	1,09				
Sine oculis homeobox homolog 1	X91868					1,98	0,66		
Adaptor-related protein complex 2, sigma 1 subunit	X97074					1,89	0,91		
Metallothionein 1L	X97261			1,90	2,30				
Nuclear protein SDK3	Y10351					1,98	0,66		
Ig kappa light chain	Y14736	2,28	0,51			1,98	0,66		
Ig lambda light chain	Y14738	2,32	0,51	2,46	0,59	2,33	0,49		
Ig lambda light chain	Y14738	1,94	0,51	2,20	1,09				
Selenoprotein P, plasma, 1	Z11793			2,13	1,76				
Translation elongation factor 1 delta	Z21507					2,45	2,00		
Tumor necrosis factor receptor superfamily, member 17	Z29575			1,90	3,45				
Early lymphocyte activation antigen CD69	Z30428			1,86	2,30				
Ras homolog gene family, member I	Z35227					2,30	0,49		
Ig kappa chain V-IV region B17 precursor	Z46347	2,56	0,51	1,97	1,76	2,02	0,49		
PRM1, PRM2, PRM3, TNP2 and SOCS-1	Z46940					1,81	1,08		
CpG island DNA genomic Mse1 fragment	Z56162			3,27	1,77				
Mitochondrial ribosomal protein S31	Z68747					1,82	1,42		
Clone ICRFp50711077	Z69892	2,02	0,51	1,85	2,30	2,16	0,49		
Plakophilin 1	Z73678			2,57	2,66				
Ig heavy chain variable region	Z98733	2,80	3,23	2,79	0,59	2,55	0,49		
Incyte EST	-	2,18	0,51	2,11	1,09	2,11	0,49		
Incyte EST	-	2,22	2,49			2,04	0,49		
Incyte EST	-			1,86	3,78				
Incyte EST	-			1,86	2,89				
Incyte EST	-			1,84	3,45				
Incyte EST	-					1,83	1,23		
Incyte EST	-					2,20	0,66		
Incyte EST	-					1,90	0,91		

Asterics indicate genes with an average signal intensity under 1.5 the average signal intensity of the background signal in non-MG adult

**Table S2: List of 736 genes down-regulated in MH, ML and SN patients**

These genes were extracted by SAM with a False Discovery Rate&lt;5% and a FC&gt;1,8.

Name	GenBank	MH		ML		SN	
		FC	FDR	FC	FDR	FC	FDR
Protein tyrosine phosphatase, receptor type, N	AA281524	-1,88	1,55				
Retinoic acid receptor responder 1	AA418256			-2,07	2,66	-2,68	0,77
KIAA0103 protein	AA447703					-1,99	1,08
Rap guanine nucleotide exchange factor (GEF) 3	AA453498					-1,81	1,93
Transcription elongation factor B, polypeptide 1	AA521128			-1,96	2,89		
Mitochondrial intermediate peptidase	AA524277					-1,99	0,91
Chromosome 1 open reading frame 15E	AA594756					-2,00	0,91
BCL2-associated athanogene	AA628507			-2,18	0,59	-1,99	0,77
General transcription factor IIH, polypeptide 2, 44kDa	AA676310			-2,07	1,76	-2,07	0,77
Transcribed locus	AA843678			-1,80	4,43		
Tudor domain containing 9	AA844124					-1,91	1,06
Arginine-rich, mutated in early stage tumors	AA974308	-1,83	2,32				
RNA polymerase I transcription factor RRN3	AA977114					-2,10	0,77
Myosin, heavy polypeptide 1A	AAA48988					-1,92	1,08
Pax-6	AAB32671	-1,92	2,49			-1,86	1,55
Potassium channel	AAC61520					-1,98	0,91
Olfactory receptor	AAC64584					-2,05	2,75
Layilin	AAC68695			-1,97	2,66		
Bing1	AAC69892	-1,86	1,40				
Polyhomeotic 2	AAD00519					-1,80	1,24
Similar to beta-transducins	AAD17343			-1,90	3,78		
Ubx4 protein	AAH04632	-1,89	3,56	-2,19	2,07	-2,58	0,77
Dynein, axonemal, heavy polypeptide 1	AAK60620					-1,81	1,43
Nephronectin (Neph1)	AAK84392			-2,11	2,07		
KIAA0317 protein	AB002315			-1,82	4,75	-1,84	1,43
Talin 2	AB002318					-1,88	1,24
Death associated transcription factor 1	AB002331	-2,28	0,51	-2,03	1,77		
Sal-like 2	AB002358			-1,95	3,78		
Ectonucleoside triphosphate diphosphohydrolase 1	AB002390	-1,98	0,51	-2,11	1,76		
Peroxisome proliferative activated receptor, gamma	AB005526					-2,69	0,77
SRY (sex determining region Y)-box 15 (Sox15)	AB006867					-1,94	0,91
Phosphoinositide-binding protein PIP3-E	AB007863			-2,20	0,59		
Heat shock 70kDa protein 12A	AB007877					-2,11	0,77
Zinc finger protein 262	AB007885	-2,10	2,32	-2,08	2,97	-1,85	1,93
Zinc finger protein 262	AB007885			-1,82	4,43		
Zinc finger and BTB domain containing 24	AB007901			-3,67	0,59	-2,57	2,75
KIAA0492 protein	AB007961					-2,28	0,77
KIAA0527 protein	AB011099			-1,97	2,07		
Zinc finger protein 292	AB011102	-1,88	2,32	-2,30	0,59	-2,39	0,77
NUAK family, SNF1-like kinase, 1	AB011109					-2,12	0,77
Thioredoxin domain containing 4 (endoplasmic reticulum)	AB011145			-2,16	1,98		
Phosphatidylinositol-4-phosphate 5-kinase, type I, gamma	AB011161			-2,01	2,07		
Alkaline phosphatase, liver/bone/kidney	AB011406			-2,42	1,76		
Serine/threonine kinase 17b (apoptosis-inducing)	AB011421			-2,45	0,59		
Cullin 4B	AB014595	-1,94	2,49				
Kelch-like 18	AB018338					-1,92	1,42
Cold shock domain containing E1, RNA-binding	AB020692					-2,08	0,77
WD repeat domain 47	AB020700					-1,82	1,42
KIAA0895 protein	AB020702	-1,95	1,55			-2,19	0,77
Dynein, axonemal, heavy polypeptide 1	AB023161			-2,18	2,97		
WD repeat domain 37	AB023199			-1,94	3,79		
Beta-3-galactosyltransferase 4	AB026730			-1,93	2,07		
Bromodomain adjacent to zinc finger domain, 1E	AB032253			-1,86	2,89	-1,97	0,77
HECT domain containing 1	AB032957					-1,82	1,83
Protein Z, vitamin K-dependent plasma glycoprotein	AB033749					-1,83	2,25
Sorbin and SH3 domain containing 1	AB037717			-1,97	2,66		
Mucin 3A, intestinal	AB038781					-2,11	0,77
Amyotrophic lateral sclerosis 2, candidate 2	AB038950			-5,67	1,98	-4,39	2,75
Myosin, heavy polypeptide 7B, cardiac muscle, beta	AB040945					-1,81	1,66
Zinc finger and BTB domain containing 26	AB046792					-2,79	0,77

Chromosome 20 open reading frame 23	AB046810					-2,06	0,77
Clone QnpA-15275	AB047901					-1,83	1,23
Clone QnpA-16545	AB049838	-2,39	0,51			-1,84	1,43
Clone QnpA-20858	AB050409					-1,82	1,24
Cytoplasmic polyadenylation element binding protein	AB051460					-1,85	1,08
Dual specificity phosphatase 1E	AB051487			-2,57	4,43	-2,45	2,00
Kinesin family member 21A	AB051495					-2,26	0,77
Zinc finger protein 436	AB051497			-2,02	2,07	-1,91	1,08
3-oxo acid CoA transferase 1 (Scot-t)	AB052900					-1,93	4,96
Guanine nucleotide exchange factor Lbc	AB055890					-2,08	0,86
Clone QnpA-11220	AB056347					-1,89	1,08
Zinc finger, CCCH-type with G patch domain	AB058750	-1,97	2,32				
Syntenin	AF000652	-1,90	2,32				
Type II integral membrane protein (NKG2-D)	AF001298					-2,04	0,86
Protein tyrosine phosphatase, non-receptor type 2:	AF001846			-1,99	2,07		
Niemann-Pick disease, type C1	AF002020			-2,47	0,59		
Syntaxin binding protein 1	AF004563			-2,28	2,66		
Insulin receptor substrate 3-like	AF015042					-2,23	0,77
Fucose-1-phosphate guanylyltransferase	AF017445	-2,22	0,51	-2,29	0,59	-2,72	0,77
Heparan sulfate (glucosamine) 3-O-sulfotransferase 1	AF019386					-1,95	0,91
Secreted frizzled-related protein 4	AF026692					-1,95	0,86
Mannosidase, alpha, class 1A, member 2	AF027156	-1,84	2,49	-2,03	2,07		
Chloride channel 3	AF029346					-1,91	1,08
Hepatitis B virus x interacting proteir	AF029890			-2,06	1,77		
Cystatin F (leukocystatin)	AF031824					-1,83	1,24
Small nuclear RNA activating complex, polypeptide	AF032387					-2,07	3,75
Interleukin 15 receptor, alpha	AF035279			-1,84	3,79		
Regulator of G-protein signalling 14	AF037195	-2,03	1,27			-1,87	1,24
Hydroxyacyl-Coenzyme A dehydrogenase, type	AF037438					-1,84	1,43
Clone 23728	AF038199	-1,84	2,32	-2,02	2,07		
Hairless homolog	AF039196					-1,98	1,23
Olfactory receptor and MYLK genes	AF042089			-1,90	2,97		
Tumor necrosis factor (ligand) superfamily, member 12	AF046888					-2,18	1,66
Sel-1 suppressor of lin-12-like	AF052059			-1,94	2,07		
Histone deacetylase 3 (HDAC3)	AF059650	-2,04	0,51				
Zinc finger protein 145	AF060568			-1,93	2,66		
Putative neuronal cell adhesion molecule	AF063936					-1,88	1,08
Nonmetastatic protein 23, homolog 5	AF067724					-1,80	4,13
RAB2, member RAS oncogene family	AF070629				-2,03	2,07	
G-protein-coupled receptor 75 (GPR75)	AF072693	-1,98	2,32				
Myotubularin related protein 6	AF072928					-1,90	1,24
Solute carrier family 1, member 1	AF074906					-2,15	0,91
Pre-T-cell receptor alpha chain 1 precursor	AF084941	-2,24	0,51				
Zinc finger protein 641	AF086127	-1,85	1,27			-1,94	0,86
Hypothetical protein LOC283337	AF086252			-1,86	3,45		
ATP synthase, mitochondrial, F0 complex, subunit c	AF087135	-1,93	1,40	-2,08	1,76		
NADH:ubiquinone oxidoreductase SDAP subuni	AF087660	-2,95	2,32	-2,78	2,89		
TIA1 cytotoxic granule-associated RNA binding protei	AF090093	-1,82	1,55				
L-3-hydroxyacyl-CoA dehydrogenase, short chai	AF095703					-1,84	2,00
Transcription elongation factor A (SII)-like 1	AF095906					-1,99	1,23
WNT1 inducible signaling pathway protein 1	AF100779					-2,04	1,93
Urotensin 2	AF104118					-1,81	1,42
Clone BAC270M14 on chromosome 14q24.3	AF107885					-2,01	1,24
Signal sequence receptor, gamma	AF110647	-1,93	1,27	-2,12	0,59	-2,05	0,77
Kelch-like 7	AF111113					-2,00	0,91
SPTLC2 and unknown genes	AF111168					-2,42	1,24
Integrin, alpha 10	AF112345					-3,05	4,13
Y-linked zinc finger protein (ZFY)	AF114156	-1,88	4,95			-2,01	1,43
Host cell factor C2	AF117210			-2,11	2,66	-1,86	2,00
Feline leukemia virus subgroup C cellular recepto	AF118637					-2,02	0,86
Prepro-orexin (PPORX) gene	AF118885					-2,03	3,75
Smoothened homolog	AF120103			-2,05	2,89		
HECT domain containing 2	AF131793					-2,10	1,83
Proteoglycan 3	AF132209	-2,38	2,49			-1,90	3,72
Coenzyme Q6 homolog	AF132944					-2,05	2,86
NF-E2-related factor 3 gene	AF135116			-1,92	2,66		
Chemokine (C-C motif) receptor 9 (CCR9)	AF145439	-1,96	0,51				

Solute carrier family 6, member 14	AF151978					-1,85	1,55
IkappaBkinase complex-associated protein	AF153419	-4,36	3,23	-4,62	1,76	-5,15	0,77
Paternally expressed 3	AF166122					-1,86	1,93
Activating signal cointegrator 1	AF168418	-1,96	1,40				
X 010 protein	AF168711	-2,04	1,27				
Mitochondrial carrier homolog 2	AF176008	-2,30	0,51	-2,12	1,76	-2,12	0,77
A-kinase anchoring protein 220	AF176555	-2,12	2,49			-2,04	1,43
Sulfotransferase 1B2 gene	AF184894					-2,08	2,75
PI-3-kinase-related kinase SMG-1	AF186377					-2,06	4,15
Filamin B, beta	AF191629					-1,91	1,08
Endothelial differentiation gene 4 (EDG4)	AF197929			-1,88	4,43		
AT rich interactive domain 4B (RBP1-like)	AF214114			-1,81	4,43		
Tripartite motif-containing 34	AF220143					-1,98	0,86
MANBA and UBE2D3 genes	AF224669			-2,01	2,07		
Tensin	AF225896					-2,91	0,77
Tripartite motif-containing 29	AF230388	-2,39	0,51	-2,43	0,59	-1,94	1,23
ATPase, lysosomal accessory protein 2	AF248966			-2,19	1,76		
Chromosome 10 open reading frame 11	AF267860					-1,84	1,24
Solute carrier family 21, member 3	AF279784					-2,14	3,07
SP110 nuclear body protein	AF280094			-1,80	4,43	-1,87	1,08
CHMP1.5 protein	AF281064	-2,29	0,51	-1,80	4,43	-1,84	1,23
Homeobox B7, B6, B5, B4 and B3 genes	AF287967			-1,85	2,97		
Chromosome 12 open reading frame 1C	AF289485			-1,86	3,78		
Pumilio 2 (PUMH2)	AF315591	-1,98	1,40			-1,94	1,06
Zinc finger protein 268	AF317549			-1,87	4,43		
Actin cross-linking factor	AF317696	-1,86	1,40				
GLIS family zinc finger 2	AF325914					-2,19	0,77
* <i>Plasmalemma vesicle associated protein</i>	AF326591	-2,17	2,99			-2,54	0,77
NMDA receptor regulated 1	AF327722	-1,94	1,40				
AFG3 ATPase family gene 3-like 1	AF329692					-1,88	1,06
Dombrock blood group (DO)	AF340234			-5,15	1,76	-4,58	1,06
Carboxypeptidase Iv	AF368463					-1,86	1,66
Interleukin 6 (interferon, beta 2)	AF372214					-2,53	0,77
ZNFPHX133 protein	AF373036			-1,95	2,66		
Cathepsin D (lysosomal aspartyl protease)	AI031979	-2,00	2,49				
Hypothetical protein LOC284591	AI130021					-1,88	0,91
Hemoglobin, gamma G	AI133196					-1,84	1,66
Phosphoglucomutase 1	AI207581			-1,99	2,07	-1,98	0,86
Retinol-binding protein 4, plasma	AI207655	-1,99	0,51	-1,89	3,78		
Claudin 7	AI279608	-2,12	4,43			-2,77	0,77
Thymocyte antigen CD1t	AI336342	-1,95	0,51	-2,20	0,59		
Zinc finger protein 415	AI376803					-1,81	1,24
Formin binding protein 21	AI392730	-2,05	2,32				
Prostaglandin E synthase	AI421214					-1,94	0,91
Similar to thioredoxin-like 2	AI479766			-1,80	4,75		
Solute carrier family 16, member 1	AI565092	-2,26	4,06				
CLIP-associating protein 2	AI583424	-1,87	2,99				
Dual specificity phosphatase 7	AI655015			-2,71	0,59		
Hypothetical protein LOC388928	AI685683					-1,92	1,23
Ankyrin repeat domain 12	AI692537			-1,96	4,43		
Tetraspanin 6	AI721194					-2,29	0,77
Protease, serine, 16 (thymus)	AI800750	-2,74	0,51				
Immediate early response 3	AI911657					-1,92	1,43
Calmin (calponin-like, transmembrane)	AI915271					-1,80	1,42
Kinesin family member C3	AI961712					-1,87	0,91
Mediterranean fever	AJ003147			-2,19	1,76		
ATPase, Class II, type 9B	AJ006268					-1,90	1,43
Ret finger protein-like 1	AJ010228					-1,85	1,24
RING-H2 protein RNF6, alternative exon 1t	AJ010347	-1,89	1,40				
InaD-like	AJ224747			-2,14	1,76		
Zinc finger protein 198	AJ224901	-3,57	4,06			-2,70	4,26
Ig heavy constant mu	AJ294731			-2,98	1,76	-3,01	0,77
Syntenic region on chromosome 11p15.3	AJ400877			-2,13	1,76		
Myosin IB	AK000160	-1,83	3,56				
Clone KAIA4699	AK000400					-2,11	1,24
Zinc finger protein 334	AK001331					-1,97	0,86
Zinc finger, DHHC-type containing 4	AK001341			-1,81	3,79		

Ubiquitin-conjugating enzyme E2W (putative)	AK001873					-1,89	1,08
REV1-like	AK002087					-2,41	1,66
Cyclin-dependent kinase inhibitor 2C	AK021794	-2,15	0,51	-1,85	3,78		
TBP-associated factor, RNA polymerase II 68kDa (TAF15)	AK022003	-2,03	2,32	-1,97	4,43		
Cytochrome P450, family 4, subfamily V, polypeptide 2	AK022114					-1,91	1,06
Hypothetical protein FLJ12118	AK022180			-2,45	0,59		
Geranylgeranyl diphosphate synthase	AK022422					-2,07	0,86
Advillin	AK022448					-3,16	0,91
Zinc finger protein 329	AK022648					-1,89	1,42
* Solute carrier family 25, member 12	AK022828	-1,94	1,55			-2,02	0,86
Similar to hypothetical protein LOC231503	AK023055					-2,12	0,77
Highly similar to Sp140 protein	AK023116	-2,04	0,51				
DnaJ (Hsp40) homolog, subfamily B, member 5	AK023253	-2,72	2,49			-2,47	1,55
Two pore segment channel 2	AK023366	-2,01	0,51	-1,83	3,79		
ARP6 actin-related protein 6 homolog	AK023684			-2,00	2,07	-1,93	0,91
HBS1-like	AK024258	-2,22	0,51				
Enhancer of polycomb homolog 1	AK024329			-3,52	2,66	-3,54	1,06
DnaJ (Hsp40) homolog, subfamily B, member 14	AK024343			-1,83	4,75		
Glyoxylate reductase/hydroxypyruvate reductase	AK024386			-2,53	0,59		
Esophageal cancer associated protein	AK024693	-2,14	0,51	-1,81	4,43		
* Carnitine palmitoyltransferase 1A (liver)	AK025307	-1,87	1,40			-1,97	0,91
Similar to ras-related small GTP binding protein Rab5	AK025474					-2,15	0,91
Coronin 7	AK025674	-1,93	1,27				
AE binding protein 2	AK025788			-1,86	3,45	-1,94	0,91
Rho-guanine nucleotide exchange factor	AK025816	-2,13	2,49				
Hypothetical protein FLJ22405	AK026058	-2,15	0,51	-2,35	0,59	-2,26	0,77
F-box and WD-40 domain protein 5	AK026081					-2,12	1,43
Zinc finger protein 677	AK026366					-1,84	1,24
TATA box-binding protein-associated factor 1E	AK026521					-1,94	1,06
ATP synthase, mitochondrial, epsilon chain	AK026556	-1,85	2,49				
Claudin 4	AK026651			-1,93	2,66		
Tripartite motif-containing 52	AK026706					-1,90	1,55
v-ras simian leukemia viral oncogene homolog 3	AK026850			-1,86	3,78	-2,11	0,77
Pleiomorphic adenoma gene-like 2	AK026951			-1,90	2,66		
Golgi apparatus protein 1	AK027032			-2,08	1,76	-1,84	1,24
Chromosome 20 open reading frame 5C	AK027065					-1,99	1,24
Leucine proline-enriched proteoglycan (leprecan)	AK027648	-1,93	0,51				
RAB2B, member RAS oncogene family	AK027730	-2,14	1,40	-2,28	1,76	-2,29	0,77
Ring finger protein 170	AK027748					-1,83	1,42
Source of immunodominant MHC-associated peptide	AK027789	-2,00	1,40	-2,38	0,59	-2,14	0,77
Zinc finger protein 585B	AK027834	-1,93	3,23				
Tensin 4	AK027856					-2,02	1,06
Clone RP4-816K17 on chromosome 20p12.2-13	AL031678					-1,92	1,66
MAS-related GPR, member F	AL049451					-1,82	1,83
Regulatory factor X, 5	AL050135	-1,83	2,32	-1,83	3,78	-1,86	1,23
Clone DKFZp586N0819	AL050285					-2,52	1,93
RNA binding motif protein, X-linked 2	AL050405	-1,84	3,56				
NIMA-related kinase 7	AL080111	-1,83	4,95			-2,37	0,77
Formyltetrahydrofolate synthetase domain containing	AL117452	-1,90	1,55				
Kelch-like 7	AL136597			-2,29	0,59		
Actin-like 6A	AL136608			-1,85	4,43		
PTK9L protein tyrosine kinase 9-like (A6-related protein)	AL136773	-1,94	3,23	-1,99	4,43		
Makorin 1	AL136812	-1,95	1,27	-2,21	0,59	-2,10	0,77
Adaptor-related protein complex 2, alpha 1 subunit	AL136925	-1,82	4,43			-1,94	1,43
Hypothetical protein MGC5139	AL137327			-1,96	4,43		
Hypothetical protein LOC90499	AL137712	-1,85	3,56				
PX domain containing serine/threonine kinase	AL137938			-1,92	2,66		
Kinesin-like 8	AL162078	-1,85	2,32				
Chromosome 21 segment HS21C003	AL163203					-1,95	0,91
Chromosome 21 segment HS21C048	AL163248			-1,96	2,66	-1,91	1,06
Chromosome 21 segment HS21C048	AL163248					-2,19	1,06
Calcineurin A alpha	AL353950					-1,88	1,24
DDHD domain containing 1	AL353954					-1,89	1,43
Ring finger protein 36	AL360161					-1,80	1,43
Prefoldin 1	AL521761	-2,09	1,40				
RAD51 homolog	AL524788			-1,89	2,97		
EBNA1-binding protein 2	AL526336	-2,14	0,51	-2,42	0,59	-1,97	1,06

Plexin D1	AL527865				-2,11	0,77
SET domain and mariner transposase fusion gene	AL528596	-1,96	2,97			
Complement component 1 inhibitor	AL531502				-2,04	0,77
Septin 8	AL532971				-1,99	0,91
Ubiquitin specific peptidase 14	AL546236	-2,14	1,20			
Interleukin 1 receptor-like 1	AL553735				-2,01	0,77
Dual specificity phosphatase 3	AL555009				-1,92	1,08
Glycogen synthase 1 (muscle)	AL556228	-1,86	2,66			
Opiate receptor-like 1	AL574931				-1,91	0,91
N-acetyltransferase 6	AL576483	-1,93	2,66			
Hyaluronoglucosaminidase 1	AL578077	-1,91	4,43	-2,05	0,91	
Chromosome 21q, section 32/105	AP001688	-1,92	2,97	-2,22	0,77	
Chromosome 21q, section 56/105	AP001712	-8,99	3,79	-8,49	1,66	
Chromosome 21q, section 60/105	AP001716				-2,16	0,91
Chromosome 21q, section 63/105	AP001719				-1,90	0,86
Chromosome 21q, section 96/105	AP001752	-2,70	0,59	-2,13	1,24	
Chromosome 21q, section 96/105	AP001752	-1,87	2,32			
Chromosome 1q22-q23, CD1 region	AP002534				-2,16	0,77
Clone KB87D5 on chromosome 8q23	AP002850	-2,08	0,51		-1,82	1,42
Clone KB1629B1 on chromosome 8q23	AP003439				-2,14	1,66
Pleiotrophin	AU120808	-1,89	1,27	-1,80	3,79	
Keratin 15	AU122673			-1,85	4,75	
Calponin 2	AU124309			-1,85	2,97	
Hypothetical gene CG012	AU130970			-2,04	1,76	
Forkhead box O3A	AU134033	-2,01	2,32	-1,92	4,43	
N-acylsphingosine amidohydrolase-like protein	AU143425				-1,80	1,55
Ubiquinol-cytochrome c reductase core protein	AU148041	-1,80	2,32			
Myosin X	AU151619				-2,16	0,77
NADH dehydrogenase 1 alpha subcomplex :	AV647700	-1,83	1,40			
Ribosomal protein S7	AV650019	-1,89	2,99			
G protein-coupled receptor 171	AV653286				-1,89	1,06
Sialic acid binding Ig-like lectin 6	AV712452				-1,92	2,00
LY6/PLAUR domain containing 1	AV727120				-1,84	1,23
Integrin, alpha E (antigen CD103)	AV762515	-1,88	2,32			
Histone 1, H2ae	AV763030			-1,92	2,66	-1,91 1,06
Cytochrome c oxidase subunit VIIa polypeptide 2 (liver	AV764305	-1,95	1,40	-2,44	0,59	
Thyroid hormone receptor coactivating protein	AW020536	-2,17	0,51	-2,09	0,59	-1,96 0,77
Cytochrome P450, family 24, subfamily A, polypeptide 1	AW022349				-1,92	1,08
Phosphatidic acid phosphatase type 2E	AW131816	-1,85	1,55			
Dual specificity phosphatase 8	AW189334			-1,87	4,43	-1,90 1,24
RAB2, member RAS oncogene family	AW301641				-1,98	0,91
LIM domain 7	AW469395			-2,59	0,59	
Intercellular adhesion molecule 2	AW577907	-1,87	3,56		-2,29	0,77
Ankyrin repeat domain 7	AW780029				-2,01	0,77
Platelet-derived growth factor receptor, alpha polypeptide	AW887370			-1,93	4,60	-2,30 0,77
BH-protocadherin (brain-heart)	AW960791			-1,99	2,07	-2,26 0,77
Runt-related transcription factor 1	AW963298	-2,08	0,51			
SRY (sex determining region Y)-box 5 (Sox5	BAA32567			-2,41	1,76	-2,79 0,77
Putative protein	BAB22510	-2,07	2,32			
Putative protein	BAB23743	-2,01	3,23			
Putative protein	BAB25067				-2,00	0,86
Unnamed protein	BAB25692				-1,97	1,06
Putative protein	BAB25981	-2,03	3,23		-2,11	1,23
Unnamed protein	BAB26083				-2,12	4,26
Unnamed protein	BAB30477				-1,85	1,42
Insulin-like growth factor binding protein 3	BC000013				-1,82	1,66
Cadherin, EGF LAG seven-pass G-type receptor 1	BC000059				-2,03	0,91
Similar to dynamin 1-like	BC000136	-1,96	3,56			
Dihydrofolate reductase	BC000192			-1,84	3,79	
Non-metastatic cells 3	BC000250	-1,83	3,56			
Thyroid hormone receptor interactor 1	BC000404				-1,97	0,86
Protein disulfide isomerase family A, member 4	BC000425			-2,10	1,76	
Ubiquinol-cytochrome c reductase core protein I	BC000484	-1,84	1,27			
Keratin 8	BC000654	-2,08	0,51	-2,02	1,76	
MAX dimerization protein 3	BC000745			-1,98	2,07	
Heat shock 90kDa protein 1, alpha	BC000987			-1,91	2,07	
Protein phosphatase 2, regulatory subunit B, delta isoform	BC001095	-1,95	2,49	-1,92	4,75	-2,17 0,77



Tripartite motif-containing 62	BC001222			-1,84	2,66		
SH3-domain GRB2-like 1	BC001270	-1,97	1,27				
TRPC4-associated protein (subfamily C)	BC001323	-1,92	0,51				
Mitogen-activated protein kinase-activated protein kinase 3	BC001662	-2,07	0,51	-1,91	2,97	-2,02	0,86
Asparaginyl-tRNA synthetase	BC001687	-2,05	0,51	-2,21	0,59	-1,91	1,06
Lectin, galactoside-binding, soluble, 1 (galectin 1)	BC001693			-1,92	2,07	-2,03	0,77
Angiotensin-like 7	BC001881			-1,97	3,45		
Dehydrogenase/reductase (SDR family) member 3	BC002730			-1,97	2,07	-1,98	0,86
Phosphatidic acid phosphatase type 2C	BC002806					-1,83	1,08
Cysteinyl-tRNA synthetase	BC002880			-2,01	1,98	-1,86	1,08
Hypothetical protein MGC11335	BC002943					-2,09	0,77
GATA-binding protein 3	BC003070	-2,12	0,51				
Lysosomal-associated protein transmembrane 4 alpha	BC003158			-1,94	2,66		
Speckle-type POZ protein	BC003385	-2,10	1,27	-1,84	4,75		
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	BC003394	-2,30	0,51	-2,42	0,59		
Ret finger protein 2	BC003579					-1,86	1,23
Matrix metalloproteinase 7	BC003635			-5,03	2,66	-4,70	1,43
RNA binding motif protein 10	BC004181	-1,86	1,27	-2,14	1,20		
Metastasis associated 1 family, member 3	BC004227	-2,17	0,51	-2,27	0,59	-1,80	1,55
Plexin B2	BC004542			-1,85	3,45		
Carbonic anhydrase III, muscle specific	BC004897			-2,06	3,78		
Putative protein	BC004948			-1,98	1,98	-2,07	0,77
Solute carrier family 25, member 1	BC004980	-2,11	0,51				
Glutaredoxin (thioltransferase)	BC005304	-1,97	1,40				
Interferon gamma receptor 1	BC005333			-3,55	3,79		
Erythrocyte membrane protein band 4.1-like 3	BC006141	-1,87	2,99	-2,18	1,76	-2,16	0,77
Asparaginase like 1	BC006267					-2,26	1,23
Hypothetical protein MGC10540	BC006282	-1,93	1,40				
Peroxisomal biogenesis factor 14	BC006327					-1,88	1,23
PDZ domain containing 1	BC006496					-1,80	3,75
Amyloid P component, serum	BC007058					-3,39	1,55
Plasminogen activator, tissue	BC007231					-2,11	0,77
Exonuclease NEF-sp	BC007646					-1,83	4,15
Dual specificity phosphatase 2	BC007771					-2,26	0,77
PAX interacting protein 1	BC008328			-2,08	1,76		
Ubiquitin-conjugating enzyme E2G 2	BC008351			-2,14	1,98	-1,92	1,23
Eukaryotic translation initiation factor 3, subunit 6	BC008419	-1,97	2,32				
Transmembrane 4 L six family member 1	BC008442					-1,92	1,06
ARP3 actin-related protein 3 homolog E	BC008682					-2,00	0,77
HLA-B associated transcript 4	BC008783	-2,67	0,51	-2,27	1,77	-2,26	0,77
Keratin 6A	BC008807	-1,86	1,40				
Kinesin 2 60/70kDa	BC008881	-1,87	2,32				
TRK-fused gene	BC009241	-2,36	0,51	-2,30	0,59	-1,88	1,23
Hermansky-Pudlak syndrome 6	BC009258			-1,87	4,60	-1,97	1,06
Clone 15169	BC009342					-1,81	1,24
Collagen alpha 1(I) chain precursor	BC009436	-1,94	1,40				
Chaperonin containing TCP1, subunit 5 (epsilon)	BC009454	-1,86	1,40	-1,98	1,98		
Dopamine receptor D5	BC009748					-1,87	1,23
MUS81 endonuclease homolog	BC009999	-2,11	0,51			-1,82	1,24
DR1-associated protein 1	BC010025			-2,30	0,59	-2,00	0,77
Claudin 15	BC010160	-1,86	2,32				
Stomatin	BC010703					-2,00	0,77
Protease inhibitor 3, skin-derived (SKALP)	BC010952	-2,01	1,27				
Oncostatin M	BC011589					-1,81	1,43
Interleukin 17 receptor	BC011624			-1,95	4,75		
Protein phosphatase 2, catalytic subunit, beta isoform	BC012022					-1,83	1,08
PDZ domain containing 8	BC012186	-1,98	1,55			-1,92	1,23
Betaine-homocysteine methyltransferase	BC012616					-1,81	1,83
Deoxynucleotidyltransferase terminal	BC012920	-1,92	1,27				
Opa interacting protein 5	BE045993			-2,07	1,77		
Tumor suppressing subtransferable candidate 1	BE219591					-1,89	0,91
SWI/SNF related protein, subfamily d, member 2	BE254018	-2,12	1,40	-2,51	0,59	-2,16	0,77
Nucleoside phosphorylase	BE266250			-2,24	0,59		
Thioredoxin-like 4	BE275227	-1,98	0,51	-2,40	0,59	-1,88	0,91
Tumor necrosis factor superfamily, member 4	BE349175			-1,97	2,66		
Similar to MER9 repetitive element	BE350898			-1,90	2,97		
Similar to CG5435-PA	BE501346			-1,97	4,43		

Small nuclear ribonucleoprotein polypeptide A	BE501622	-2,20	0,51	-2,29	0,59	-1,85	1,24
Isoleucine-tRNA synthetase	BE513909			-1,87	3,45		
Williams-Beuren syndrome chromosome region 1	BE531346			-2,04	2,66		
Kinesin family member 14	BE644769	-1,84	2,49				
Zinc finger, BED-type containing 1	BE674930					-1,80	1,66
Nuclear antigen Sp100	BE675052			-2,19	0,59		
Small proline-rich protein 2A	BE714149			-1,98	4,43	-1,85	1,93
Huntingtin interacting protein B	BE735468	-2,01	0,51				
Thyroid hormone receptor interactor 4	BE740238	-2,00	2,32				
Ig superfamily, member 2	BE746215					-2,47	0,91
Clone 3941904	BE797338					-1,81	1,66
Hypothetical protein HT03C	BE818955	-1,82	2,49				
Serpin peptidase inhibitor, clade B, member 4	BE856006					-1,86	1,24
P53-inducible cell-survival factor	BE858411			-2,04	1,77		
Ubiquitin specific peptidase 1C	BE891142					-2,01	0,86
Phenylalanine-tRNA synthetase-like	BE892769	-1,82	2,49				
Neutral sphingomyelinase activation associated factor 1	BF111145					-1,82	1,23
Complement component 4B	BF338113	-2,71	0,51	-2,14	1,20	-2,49	0,77
Placental growth factor (PGF)	BF431974					-2,11	0,77
Carbohydrate sulfotransferase 2	BF477523	-1,85	2,32				
MRS2-like, Magnesium homeostasis factor	BF508841			-2,26	0,59		
Interferon-stimulated transcription factor 3, gamma	BF525953			-2,07	1,77		
Ubiquitin specific peptidase 11	BF530688			-1,95	2,89		
Spastic paraplegia 7, paraplegin	BF570017			-2,21	1,76		
Cyclin C	BF593642	-1,83	1,40	-1,94	2,07		
RAD21 homolog	BF696386	-1,89	1,55				
Vacuolar protein sorting 45B	BF796127	-4,74	3,23	-4,34	3,45	-3,71	2,75
ATP-binding cassette, sub-family F, member 2	BF982597					-2,03	0,77
Dystrophia myotonia-containing WD repeat motif 1	BF996358					-1,87	1,43
ATP synthase, mitochondrial, subunit F6	BG030146	-1,98	0,51				
General transcription factor IIF, polypeptide 2	BG032043					-2,01	0,77
WD repeat domain 1	BG034829	-1,84	2,49	-2,05	2,07		
Glycoprotein, synaptic 2	BG036398	-1,82	2,32				
BRCA1 associated protein-1	BG109611	-1,83	2,99				
Small nuclear ribonucleoprotein polypeptide C	BG110237	-1,88	1,40				
Cyclin I	BG165160	-1,81	2,49				
Exportin 7	BG179617					-1,96	0,86
Histidine triad nucleotide binding protein 1	BG179851					-2,04	0,77
Phosphatidylinositol glycan, class C	BG216242					-1,85	1,23
Tumor-associated calcium signal transducer 2	BG259957			-2,12	1,76	-1,87	1,24
KCNMB3 gene	BG261015			-2,28	0,59		
v-myb avian myeloblastosis viral oncogene homolog 1	BG387620	-2,08	0,51				
c-src tyrosine kinase	BG391140	-1,82	2,49	-2,13	1,76	-2,03	0,77
Protein tyrosine phosphatase, receptor type, C	BG421123			-1,94	2,30		
U3 snoRNP protein 4 homolog	BG436654	-1,91	1,40				
Keratin, hair, basic, 6	BG490944			-2,15	3,45		
NADH-ubiquinone oxidoreductase 1 beta subcomplex 1	BG492618			-2,65	0,59	-1,86	1,06
Translation initiation factor 1A, Y-linked	BG498472			-1,96	2,66		
Translation initiation factor 3, subunit 6, 48kDa	BG499049			-1,96	2,66		
Valyl-tRNA synthetase	BG519757					-1,90	1,24
Breast carcinoma amplified sequence 2	BG527737			-2,15	0,59	-1,98	0,77
Secretory leukocyte protease inhibitor	BG533465	-2,07	0,51				
Interferon, alpha-inducible protein 27	BG535739			-1,95	2,30		
Hypothetical gene supported by BC055092	BG611120	-1,85	2,49			-1,86	1,42
BET1 homolog	BG612104			-2,08	1,76		
Actin related protein 2/3 complex, subunit 3	BG620669	-1,91	0,51				
Endothelial differentiation gene 2 (EDG2)	BG621964					-1,96	0,86
CDK2-associated protein 1	BG676784	-1,92	1,40				
Ras-related C3 botulinum toxin substrate 2	BG684065			-1,89	2,66		
Transmembrane emp24-like trafficking protein 10	BG708327			-1,93	2,66		
Keratin 5	BG739723	-2,07	4,43				
Hepatoma-derived growth factor	BG740896	-1,82	2,32	-2,17	1,76		
Src homology 2 domain containing adaptor protein E	BG751150					-1,81	1,24
Galectin 3	BG770327	-2,00	1,27	-2,26	0,59	-1,98	0,91
Isocitrate dehydrogenase 1 (NADP+), soluble	BG939422			-2,29	0,59		
Hemoglobin, delta	BG943559					-2,28	0,77
C2f protein	BG999341	-2,06	2,49			-2,07	1,23

Inosine monophosphate dehydrogenase 2	BI223795	-1,91	2,66	-1,89	1,06
Transcription factor 12	BI254529	-1,98	1,98		
Mitogen-activated protein kinase 1	BI334631			-1,90	1,66
RNA pseudouridylate synthase domain containing 2	BI334753			-1,91	1,08
Cytoplasmic FMR1 interacting protein 1	BI522540	-2,05	2,07		
KIAA0433 protein	BI522622	-2,31	0,59		
2,4-dienoyl CoA reductase 1, mitochondria	BI560133	-1,91	2,66		
Cullin 1	BI599583			-2,11	0,77
Transcription elongation factor A-like 1	BI712548	-2,03	2,07	-2,06	0,77
Solute carrier family 22, member 18	BI761173			-2,26	1,24
Calpain 2 (large subunit)	BI771158	-1,92	0,51		
Cytochrome c oxidase subunit Vic (COX6C)	BI861005	-1,93	1,40		
CD3D antigen, delta polypeptide (TiT3 complex)	BI907465	-1,93	1,55		
RNA binding motif protein 15B	BM021378	-1,82	4,60	-1,86	1,24
Distal intestinal serine protease	CAB56465			-1,81	1,43
Unnamed protein	CAC38896			-2,00	1,55
Unnamed protein	CAC39400			-1,84	1,83
Histidine ammonia-lyase	D16626			-2,01	0,91
Nuclear receptor subfamily 1, group D, member 2	D16815	-1,84	4,60		
CD116 antigen	D26616			-2,41	0,91
Helicase SKI2W	D29641	-2,17	0,51	-1,93	2,66
Ubiquitin specific protease 8	D29956	-1,84	3,56		
Proteasome 26S subunit, non-ATPase, 5	D31889			-1,84	1,93
2-oxoglutarate dehydrogenase	D32063	-1,80	3,56		
Condensin complex subunit 2	D38553	-1,86	1,55		
DNA cross-link repair 1A	D42045			-1,83	4,60
Membrane-bound transcription factor peptidase, site 1	D42053			-2,14	0,77
RAB21, member RAS oncogene family	D42087	-1,82	1,55		
Chemokine (C-C motif) ligand 17 (TARC)	D43767			-2,21	0,59
Adducin 1 (alpha)	D44640			-1,81	4,43
Protein disulfide isomerase family A, member 5	D49490			-2,06	0,77
ATP synthase, mitochondrial, F0 complex, subunit c	D50371	-2,19	1,27	-2,16	1,98
Ribosomal protein S21	D52096	-2,30	0,51	-2,05	2,07
Golgi autoantigen, golgin subfamily a, 2	D63997			-2,06	0,91
SEC14-like 1	D67029			-1,89	1,43
Dihydropyrimidinase-like 3	D78014			-1,86	2,97
RAB7, member RAS oncogene family-like 1	D84488	-2,22	2,32	-1,96	1,55
Neuropeptide Y receptor Yc	D86519			-2,01	1,83
RB1-inducible coiled-coil 1	D86958	-1,87	1,40	-1,94	2,30
Regulator of nonsense transcripts 1	D86988			-1,95	0,91
KIAA0265 protein	D87454			-1,95	2,66
CMP-sialic acid transporter	D87969	-1,81	4,06		
Solute carrier family 33, member 1	D88152			-2,20	0,77
Endothelin receptor type A	D90348			-2,13	3,78
ATPase, H+ transporting, lysosomal 34kDa, V1 subunit C	H82183	-2,15	0,51		
I factor (complement)	J02770			-1,87	3,75
GH and chorionic somatomammotropin genes	J03071			-2,10	1,55
Laminin, gamma 1	J03202	-1,92	2,32	-2,46	0,59
Surfactant, pulmonary-associated protein C	J03553			-1,81	1,93
Plasminogen activator, tissue (PLAT)	K03021			-2,05	0,86
Basonuclin 1	L03427			-1,86	1,66
cAMP responsive element binding protein 5	L05912	-2,37	3,56		
Myeloid cell leukemia sequence 1 (BCL2-related)	L08246			-1,88	2,89
Rho A proto-oncogene	L09159	-1,84	2,99	-1,87	1,43
N-formyl peptide receptor and Alu repeats	L10820			-1,93	1,23
Glycoprotein phospholipase C	L11702			-1,85	1,93
Dopamine receptor D4	L12398			-2,22	0,77
Transketolase (Wernicke-Korsakoff syndrome)	L12711			-1,81	4,43
Ig mu binding protein 2	L14754			-1,84	2,97
Zinc finger protein 141 (clone pHZ-44)	L15309			-1,97	0,91
Glutamate receptor, ionotropic, AMPA 2	L20814			-2,18	0,77
Arginine vasopressin receptor 1A	L25615			-1,98	0,91
Lamin B receptor	L25931	-1,87	1,55		
ST3 beta-galactoside alpha-2,3-sialyltransferase 1	L29555			-2,08	0,91
Glycerol-3-phosphate dehydrogenase 1 (soluble)	L34041			-1,90	1,23
FKBP-rapamycin associated protein (FRAP)	L34075	-1,93	0,51		
Sarcoglycan, alpha	L34355			-1,86	2,89
		-2,01	0,77		

Mitochondrial translational initiation factor 2	L34600	-2,08	0,51				
Aldehyde dehydrogenase 5 family, member A'	L34820	-2,01	2,32				
Interferon receptor (IFNAR2)	L42237	-1,80	3,23	-2,13	1,98		
Clone JJ1a (cadherin)	L43338					-1,82	1,66
Protein phosphatase 2, regulatory subunit B,ε isoform	L76703					-2,04	0,77
ADP/ATP carrier protein (ANT-2) gene	L78810					-1,85	1,24
BRCA1, Rho7, vat1 and ipf35 genes	L78833	-1,84	2,99				
Cathepsin D	M11233					-2,00	1,93
Platelet-derived growth factor beta polypeptide	M12783					-1,81	1,43
CD8 antigen, alpha polypeptide	M12824	-1,91	0,51				
Proliferating cell nuclear antigen	M15796			-1,85	3,78		
Cathepsin G	M16117	-2,61	2,32			-2,21	1,83
Butyrylcholinesterase	M16541					-1,93	1,06
Thrombomodulin	M16552					-1,86	1,43
ATP synthase beta subunit gene	M19482					-2,37	0,77
ATP-binding cassette, sub-family B, member 4	M23234					-1,81	2,75
RAS p21 protein activator	M23379			-1,91	2,30		
Nucleophosmin	M23613	-1,89	1,55				
Hemoglobin mu chain	M24173					-2,02	1,08
Na,K-ATPase beta subunit (ATP1B) gene	M25161			-1,88	2,66		
ATPase, Ca <sup>++</sup> transporting, plasma membrane 4	M25874	-1,83	2,49				
ATP synthase beta subunit precursor (ATPSB) gene	M27132					-1,87	1,43
CD80 antigen	M27533			-1,88	4,43	-2,17	0,77
Zinc finger protein 84	M27878			-2,00	1,98	-1,99	0,77
Calpastatin	M28228	-2,13	2,32				
Thymocyte antigen CD1t	M28826	-2,10	0,51				
Thymocyte antigen CD1c	M28827	-2,53	0,51				
Interleukin 7 receptor	M29696			-2,24	0,59	-1,93	1,06
6-O-methylguanine-DNA methyltransferase	M29971	-2,12	1,55	-1,91	4,43		
L-plastin	M34426	-2,17	2,99			-2,46	0,77
Neurotrophin-3	M37763					-1,84	1,55
Tripeptidyl peptidase I	M55169					-4,35	4,26
Solute carrier family 2, member 3 pseudogene 1	M55536					-1,83	3,07
Hematopoietic protein 1	M58285	-1,89	2,49	-1,94	3,45		
Nuclear factor kappa-B, subunit 1(NFKB1)	M58603			-1,83	3,79		
Collagen, type VIII, alpha 2	M60832			-2,56	2,07	-2,60	0,77
Growth differentiation factor 1	M62302					-1,86	1,66
Transcriptional enhancer factor (TEF1)	M63896					-1,98	0,91
Heat shock transcription factor 1	M64673			-2,08	2,07	-1,80	1,66
Dystonin	M69225	-2,14	0,51	-2,10	1,77	-2,11	0,77
Insulin-like growth factor I receptor gene	M69229					-3,49	2,75
Glutamate decarboxylase 2	M74826					-1,90	2,25
Translation termination factor 1	M75715	-1,87	2,49				
Interleukin 5 receptor, alpha	M75914					-1,87	1,06
Subtilisin-like protein (PACE4)	M80482	-1,84	1,55				
Transcription factor 12	M80627	-2,18	0,51				
S100 calcium binding protein A7 (psoriasin 1)	M86757					-1,96	1,06
A kinase (PRKA) anchor protein 5	M90359					-1,84	1,24
Outer dense fiber protein (ODFIG)	M93132					-1,88	0,91
Lamin B2	M94362	-2,09	1,27				
interferon-stimulated transcription factor 3, gamma	M97935			-2,38	0,59	-1,96	0,91
interferon-stimulated transcription factor 3, gamma	M97935			-1,81	3,78		
Phosphoribosylglycinamide formyltransferase	N31908					-1,83	1,42
Adrenergic, beta-2-, receptor, surface	NM_000024					-2,37	0,77
Solute carrier family 12, member 1	NM_000338					-1,89	1,06
ATP-binding cassette, sub-family C, member ε	NM_000352					-1,82	1,43
Adenylate kinase 1	NM_000476	-1,97	4,95			-2,23	1,08
Apolipoprotein A-IV	NM_000482					-5,64	1,08
Calcium channel, voltage-dependent, gamma subunit	NM_000727					-1,93	1,43
Gamma-aminobutyric acid (GABA) A receptor, alpha 3	NM_000808					-1,86	1,83
Solute carrier family 2, member 4	NM_001042					-1,88	0,91
Amiloride-sensitive cation channel 1, neuronal (degenerin)	NM_001094					-1,93	1,66
Cyclin-dependent kinase inhibitor 2C	NM_001262	-2,07	0,51	-2,44	0,59		
Ig superfamily, member 1	NM_001555					-2,03	1,98
Chemokine (C-X-C motif) ligand 10 (IP10)	NM_001565			-1,94	2,97		
Hypothetical protein LOC15116	NM_002410					-2,20	0,77
Stress-activated protein kinase JNK1	NM_002750	-2,24	1,27			-2,03	1,08

Sodium channel, voltage-gated, type IX, alpha	NM_002977	-2,17	2,66	-1,94	1,93
Sialophorin (CD43)	NM_003123			-1,86	1,06
Tight junction protein 1	NM_003257			-2,02	0,77
Histone 1, H4k	NM_003541		-2,05	1,98	
Topoisomerase (DNA) III beta	NM_003935	-1,81	4,95		
Rhomboid, veinlet-like 1	NM_003961			-1,80	1,43
Chemokine (C-C motif) receptor-like 2 (CCRL2)	NM_003965		-1,84	3,78	
Peptide YY	NM_004160			-1,88	1,93
Paraneoplastic antigen MA1	NM_006029	-2,19	0,51	-3,00	0,59
Phospholipase C-like 1	NM_006226		-1,98	2,07	
IGF-II mRNA-binding protein 3	NM_006547			-1,84	4,26
Solute carrier family 17, member 3	NM_006632		-2,07	1,76	-2,17
WD repeat domain 45	NM_007075		-1,92	2,97	
KIAA0748 protein	NM_014796			-1,88	0,91
KIAA0329 protein	NM_014844		-1,82	4,43	
TED protein	NM_015686	-1,89	1,40	-2,90	0,59
PQ loop repeat containing 2	NM_017765			-2,11	0,77
Protocadherin 8	NM_032949			-2,10	1,23
Glutamate receptor, ionotropic, kainate epsilon	S40369			-1,87	1,08
Peptidylprolyl isomerase C (cyclophilin C)	S71018		-2,15	2,07	-2,37
Gamma-aminobutyric acid (GABA) A receptor, alpha epsilon	S81944			-2,19	0,77
B-cell CLL/lymphoma 6 (BCL 6A)	T27711	-1,84	2,32	-2,28	0,59
5' region ZFX gene	U00241			-1,95	0,91
Active BCR-related gene	U01147			-1,92	0,91
Fibulin 1	U01244			-1,97	1,06
E1A binding protein p300	U01877			-1,89	1,06
Fms-related tyrosine kinase 3 ligand	U03858		-2,30	2,66	-2,15
Maspin	U04313	-1,81	4,06		
RAB40B, member RAS oncogene family	U05227			-2,03	4,13
Zinc finger protein 78-like 1	U09413			-1,86	1,23
Zinc finger protein 137	U09414	-1,97	2,32		-2,17
Calmodulin 1	U12022			-2,06	0,77
Suppression of tumorigenicity 5	U15131		-1,89	2,66	
Peroxisomal biogenesis factor epsilon	U19721		-2,24	1,76	
Chemokine (C-X3-C motif) receptor 1 (CX3CR1)	U20350			-1,84	1,24
Transcriptional repressor (CTCF)	U25435	-1,92	1,55		
Uncoupling protein 1 (mitochondrial, proton carrier)	U28480			-2,36	0,77
High-mobility group phosphoprotein isoform I-C gene	U28754			-2,10	0,91
erv1-like growth factor	U31176	-1,87	2,32		
E74-like factor 4 (ets domain transcription factor)	U32645		-2,23	0,59	-1,98
Signaling lymphocytic activation molecule family member 2	U33017		-1,90	2,97	
Integrin-linked kinase-2	U40282		-1,98	3,45	
Cytochrome P450, family 51, subfamily A, polypeptide 1	U51684			-1,91	0,91
Embigin homolog	U52054			-1,82	1,55
Chromosome Xq28	U52112			-2,53	2,25
Putative transcriptional regulator ENX-1	U52965	-1,82	2,99		
Solute carrier family 1, member 5	U53347	-1,91	2,49		
Peroxisomal biogenesis factor epsilon	U56602	-2,28	0,51	-2,43	0,59
Chemokine (C-C motif) ligand 13 (CCL13)	U59808			-1,94	1,06
PTK6 protein tyrosine kinase epsilon	U61412			-1,97	0,91
Elastin (Williams syndrome region)	U62292			-1,98	0,77
Zinc finger protein 193	U62392		-1,89	2,89	
Deoxyuridine triphosphatase (DUT)	U62891	-1,81	2,49		-1,92
Chemokine (C-C motif) ligand 20 (CCL20)	U64197			-2,21	1,43
Potassium inwardly-rectifying channel J1 (ROMK1)	U65406			-2,14	0,77
Hermansky-Pudlak syndrome 1	U65676			-1,89	3,75
Ephrin-B3	U66406			-1,89	1,42
Ataxia telangiectasia mutated	U67093		-1,81	4,75	
Aryl hydrocarbon receptor nuclear translocator-like 1	U69202	-1,89	1,27		
Zinc finger protein 32 (KOX 30)	U69645			-1,86	1,66
Potential transcriptional repressor NOT4H1	U71267	-2,31	3,23		-2,14
Cyclin-selective ubiquitin carrier	U73379	-1,92	1,55		1,83
RAB interacting factor	U74324			-1,95	1,08
TBP-associated factor, RNA polymerase II 130kDa (TAF4)	U75308			-1,95	1,06
Mitogen-activated protein kinase kinase kinase 1	U77129			-1,92	1,06
Lipopolysaccharide-induced TNF factor 1	U77396		-2,11	1,76	
Glutamate receptor, ionotropic, N-methyl D-aspartate 2C	U77782	-1,80	2,49		

Collagenase, stromelysin and metalloelastase gene	U78045					-2,08	1,93
Protein phosphatase 1D (PPMD1)	U78305					-1,82	4,75
GTF2H2, NAIP and SMN genes on chromosome 5q12-13	U80017					-2,03	3,79
GTF2H2, NAIP and SMN genes on chromosome 5q12-13	U80017					-1,86	4,43
Vesicle transport ARG2	U82256					-1,89	2,66
CD5 antigen-like	U82812						-2,50 0,77
Parathyroid hormone-responsive B1	U85995						-1,85 1,06
C4-sterol methyl oxidase homolog (DESP4	U93162	-1,85	3,23				
Zinc finger protein 230	U95044						-1,90 0,91
U1A snRNA	V00590						-2,31 0,77
raf-1 serine/threonine protein kinase	X03484	-2,03	0,51	-1,82	4,43		
Cytochrome P450, family 11, subfamily A, polypeptide 1	X05367						-1,85 1,23
Thyroglobulin	X05615	-1,85	2,32				
Growth hormone receptor	X06562						-10,5 1,93
Zinc finger protein 35	X07289						-1,82 1,24
Eosinophil peroxidase	X14346						-1,84 1,42
Eosinophil peroxidase	X14346	-1,82	3,56				
Interferon regulatory factor 1	X14454						-1,80 1,24
Chondroitin sulfate proteoglycan 2	X15998						-1,83 1,55
Cytochrome P450, family 4, subfamily B, polypeptide 1	X16699			-1,82	3,79	-2,06	0,77
Enolase 3 (beta, muscle)	X51957						-2,02 0,77
Myosin regulatory light chain MRCL3	X54304					-2,75	0,59
Inositol 1,4,5-trisphosphate 3-kinase A	X54938						-1,92 1,06
TREB protein	X55543	-2,16	0,51				-1,93 0,91
Mannose receptor, C type 1	X55635						-1,83 1,23
U13 snRNA pseudogene U13.12A	X58061	-2,22	4,95				-2,88 0,77
Translation elongation factor 1 beta 2	X60489					-2,15	0,59
Parvalbumin	X63070						-1,89 2,00
WAP four-disulfide core domain 2	X63187					-1,86	3,78
Pentraxin-related gene, rapidly induced by IL-1 beta	X63613						-1,89 0,86
Topoisomerase (DNA) II beta	X68060					-2,05	1,98
Adenosine A2b receptor	X68487						-1,88 1,08
Utrophin (homologous to dystrophin)	X69086					-2,06	2,07
Myomesin 1	X69090						-2,18 0,77
Transforming growth factor, alpha	X70340					-3,00	3,45
Protein phosphatase 2A, regulatory subunit B'	X73478	-1,96	1,55				-2,31 4,50
Keratin 20	X73502						-1,87 0,77
Transcription elongation factor	X73534						-2,06 0,77
Protein phosphatase 1 gamma	X74008	-2,02	1,55				
ATP-binding cassette, sub-family E	X74987					-1,85	2,89
Genomic YAC-end left arm of chromosome 15	X75191	-1,92	1,40	-2,09	1,76	-1,84	1,24
Ketohexokinase	X78678	-2,87	4,06				-2,36 3,75
AU RNA binding protein/enoyl-CoA hydratase	X79888					-1,83	2,97
Plakophilin 4	X81889					-1,93	2,07
Death associated protein 3	X83544	-1,94	0,51				
Sodium channel, nonvoltage-gated 1, gamma	X87160					-2,07	1,77
Cathepsin C	X87212					-1,82	3,78
Glucosidase I	X87237						-1,86 1,06
FAT tumor suppressor homolog 1	X87241						-1,81 1,43
Titin	X90568					-2,60	0,59
Rabaptin, RAB GTPase binding effector protein 1	X91141					-1,81	4,43
Transcription factor AP-2 beta	X95694						-1,83 2,25
Dombrock blood group (ART4)	X95826						-1,88 1,43
Cell division cycle 2, G1 to S and G2 to M	Y00272					-1,97	2,07
PolyA binding protein	Y00345	-1,90	0,51				
Superoxide dismutase 2, mitochondria	Y00472					-2,05	1,98
Ras-like without CAAX 1	Y07566					-2,75	1,76
Uracil-DNA glycosylase	Y09008						-1,92 2,75
Carboxylesterase 2 (intestine, liver	Y09616						-1,87 4,50
RNA terminal phosphate cyclase domain 1	Y11651	-1,84	1,55				-2,02 0,77
Phosphoinositide-3-kinase, class 2, alpha polypeptide	Y13367						-1,91 0,91
Caveolin 3	Y14747						-1,87 2,25
Cytochrome c oxidase subunit VIIb (CoxVIIb	Z14244	-1,89	2,32				
BCL2-like 1	Z23115						-1,87 1,24
Poly(rC)-binding protein 1	Z29505	-2,02	1,27	-2,53	0,59		
General transcription factor IIH, polypeptide 2, 44kDa	Z30094					-1,81	3,45
Myeloid/lymphoid or mixed-lineage leukemia (ALL1	Z69764						-2,69 4,50

ATPase, Ca <sup>++</sup> transporting, ubiquitous	Z69881			-1,92	2,66	-1,95	0,86
Incyte EST	-			-2,01	2,66	-2,14	0,77
Incyte EST	-	-2,32	0,51			-2,04	0,77
Incyte EST	-					-1,80	1,23
Incyte EST	-					-1,95	1,06
Incyte EST	-			-1,91	4,43		

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*Asterics indicate genes with an average signal intensity under 1.5 the average signal intensity of the background signal in non-MG adult*

**Table S3-A: List of genes located in the over-represented chromosomal regions in the thymus of MG patients.**  
 These regions were significantly over-represented using a  $\chi^2$  test.

Region Name	GenBank	Expression
<b>Chromosome 1q21</b>		
Ig superfamily, member 4B	AF062733	MH
Acidic nuclear phosphoprotein 32 family, member E	AK025624	ML SN
S100 calcium-binding protein A4	AV713821	MH ML SN
Cathepsin S	BC002642	ML SN
CK2 interacting protein 1	BC010149	ML SN
Myeloid cell leukemia sequence 1 (BCL2-related)	BE408610	MH
Phosphatidylinositol 4-kinase, catalytic, beta polypeptide	BG025389	SN
ALL1-fused gene from chromosome 1q	BG498770	SN
Kinesin family member 14	D26361	SN
RAR-related orphan receptor C	U16997	ML SN
Interleukin 6 receptor	X12830	MH SN
<b>Chromosome 1q32</b>		
Calcium channel, voltage-dependent, L type, alpha 1S subunit	AI417964	MH ML
Guanylate kinase 1	BC006249	ML
Proline arginine-rich end leucine-rich repeat protein	BE836107	MH
Complement component receptor 2 (CD21)	J03565	MH
ELK4, ETS-domain protein (SRF accessory protein 1)	NM_021795	MH
Contactin 2 (axonal)	X67734	ML
Plakophilin 1	Z73678	ML
<b>Chromosome 2p12</b>		
Ig kappa constant	AJ010442	MH SN
Ig kappa constant	BC005332	MH ML
Nuclear DNA-binding protein	BE857571	SN
Ig kappa chain variable region (IGKV gene)	M63438	MH ML SN
Ig kappa chain variable region (IGKV gene)	M63438	MH ML SN
Ig kappa constant	S49006	MH
Ig kappa light chain	Y14736	MH SN
Ig kappa chain V-IV region B17 precursor	Z46347	MH ML SN
<b>Chromosome 6p21</b>		
Chloride intracellular channel 1	AA291390	ML SN
Two pore domain K+ channel (TASK-2)	AF084830	MH
Ring finger protein 1	AL576514	ML SN
BCL2-antagonist/killer 1	AW276601	SN
Dimethylarginine dimethylaminohydrolase 2	BC001435	SN
TAP binding protein (tapasin)	BE394234	ML SN
MHC class II, DR alpha	BF795929	MH ML SN
MHC class II, DO beta	BG176768	MH SN
MHC class II, DQ beta 1	BG619272	MH ML SN
Trinucleotide repeat containing 5	BG675987	ML SN
RD RNA binding protein	L03411	SN
MHC class I, E (HLA-E)	M21533	ML SN
MHC class I (HLA-B13)	M24041	SN
MHC class II, DQ beta 1	M24364	MH ML SN
MHC class II, DQ beta 1	M24364	ML SN
MHC class II, DP alpha 1	M27487	ML SN
MHC class II, DQ beta 1	U83582	ML SN
TBP-associated factor, RNA polymerase II 28kDa (TAF11)	W63567	ML SN
MHC class II, DQ alpha 2	X00033	MH SN
MHC class II alpha chain gene DZ-alpha	X02882	MH
Complement component 2	X04481	MH
<b>Chromosome 9q34</b>		
SH2-containing protein Nsp3	AF124251	SN
Surfeit 5	AI884541	ML SN
Serologically defined colon cancer antigen 3	AK001296	ML
Surfeit 1	AL549808	SN
Mannosidase, alpha, class 1B, member 1	AL583481	ML SN
Dynamin 1	AW206374	ML SN
Bromodomain containing 3	AW953714	ML SN
Formin binding protein 1	BC009262	ML SN
Ubiquitin associated domain containing 1	BE892211	SN
TNF receptor-associated factor 2	BG677004	ML
Peptidase (mitochondrial processing) alpha	D21064	SN
Serologically defined colon cancer antigen 3	NM_006643	ML
Nucleoporin	X64228	SN
<b>Chromosome 14q32</b>		
SNC73 protein (Ig H alpha 1)	AF067420	MH SN
Ig heavy constant mu	AI634950	MH ML SN
KIAA0284 protein	AK025023	MH
Serpin A3	BG567810	MH
Fibulin 5	AL570066	SN
T-cell leukemia/lymphoma 1A	BG757974	MH ML
T-cell leukemia/lymphoma 1A	BG760057	MH ML SN
Ig heavy constant mu	BM008087	MH ML SN
Interferon, alpha-inducible protein 27 (ISG12)	X67325	SN
Ig heavy chain variable region	Z98733	MH ML SN
<b>Chromosome 22q11</b>		
Ig lambda 1 variable region	AF124182	MH
Clone KB1125A3 on chromosome 22q11.2	AP000350	ML SN



Clone KB1440D3 on chromosome 22q11.2	AP000553			SN
Ig lambda-like polypeptide 1, pre-B-cell specific	AW898081		ML	SN
ATPase, H+ transporting, lysosomal, V1 subunit E isoform 1	BC004443		ML	SN
Ubiquitin fusion degradation 1 like (yeast)	BC005087		ML	
Ig lambda joining 3	BF338816	MH		SN
Ig lambda locus	M87790			SN
Peptidylprolyl isomerase (cyclophilin)-like 2	U37221		ML	
Ig lambda constant 2	X57812	MH	ML	
Ig lambda constant 2	X57812	MH	ML	
Ig lambda light chain	Y14738	MH	ML	SN
Ig lambda light chain	Y14738	MH	ML	
<b>Chromosome 3p21</b>				
Arginine-rich, mutated in early stage tumors	AA974308	MH		
Kelch-like 18	AB018338			SN
Chemokine (C-C motif) receptor 9 (CCR9)	AF145439	MH		
Dual specificity phosphatase 7	AI655015		ML	
PTK9L protein tyrosine kinase 9-like (A6-related protein)	AL136773	MH	ML	
PX domain containing serine/threonine kinase	AL137938		ML	
N-acetyltransferase 6	AL576483		ML	
Hyaluronoglucosaminidase 1	AL578077		ML	SN
Ubiquinol-cytochrome c reductase core protein I	AU148041	MH		
Mitogen-activated protein kinase-activated protein kinase 3	BC001662	MH	ML	SN
Huntingtin interacting protein B	BE735468	MH		
BRCA1 associated protein-1	BG109611	MH		
Inosine monophosphate dehydrogenase 2	BI223795		ML	SN
RNA binding motif protein 15B	BM021378		ML	SN
Rho A proto-oncogene	L09159	MH		SN
Chemokine (C-C motif) receptor-like 2 (CCRL2)	NM_003965		ML	
Chemokine (C-X3-C motif) receptor 1 (CX3CR1)	U20350			SN
Zinc finger protein 35	X07289			SN
Transcription elongation factor	X73534			SN

**Table S3-B: Classification of 168 genes up-regulated in MH patients.**

These genes were extracted by SAM with a False Discovery Rate<5% and a FC>1.8.

<b>Biological process</b>	<b>GenBank</b>	<b>Name</b>
<b>Function</b>		
<b>Immune response</b>		
B cell related	AF208502	Early B-cell transcription factor (EBF)
B cell related	BC001609	Linker for activation of B cells (LAB)
B cell related	BG024663	CD20 antigen (B-lymphocyte cell-surface antigen B1)
B cell related	BG754034	Spi-B transcription factor (Spi-1/PU.1 related)
B cell related	BG759817	CD79A antigen (Ig-associated alpha)
B cell related	BG822701	CD44 antigen
B cell related	J03565	Complement component receptor 2 (CD21)
B cell related	M27394	CD20 antigen (B-lymphocyte cell-surface antigen B1)
B cell related	M31732	B-cell CLL/lymphoma 3
B cell related	M80461	CD79B antigen (Ig-associated beta)
B cell related	M80461	CD79B antigen (Ig-associated beta)
B cell related	M84371	CD19 antigen
B cell related	X66079	Spi-B transcription factor (Spi-1/PU.1 related)
Chemokine	AF044197	Chemokine (C-X-C motif) ligand 13 (CXCL13)
Chemokine	BI837774	Chemokine (C-C motif) ligand 21 (CCL21)
Chemokine	M25315	Chemokine (C-C motif) ligand 3 (CCL3)
Complement component	K02765	Complement component 3
Complement component	X04481	Complement component 2
IFN induced	AA034349	Interferon-induced protein 44
IFN induced	AA477235	Myxovirus resistance 1 (interferon-inducible protein p78)
IFN induced	AF024714	Interferon-inducible protein (AIM2)
IFN induced	AL582281	2',5'-oligoadenylate synthetase 1
IFN induced	AW964220	Interferon consensus sequence binding protein 1
IFN induced	BC000562	2',5'-oligoadenylate synthetase 1
IFN induced	J04164	Interferon-inducible protein (9-27)
IFN induced	M24594	Interferon-induced protein with tetratricopeptide repeats
IFN induced	NM_002053	Guanylate binding protein 1 (interferon-inducible)
IFN induced	X82200	Stat50
Ig family	AF062733	Ig superfamily, member 4B
Ig family	AF067420	SNC73 protein (Ig H alpha 1)
Ig family	AF124182	Ig Lambda 1 variable region
Ig family	AI634950	Ig heavy constant mu
Ig family	AJ010442	Ig kappa constant
Ig family	BC005332	Ig kappa constant
Ig family	BF338816	Ig lambda joining 3
Ig family	BM008087	Ig heavy constant mu
Ig family	D87023	Ig lambda
Ig family	M63438	Ig kappa chain variable region (IGKV gene)
Ig family	M63438	Ig kappa chain variable region (IGKV gene)
Ig family	S49006	Ig kappa constant
Ig family	S50732	Ig kappa chain V-IV region B17 precursor
Ig family	X51985	Lymphocyte-activation gene 3
Ig family	X51985	Lymphocyte-activation gene 3
Ig family	X57812	Ig lambda constant 2
Ig family	X57812	Ig lambda constant 2
Ig family	Y14736	Ig kappa light chain
Ig family	Y14738	Ig lambda light chain
Ig family	Y14738	Ig lambda light chain
Ig family	Z46347	Ig kappa chain V-IV region B17 precursor
Ig family	Z98733	Ig heavy chain variable region
Kinase activity	AF019562	TYRO protein tyrosine kinase binding protein (DAP12)
MHC class II	AL543515	CD74 antigen (MHC class II antigen-associated)
MHC class II	BF795929	MHC class II, DR alpha
MHC class II	BG176768	MHC class II, DO beta
MHC class II	BG619272	MHC class II, DQ beta 1
MHC class II	M24364	MHC class II, lymphocyte antigen DQB
MHC class II	X00033	MHC class II, DQ alpha 2
MHC class II	X02882	MHC class II alpha chain gene DZ-alpha
Receptor activity	AF296673	Toll-like receptor 10
Receptor activity	AK027618	Neurogenic locus notch homolog protein 4 precursor
Receptor activity	U63963	CSF-1 receptor (FMS)
Receptor activity	X12830	Interleukin 6 receptor
Unclassified	NM_004262	Airway trypsin-like protease
Unclassified	S69115	Natural killer cell group 7 sequence
Unclassified	U10267	Defensin-related pseudogene sequence

### Cellular metabolism

Nucleotide metabolism	AB023420	Heat shock 70kDa protein 4
Nucleotide metabolism	AL535356	Ribosomal protein S7
Nucleotide metabolism	BG252637	Prostatic binding protein
Nucleotide metabolism	BI259616	Uracil-DNA glycosylase 2
Nucleotide metabolism	NM_005058	RNA binding motif protein, Y-linked, family 1, member A1
Nucleotide metabolism	U04953	Isoleucyl-tRNA synthetase
p53 pathway	AB036063	Ribonucleotide reductase M2 B (TP53 inducible)
p53 pathway	D86983	Melanoma associated gene
p53 pathway	L13698	Growth arrest-specific gene-1
Protease	AL541945	Serine proteinase inhibitor, clade F, member 1
Protease	BE148534	Serpin B13
Protease	BG567810	Serpin A3
Protease	BI520001	Procollagen C-endopeptidase enhance
Protein processing	AF070618	Mitochondrial 28S ribosomal protein S22
Protein processing	AI590087	HERPUD1
Protein processing	BG576390	Hermansky-Pudlak syndrome (HPS1)
Protein processing	L43494	Sialyltransferase 8A
Transporter activity	AA057813	Lectin, mannose-binding, 1
Transporter activity	AF085224	Solute carrier family 21, member 3
Transporter activity	BF026359	Carnitine palmitoyltransferase II
Transporter activity	J04127	Cytochrome P450, subfamily XIX
Transporter activity	NM_005073	Solute carrier family 15, member 1
Transporter activity	NM_006849	Protein disulfide isomerase
Transporter activity	U43944	Breast cancer cytosolic NADP(+)-dependent malic enzyme
Transporter activity	X00129	Retinol binding protein (RBP)
Transporter activity	X90926	CYP2D7-CYP2D6 intergenic region
Ubiquitine cycle	AB020647	F-box and leucine-rich repeat protein 7
Ubiquitine cycle	AW270961	Diubiquitin
Ubiquitine cycle	AW804509	BRCA1 associated protein

### Transcription

Transcription factor activity	AAC47282	Sob protein (zinc finger protein)
Transcription factor activity	AF087940	Heart and neural crest derivatives expressed 1
Transcription factor activity	AI051628	v-jun avian sarcoma virus 17 oncogene homolog
Transcription factor activity	AK027071	TGF beta 1 induced transcript 4
Transcription factor activity	AL549846	TGF beta-induced factor
Transcription factor activity	AV747778	v-fos FBJ murine osteosarcoma viral oncogene homolog
Transcription factor activity	BG757974	T-cell leukemia/lymphoma 1A
Transcription factor activity	BG760057	T-cell leukemia/lymphoma 1A
Transcription factor activity	D31716	Basic transcription element binding protein 1
Transcription factor activity	L49169	FBJ murine osteosarcoma viral oncogene homolog E
Transcription factor activity	M92844	Zinc finger transcriptional regulator (GOS24) gene
Transcription factor activity	M92844	Zinc finger transcriptional regulator (GOS24) gene
Transcription factor activity	NM_003451	Zinc finger protein 177
Transcription factor activity	NM_021795	ELK4, ETS-domain protein (SRF accessory protein 1)
Transcription factor activity	U20734	Transcription factor junB (junB)
Transcription factor activity	X63741	Early growth response 3
Transcriptional regulation	AJ000052	Splicing factor SF1 (ZNF162)
Transcriptional regulation	BF305705	Histone deacetylase 5
Transcriptional regulation	M96684	Purine-rich element binding protein A
Transcriptional regulation	R56503	SWI/SNF complex, subfamily a, member 2
Transcriptional regulation	U66615	SWI/SNF complex subfamily c, member 1

### Cell communication

Cell adhesion	AU124258	Desmoglein 2
Cell adhesion	BE836107	Proline arginine-rich end leucine-rich repeat protein
Cell adhesion	S80335	Integrin beta 7 subunit
Channel	AF084830	Two pore domain K+ channel (TASK-2)
Channel	AF177940	Ion channel homolog (IWU1)
Channel	AI417964	Calcium channel, voltage-dependent, L type, alpha 1S subunit
Channel	AW162513	Potassium voltage-gated channel, subfamily G, member 7
Channel	U72245	Phospholemman chloride channel
Channel	U95367	Gamma-aminobutyric acid (GABA) A receptor, pi subunit
Ligand	AL547439	Connective tissue growth factor
Ligand	AW513199	Corticotropin releasing hormone
Ligand	BF980737	Glucagon
Ligand	U08137	Fas ligand
Receptor activity	AF284095	Alpha-2A adrenergic receptor
Receptor activity	BG325212	Insulin-like growth factor 2 receptor
Receptor activity	D38081	Thromboxane A2 receptor
Receptor activity	NM_000677	Adenosine A3 receptor
Receptor activity	NM_004835	Angiotensin receptor 1
Receptor activity	U86282	Olfactory receptor (OR7-86) pseudogene

Receptor activity	X63128	Activin A receptor, type II
<b>Intracellular signaling</b>		
Calcium binding protein	AV713821	S100 calcium-binding protein A4
Calcium binding protein	BC009846	Hippocalcin-like 1
Channel	BE408610	Myeloid cell leukemia sequence 1 (BCL2-related)
Cytoskeleton	AB006629	Cytoplasmic linker 2
Cytoskeleton	AL137287	Myosin IXA
Cytoskeleton	BAA85657	Cytokeratin (type II)
Cytoskeleton	BF799654	Erythrocyte membrane protein band 4.1-like 2
GTPase activity	AF235022	Rab-related GTP-binding protein
GTPase activity	AK022147	TBC1 domain family, member 15
GTPase activity	D29642	Rho GTPase activating protein 2
Kinase activity	AF169035	Serum/glucocorticoid regulated kinase family, member 3
Kinase activity	BG108304	v-src-1 Yamaguchi sarcoma viral related oncogene homolog
Receptor activity	AF173081	LIN-7 homolog 1 (MALS-1)
Receptor activity	AI679737	Epidermal growth factor receptor pathway substrate 3
Receptor activity	BF725116	Plexin A3
Receptor activity	S57551	Guanylate cyclase 2C
Transporter activity	AY038988	Glutaredoxin 2
Transporter activity	BG613898	Secretory carrier membrane protein 1
<b>Unknown</b>		
Unknown	AB002382	KIAA0384 protein
Unknown	AB023187	Fibronectin type III domain containing 3
Unknown	AK021842	FLJ25476 protein
Unknown	AK025023	KIAA0284 protein
Unknown	AL050127	Clone DKFZp586G021
Unknown	AL136919	Factor for adipocyte differentiation 158
Unknown	BAA24842	KIAA0412 protein
Unknown	BC008254	Hypothetical protein LOC339803
Unknown	CAC21785	Unnamed protein
Unknown	M74089	TB1 gene
Unknown	M96852	GOS19-3 gene
Unknown	X57398	NODAL modulator 3
Unknown	Z69892	Clone ICRFp50711077
Unknown	-	Incyte EST
Unknown	-	Incyte EST

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**Table S3-C: Classification of 228 genes down-regulated in MH patients.**

These genes were extracted by SAM with a False Discovery Rate<5% and a FC>1.8.

<b>Biological process</b>	<b>GenBank</b>	<b>Name</b>
<b>Function</b>		
<b>Cellular metabolism</b>		
ATP binding activity	D29641	Helicase SKI2W
ATP binding activity	H82183	ATPase, H <sup>+</sup> transporting, lysosomal 34kDa, V1 subunit C
ATP binding activity	M25874	ATPase, Ca <sup>++</sup> transporting, plasma membrane 4
ATP binding activity	U56602	Peroxisomal biogenesis factor 6
ATP biosynthesis	AF087135	ATP synthase, mitochondrial, F0 complex, subunit c
ATP biosynthesis	AK026556	ATP synthase, mitochondrial, epsilon chair
ATP biosynthesis	BC012920	Deoxynucleotidyltransferase termina
ATP biosynthesis	BG030146	ATP synthase, mitochondrial, subunit F6
ATP biosynthesis	D50371	ATP synthase, mitochondrial, F0 complex, subunit c
Cell cycle	AK021794	Cyclin-dependent kinase inhibitor 2C
Cell cycle	BF593642	Cyclin C
Cell cycle	BF696386	RAD21 homolog
Cell cycle	BG165160	Cyclin I
Cell cycle	BG676784	CDK2-associated protein 1
Cell cycle	D38553	Condensin complex subunit 2
Cell cycle	D86958	RB1-inducible coiled-coil 1
Cell cycle	NM_001262	Cyclin-dependent kinase inhibitor 2C
Channel	AK023366	Two pore segment channel 2
Kinase activity	NM_000476	Adenylate kinase 1
Kinase activity	X78678	Ketohexokinase
Nucleotide metabolism	AB002390	Ectonucleoside triphosphate diphosphohydrolase 4
Nucleotide metabolism	AL117452	Formyltetrahydrofolate synthetase domain containing 7
Nucleotide metabolism	BC000250	Non-metastatic cells 3
Nucleotide metabolism	BC009999	MUS81 endonuclease homolog
Nucleotide metabolism	BE818955	Hypothetical protein HT036
Nucleotide metabolism	M29971	6-O-methylguanine-DNA methyltransferase
Nucleotide metabolism	U62891	Deoxyuridine triphosphatase (DUT)
Protease	AI031979	Cathepsin D (lysosomal aspartyl protease)
Protease	BI771158	Calpain 2 (large subunit)
Protease	M80482	Subtilisin-like protein (PACE4)
Protein processing	AF087660	NADH:ubiquinone oxidoreductase SDAP subunit 1
Protein processing	AF110647	Signal sequence receptor, gamma 2
Protein processing	AK023253	DnaJ (Hsp40) homolog, subfamily B, member 5
Protein processing	AK024258	HBS1-like
Protein processing	AK025674	Coronin 7
Protein processing	AL136925	Adaptor-related protein complex 2, alpha 1 subunit
Protein processing	AL521761	Prefoldin 1
Protein processing	AV650019	Ribosomal protein S7
Protein processing	BC001687	Asparaginyl-tRNA synthetase
Protein processing	BC008419	Eukaryotic translation initiation factor 3, subunit 6
Protein processing	BC009454	Chaperonin containing TCP1, subunit 5 (epsilon)
Protein processing	BC010952	Protease inhibitor 3, skin-derived (SKALP)
Protein processing	BE892769	Phenylalanine-tRNA synthetase-like
Protein processing	BF477523	Carbohydrate sulfotransferase 2
Protein processing	BF796127	Vacuolar protein sorting 45B
Protein processing	D52096	Ribosomal protein S21
Protein processing	L34600	Mitochondrial translational initiation factor 2
Protein processing	M75715	Translation termination factor 1
Protein processing	U04313	Maspin
Ribosome biogenesis	AL526336	EBNA1-binding protein 2
Ribosome biogenesis	BG999341	C2f protein
RNA binding	AI392730	Formin binding protein 21
RNA binding	AL050405	RNA binding motif protein, X-linked 2
RNA binding	BC003394	Heterogeneous nuclear ribonucleoprotein C (C1/C2)
RNA binding	BC004181	RNA binding motif protein 10
RNA binding	BE501622	Small nuclear ribonucleoprotein polypeptide A
RNA binding	BG110237	Small nuclear ribonucleoprotein polypeptide C
RNA binding	BG436654	U3 snoRNP protein 4 homolog
RNA binding	X58061	U13 snRNA pseudogene U13.12A
RNA binding	Y00345	PolyA binding protein
RNA binding	Y11651	RNA terminal phosphate cyclase domain 1
RNA binding	Z29505	Poly(rC)-binding protein 1
Transporter activity	AF176008	Mitochondrial carrier homolog 2
Transporter activity	AI207655	Retinol-binding protein 4, plasma
Transporter activity	AI565092	Solute carrier family 16, member 1

Transporter activity	AK022828	* Solute carrier family 25, member 12
Transporter activity	AK025307	* Carnitine palmitoyltransferase 1A (liver)
Transporter activity	AU148041	Ubiquinol-cytochrome c reductase core protein
Transporter activity	AV647700	NADH dehydrogenase 1 alpha subcomplex :
Transporter activity	AV764305	Cytochrome c oxidase subunit VIIa polypeptide 2 (liver)
Transporter activity	BC000484	Ubiquinol-cytochrome c reductase core protein I
Transporter activity	BC004980	Solute carrier family 25, member 1
Transporter activity	BC005304	Glutaredoxin (thioltransferase)
Transporter activity	BE275227	Thioredoxin-like 4A
Transporter activity	BG036398	Glycoprotein, synaptic 2
Transporter activity	BI861005	Cytochrome c oxidase subunit Vic (COX6C)
Transporter activity	D87969	CMP-sialic acid transporter
Transporter activity	L34820	Aldehyde dehydrogenase 5 family, member A'
Transporter activity	U53347	Solute carrier family 1, member 5
Transporter activity	Z14244	Cytochrome c oxidase subunit VIIb (CoxVIIb)
Ubiquitin cycle	AB014595	Cullin 4B
Ubiquitin cycle	AJ010347	RING-H2 protein RNF6, alternative exon 1t
Ubiquitin cycle	AL136812	Makorin 1
Ubiquitin cycle	BG109611	BRCA1 associated protein-1
Ubiquitin cycle	D29956	Ubiquitin specific protease 8
Ubiquitin cycle	U73379	Cyclin-selective ubiquitin carrier
Unclassified	AF017445	Fucose-1-phosphate guanylyltransferase
Unclassified	AF027156	Mannosidase, alpha, class 1A, member 2
Unclassified	AF326591	* Plasmalemma vesicle associated protein
Unclassified	BC001270	SH3-domain GRB2-like 1
Unclassified	D32063	2-oxoglutarate dehydrogenase
Unclassified	M28228	Calpastatin
Unclassified	U93162	C4-sterol methyl oxidase homolog (DESP4)

### Transcription

Transcription factor activity	AAB32671	Pax-6
Transcription factor activity	AAC69892	Bing1
Transcription factor activity	AB007885	Zinc finger protein 262
Transcription factor activity	AB011102	Zinc finger protein 292
Transcription factor activity	AB058750	Zinc finger, CCCH-type with G patch domain
Transcription factor activity	AF114156	Y-linked zinc finger protein (ZFY)
Transcription factor activity	AF230388	Tripartite motif-containing 29
Transcription factor activity	AF327722	NMDA receptor regulated 1
Transcription factor activity	AJ224901	Zinc finger protein 198
Transcription factor activity	AK027834	Zinc finger protein 585B
Transcription factor activity	AU134033	Forkhead box O3A
Transcription factor activity	AW963298	Runt-related transcription factor 1
Transcription factor activity	BG387620	v-myb avian myeloblastosis viral oncogene homolog
Transcription factor activity	L05912	cAMP responsive element binding protein 4
Transcription factor activity	M80627	Transcription factor 12
Transcription factor activity	U09414	Zinc finger protein 137
Transcriptional regulation	AB002331	Death associated transcription factor 1
Transcriptional regulation	AF059650	Histone deacetylase 3 (HDAC3)
Transcriptional regulation	AF086127	Hypothetical protein FLJ31295
Transcriptional regulation	AF168418	Activating signal cointegrator 1
Transcriptional regulation	AF315591	Pumilio 2 (PUMH2)
Transcriptional regulation	AK022003	TBP-associated factor, RNA polymerase II 68kDa (TAF15)
Transcriptional regulation	BC003385	Speckle-type POZ protein
Transcriptional regulation	BC004227	Metastasis associated 1 family, member 3
Transcriptional regulation	BE254018	SWI/SNF related protein, subfamily d, member 2
Transcriptional regulation	BE740238	Thyroid hormone receptor interactor 4
Transcriptional regulation	M23613	Nucleophosmin
Transcriptional regulation	NM_003935	Topoisomerase (DNA) III beta
Transcriptional regulation	U25435	Transcriptional repressor (CTCF)
Transcriptional regulation	U52965	Putative transcriptional regulator ENX-1
Transcriptional regulation	U69202	Aryl hydrocarbon receptor nuclear translocator-like
Transcriptional regulation	U71267	Potential transcriptional repressor NOT4H4
Transcriptional regulation	X55543	TREB protein

### Intracellular signaling

Cytoskeleton	AF317696	Actin cross-linking factor
Cytoskeleton	AI583424	CLIP-associating protein 2
Cytoskeleton	AK000160	Myosin IB
Cytoskeleton	AL136773	PTK9L protein tyrosine kinase 9-like (A6-related protein)
Cytoskeleton	AL162078	Kinesin-like 8
Cytoskeleton	BC006141	Erythrocyte membrane protein band 4.1-like 3
Cytoskeleton	BC008881	Kinesin 2 60/70kDa
Cytoskeleton	BE644769	Kinesin family member 14
Cytoskeleton	BG034829	WD repeat domain 1

Cytoskeleton	M69225	Dystonin
GTPase activity	AF037195	Regulator of G-protein signalling 14
GTPase activity	AK025816	Rho-guanine nucleotide exchange facto
GTPase activity	AK027730	RAB2B, member RAS oncogene family
GTPase activity	D42087	RAB21, member RAS oncogene family
GTPase activity	D84488	RAB7, member RAS oncogene family-like 1
GTPase activity	L09159	Rho A proto-oncogene
Kinase activity	AL080111	NIMA-related kinase 7
Kinase activity	BC001662	Mitogen-activated protein kinase-activated protein kinase :
Kinase activity	BG391140	c-src tyrosine kinase
Kinase activity	L34075	FKBP-rapamycin associated protein (FRAP)
Kinase activity	NM_002750	Stress-activated protein kinase JNK1
Kinase activity	X03484	raf-1 serine/threonine protein kinase
Phosphatase activity	AA281524	Protein tyrosine phosphatase, receptor type, M
Phosphatase activity	AW131816	Phosphatidic acid phosphatase type 2E
Phosphatase activity	BC001095	Protein phosphatase 2, regulatory subunit B, delta isoform
Phosphatase activity	X73478	Protein phosphatase 2A, regulatory subunit B'
Phosphatase activity	X74008	Protein phosphatase 1 gamma
Protein interactions	AF176555	A-kinase anchoring protein 220
Protein interactions	BC009241	TRK-fused gene
Protein interactions	BC012186	PDZ domain containing 8
Receptor activity	AF072693	G-protein-coupled receptor 75 (GPR75)
Receptor activity	AW020536	Thyroid hormone receptor coactivating protein
Receptor activity	L25931	Lamin B receptor

#### **Immune response**

Autoantigen	AK023116	Highly similar to human Sp140 protein
Autoantigen	NM_006029	Paraneoplastic antigen MA1
Cell adhesion	AF132209	Proteoglycan 3
Cell adhesion	AV762515	Integrin, alpha E (antigen CD103)
Cell adhesion	AW577907	Intercellular adhesion molecule 2
Cell adhesion	BG770327	Galectin 3
Complement component	BF338113	Complement component 4B
Cytoskeleton	M34426	L-plastin
IFN signaling	L42237	Interferon receptor (IFNAR2)
IFN signaling	X83544	Death associated protein 3
Kinase activity	AF153419	IkappaBkinase complex-associated protein (IKBKAP)
MHC "related"	AI336342	Thymocyte antigen CD1c
MHC "related"	AK027789	Source of immunodominant MHC-associated peptides
MHC "related"	AL050135	Regulatory factor X, 5
MHC "related"	BC008783	HLA-B associated transcript 4
MHC "related"	M28826	Thymocyte antigen CD1c
MHC "related"	M28827	Thymocyte antigen CD1c
Protease	AI800750	Protease, serine, 16 (thymus)
Protease	BG533465	Secretory leukocyte protease inhibitor
Protease	M16117	Cathepsin G
Receptor activity	AF145439	CCR9
RNA binding	AF090093	TIA1 cytotoxic granule-associated RNA binding protein
TCR signaling	AF084941	Pre-T-cell receptor alpha chain 1 precursor
TCR signaling	BI907465	CD3D antigen, delta polypeptide (TiT3 complex)
TCR signaling	M12824	CD8 antigen, alpha polypeptide
Transcriptional regulation	T27711	B-cell CLL/lymphoma 6 (BCL 6A)
Transcriptional regulation	BC003070	GATA-binding protein 3
Unclassified	X14346	Eosinophil peroxidase

#### **Unknown**

Unknown	AA974308	Arginine-rich, mutated in early stage tumors
Unknown	AAH04632	Ubx4 protein
Unknown	AB020702	KIAA0895 protein
Unknown	AB049838	Clone QnpA-16545 (Macaca fascicularis brain)
Unknown	AF038199	Clone 23728
Unknown	AF168711	X 010 protein
Unknown	AF281064	CHMP1.5 protein
Unknown	AK024693	Esophageal cancer associated protein
Unknown	AK026058	Hypothetical protein FLJ22405
Unknown	AL137712	Hypothetical protein LOC90499
Unknown	AP001752	Chromosome 21q, section 96/105
Unknown	AP002850	Clone KB87D5 on chromosome 8q23
Unknown	BAB22510	Putative protein
Unknown	BAB23743	Putative protein
Unknown	BAB25981	Putative protein
Unknown	BC006282	Hypothetical protein MGC10540
Unknown	BE735468	Huntingtin interacting protein B
Unknown	BG611120	Hypothetical gene supported by BC055092

Unknown	L78833	BRCA1, Rho7, vat1 and ipf35 genes
Unknown	M58285	Hematopoietic protein 1
Unknown	NM_015686	TED protein
Unknown	X75191	Genomic YAC-end left arm of Chromosome 15
Unknown	-	Incyte EST

**Cell communication**

Cell adhesion	A1279608	Claudin 7
Cell adhesion	AK027648	Leucine proline-enriched proteoglycan (leprecan) *
Cell adhesion	BC009436	Collagen alpha 1(I) chain precursor
Cell adhesion	BC010160	Claudin 15
Cell adhesion	J03202	Laminin, gamma 1
Channel	BC001323	TRPC4-associated protein (subfamily C)
Channel	U77782	Glutamate receptor, ionotropic, N-methyl D-aspartate 2C
Cytoskeleton	AF000652	Syntenin
Cytoskeleton	BC000654	Keratin 8
Cytoskeleton	BC008807	Keratin 6A
Cytoskeleton	BG620669	Actin related protein 2/3 complex, subunit 3
Cytoskeleton	BG739723	Keratin 5
Cytoskeleton	M94362	Lamin B2
GTPase activity	BC000136	Similar to dynamin 1-like
Ligand	AU120808	Pleiotrophin
Ligand	BG740896	Hepatoma-derived growth factor
Ligand	U31176	erv1-like growth factor
Ligand	X05615	Thyroglobulin

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*Asterics indicate genes with an average signal intensity under 1.5 the average signal intensity of the background signal in non-MG adults*



**Table S3-D: List of genes deregulated in SN compared to ML patients.**

These genes were obtained comparing the expression level of the 851 genes deregulated in SN compared to ML patients by the Mann-Whitney test.

Name	GenBank	FC		Biological process	Classification	
		SN/ML	P-value		Molecular function	
<b>Up-regulated genes</b>						
U2-associated SR140 protein	BC006474	2.44	0.0079	Transcription		Transcriptional regulation
Interferon, alpha-inducible protein 27 (ISG12)	X67325	2.06	0.0079	Immune response-Defense response		IFN induced
TYRO protein tyrosine kinase binding protein (DAP12)	AF019562	2.03	0.0079	Immune response-Defense response		Kinase activity
SON DNA binding protein	AW328025	1.89	0.0079	Immune response-Defense response		Transcriptional regulation
Sine oculis homeobox homolog 1	X91868	1.86	0.0079	Transcription		Transcriptional regulation
Clone KB1184D12 on chromosome 8q23	AP003351	1.81	0.0079	Unknown		Unknown
Possible morphine-related gene	AB056657	1.67	0.0079	Unknown		Unknown
Ral GEF with PH domain and SH3 binding motif 2	AU119325	1.66	0.0079	Intracellular signaling		GTPase activity
Ectonucleoside triphosphate diphosphohydrolase 4	BG742963	1.66	0.0079	Cellular metabolism		Nucleotide metabolism
Thymopoietin	U09088	1.65	0.0079	Intracellular signaling		Cytoskeleton
SNC73 protein (Ig H alpha 1)	AF067420	1.57	0.0079	Immune response		Ig family
MHC, class II, DP alpha 1	M27487	1.51	0.0079	Immune response		MHC class II
Translocation associated fusion protein IRTA1/IGA1	BF663123	1.45	0.0079	Immune response		Receptor activity
Calponin 3, acidic	S80562	1.45	0.0079	Intracellular signaling		Cytoskeleton
Phosphate cytidyltransferase 1, choline, alpha	BG260122	1.41	0.0079	Cellular metabolism		Lipid metabolism
Metastasis associated 1 family, member 3	BC004227	1.26	0.0079	Transcription		Transcription factor activity
Similar to Neuralized (Neu)	CAC36018	1.23	0.0079	Unknown		Unknown
Nardilysin (N-arginine dibasic convertase)	BC008775	1.18	0.0079	Cellular metabolism		Protein processing
Annexin A5	J03745	1.67	0.0159	Intracellular signaling		Cytoskeleton
Cerebellar degeneration-related protein 1	M16965	1.49	0.0159	Intracellular signaling		Calcium binding protein
Mitochondrial ribosomal protein L3	BG185576	1.45	0.0159	Cellular metabolism		Protein processing
E74-like factor 1 (ets domain transcription factor)	M82882	1.41	0.0159	Transcription		Transcription factor activity
ATPase, Ca++ transporting, plasma membrane 4	M25874	1.34	0.0159	Cellular metabolism		Transporter activity
SMAD, mothers against DPP homolog 4	U44378	1.70	0.0317	Transcription		Transcription factor activity
CD84 antigen (leukocyte antigen)	NM_003874	1.56	0.0317	Immune response		Ig family
Heat shock 22kDa protein 8 (E2IG1)	AF191017	1.52	0.0317	Intracellular signaling		Kinase activity
Ig heavy constant mu	BM008087	1.52	0.0317	Immune response		Ig family
Chromosome 3p21.3, anti-oncogene region	AP000500	1.51	0.0317	Unknown		Unknown
CD9 antigen	X60111	1.48	0.0317	Cell communication		Cell adhesion
Fibulin 5	AL570066	1.43	0.0317	Cell communication		Cell adhesion
Natural killer cell group 7 sequence	S69115	1.38	0.0317	Immune response		Unclassified
Nuclear protein SDK3	Y10351	1.34	0.0317	Intracellular signaling		Kinase activity
H2A histone family, member Z	M37583	1.32	0.0317	Transcription		Unknown
Nucleoporin	X64228	1.29	0.0317	Intracellular signaling		Transporter activity
Thioredoxin-like 4A	BE275227	1.28	0.0317	Cellular metabolism		Transporter activity
Splicing factor, arginine/serine-rich 4	BF855449	1.27	0.0317	Cellular metabolism		Nucleotide metabolism
Splicing factor, arginine/serine-rich 10	BC000160	1.26	0.0317	Cellular metabolism		Nucleotide metabolism
Glutathione S-transferase omega 1	AF212303	1.25	0.0317	Cellular metabolism		Transporter activity
CSF-1 receptor (FMS)	U63963	1.23	0.0317	Immune response		Receptor activity
Death-inducing-protein	AW962464	1.18	0.0317	Unknown		Unknown
Myosin, heavy polypeptide 9, non-muscle	BF304650	1.17	0.0317	Intracellular signaling		Cytoskeleton
Methyltransferase like 3	BG287883	1.16	0.0317	Cellular metabolism		Transporter activity
<b>Down-regulated genes</b>						
Uncoupling protein 1 (mitochondrial, proton carrier)	U28480	-1.95	0.0079	Cellular metabolism		Transporter activity
Kinesin family member 21A	AB051495	-1.84	0.0079	Intracellular signaling		Cytoskeleton
Gamma-aminobutyric acid (GABA) A receptor, alpha 6	S81944	-1.73	0.0079	Cell communication		Channel
BCL2-like 1	Z23115	-1.71	0.0079	Intracellular signaling		Protein interactions
V-fos FBJ murine osteosarcoma viral oncogene homolog	AV747778	-1.69	0.0079	Transcription		Transcription factor activity
Zinc finger protein 334	AK001331	-1.52	0.0079	Transcription		Transcription factor activity
RNA polymerase I transcription factor RRN3	AA977114	-1.51	0.0079	Transcription		Transcription factor activity
Histidine ammonia-lyase	D16626	-1.50	0.0079	Cellular metabolism		Protein processing
Transcriptional enhancer factor (TEF1)	M63896	-1.44	0.0079	Transcription		Transcription factor activity
Chromosome 1q22-q23, CD1 region	AP002534	-1.43	0.0079	Unknown		Unknown
Ankyrin repeat domain 7	AW780029	-1.41	0.0079	Intracellular signaling		Protein interactions
NIMA-related kinase 7	AL080111	-1.40	0.0079	Intracellular signaling		Kinase activity
Zinc finger and BTB domain containing 26	AB046792	-1.39	0.0079	Transcription		Transcription factor activity
Unnamed protein	BAB30477	-1.33	0.0079	Unknown		Unknown
Nonmetastatic protein 23, homolog 5	AF067724	-1.29	0.0079	Cellular metabolism		Nucleotide metabolism
Outer dense fiber protein (ODFPG)	M93132	-1.29	0.0079	Cell Motility		Cytoskeleton
Zinc finger protein 35	X07289	-1.27	0.0079	Transcription		Transcription factor activity
Beta-1,4-galactosyltransferase 5	BF229298	-1.27	0.0079	Cellular metabolism		Protein processing
ATP-binding cassette, sub-family F, member 2	BF982597	-1.83	0.0159	Cellular metabolism		Transporter activity
Tetraspanin 6	AI721194	-1.69	0.0159	Cell communication		Receptor activity
Phosphatidic acid phosphatase type 2C	BC002806	-1.67	0.0159	Intracellular signaling		Phosphatase activity
Basic transcription element binding protein 1	D31716	-1.64	0.0159	Transcription		Transcription factor activity
Stomatin	BC010703	-1.46	0.0159	Intracellular signaling		Cytoskeleton
ST3 beta-galactoside alpha-2,3-sialyltransferase 1	L29555	-1.45	0.0159	Cellular metabolism		Protein processing
Arginine vasopressin receptor 1A	L25615	-1.37	0.0159	Cell communication		Receptor activity
Clone QnpA-16545	AB049838	-1.34	0.0159	Unknown		Unknown
Membrane-bound transcription factor peptidase, site 1	D42053	-1.34	0.0159	Cellular metabolism		Lipid metabolism
Hypothetical protein LOC388928	AI685683	-1.30	0.0159	Unknown		Unknown
LY6/PLAUR domain containing 1	AV727120	-1.59	0.0317	Intracellular signaling		Protein interactions
Hypothetical protein LOC284591	AI130021	-1.59	0.0317	Unknown		Unknown
Insulin-like growth factor I receptor gene	M69229	-1.54	0.0317	Cell communication		Receptor activity
F-box and WD-40 domain protein 5	AK026081	-1.53	0.0317	Cellular metabolism		Ubiquitin cycle
Tensin	AF225896	-1.50	0.0317	Intracellular signaling		Cytoskeleton
Ring finger protein 36	AL360161	-1.48	0.0317	Intracellular signaling		Protein interactions
RNA terminal phosphate cyclase domain 1	Y11651	-1.48	0.0317	Cellular metabolism		RNA binding
Olfactory receptor	AAC64584	-1.48	0.0317	Cell communication		Receptor activity
Autism susceptibility candidate 2	AK025298	-1.47	0.0317	Unknown		Unknown
Similar to hypothetical protein LOC231503	AK023055	-1.45	0.0317	Unknown		Unknown
Prostaglandin E synthase	AI421214	-1.45	0.0317	Immune response		Ligand
Chromosome 21 segment HS21C003	AL163203	-1.41	0.0317	Unknown		Unknown

Paternally expressed 3	AF166122	-1.35	0.0317	Transcription	Transcription factor activity
Glutamate receptor, ionotropic, kainate 5	S40369	-1.35	0.0317	Cell communication	Channel
Ubiquitin-conjugating enzyme E2W (putative)	AK001873	-1.31	0.0317	Cellular metabolism	Ubiquitin cycle
Ig kappa chain variable region (IGKV gene)	M63438	-1.30	0.0317	Immune response	Ig family
U1A snRNA	V00590	-1.29	0.0317	Cellular metabolism	RNA binding
Protein phosphatase 2, regulatory subunit B, $\epsilon$ isoform	L76703	-1.21	0.0317	Intracellular signaling	Phosphatase activity
Succinate dehydrogenase complex, subunit A	BC001380	-1.19	0.0317	Cellular metabolism	Transporter activity