

A.) Table of differentially expressed genes in HMGA1 transgenics comparted to controls with $p \leq 0.01$.

2 month up (7)

eomesodermin homolog (Xenopus laevis)
fibroblast growth factor 13
Way 5' of Cntn3, contactin 3 precursor
regulator of G-protein signaling 17
G protein-coupled receptor 15
natural killer cell group 7 sequence
RIKEN cDNA 9530034A14 gene

2 month down (7)

killer cell lectin-like receptor subfamily A, member 9
RNA binding motif protein 25
CD209b antigen
death associated protein-like 1
Fc receptor-like A
cDNA sequence BC032203
TruB pseudouridine (psi) synthase homolog 2 (E. coli)

12 month up (63)

aryl-hydrocarbon receptor
cyclin A2
cyclin B2
cyclin G1
glucosyltransferase
zinc finger protein 106
aurora kinase A
ceruloplasmin
centromere protein E
GrpE-like 1, mitochondrial
NudC domain containing 1
transmembrane protein 33
M-phase phosphoprotein 8
integrator complex subunit 7
diacylglycerol kinase, delta
kinesin family member 18A
CUG triplet repeat, RNA binding protein 1
nuclear receptor subfamily 3, group C, member 1
general transcription factor II 1
hemoglobin Z, beta-like embryonic chain
insulin-like growth factor binding protein 2
lectin, galactose binding, soluble 1
AF4/FMR2 family, member 1
myeloblastosis oncogene-like 2
cyclin-dependent kinase inhibitor 2A
chloride channel, nucleotide-sensitive, 1A
eukaryotic translation initiation factor 2-alpha kinase 2
twintin, actin-binding protein, homolog 1 (Drosophila)
transcription elongation factor A (SII) 1
ATPase, H⁺ transporting, lysosomal V0 subunit A2
thymidylate synthase
ubiquitin-conjugating enzyme E2A, RAD6 homolog (S. cerevisiae)
ring finger protein 13
eukaryotic translation initiation factor 4E member 2
torsin family 1, member B
regulator of G-protein signaling 3
KRR1, small subunit (SSU) processome component, homolog (yeast)
myotubularin related protein 1
NTF2-related export protein 1
golgi SNAP receptor complex member 2
ribulose-3-phosphate-5-epimerase

lectin, mannose-binding 2
DEAD (Asp-Glu-Ala-Asp) box polypeptide 17
polymerase (DNA-directed), delta 3, accessory subunit required for meiotic nuclear division 5 homolog A (S. cerevisiae)
RIKEN cDNA 1110018G07 gene
integrator complex subunit 2
WD repeat domain 68
establishment of cohesion 1 homolog 2 (S. cerevisiae)
spindle assembly 6 homolog (C. elegans)
RIKEN cDNA 4930547N16 gene
mitochondrial ribosomal protein L9
transducin (beta)-like 1X-linked receptor 1
proteasome (prosome, macropain) activator subunit 4
casein kinase 1, delta
extra spindle poles-like 1 (S. cerevisiae)
Rap guanine nucleotide exchange factor (GEF) 1
jumonji domain containing 6
SFT2 domain containing 2
acyl-Coenzyme A binding domain containing 3
3-phosphoglycerate dehydrogenase
mannoside acetylglucosaminyltransferase 4, isoenzyme A
asparagine-linked glycosylation 10 homolog B (yeast, alpha-1,2-
RIKEN cDNA 0610010B08 gene

12 month down (89)

poly (ADP-ribose) polymerase family, member 1
Rho GTPase activating protein 6
BCL2-like 2
oviductal glycoprotein 1
InaD-like (Drosophila)
clusterin
cannabinoid receptor 2 (macrophage)
dynein cytoplasmic 1 heavy chain 1
estrogen receptor 1 (alpha)
Ecotropic viral integration site 2a, mRNA (cDNA clone MGC:47928 IMAGE:1396641)
Fc receptor, IgE, low affinity II, alpha polypeptide
guanine nucleotide binding protein, alpha q polypeptide
G protein-coupled receptor kinase 5, mRNA (cDNA clone MGC:30358 IMAGE:5116510)
histocompatibility 2, O region beta locus
interleukin 3 receptor, alpha chain
kallikrein 1
LIM motif-containing protein kinase 2
myocyte enhancer factor 2C
nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100
CD244 natural killer cell receptor 2B4
Intron of Npr1, natriuretic peptide receptor 1 precursor
Intron or possible novel exon of Pax5, paired box gene 5
RAS, guanyl releasing protein 2
Intron of Ncoa3, nuclear receptor coactivator 3
nuclear antigen Sp100
titin
homer homolog 3 (Drosophila)
cytokine receptor-like factor 3
Mediterranean fever
cell adhesion molecule 1
zinc finger and BTB domain containing 20
vav 3 oncogene
nischarin

serine (or cysteine) peptidase inhibitor, clade B, member 1a
transcription factor 25 (basic helix-loop-helix)
Possible extended 3'UTR of Cdc37l1, cell division cycle 37 homolog (S. cerevisiae)-like 1
RIKEN cDNA 4932415G12 gene
RIKEN cDNA 1110029L17 gene
putative homeodomain transcription factor 2
hydroxyacylglutathione hydrolase-like
RIKEN cDNA 1500032P08 gene
ubiquitin protein ligase E3 component n-recogin 4
RAB43, member RAS oncogene family
solute carrier family 25, member 33
arrestin domain containing 2
sperm associated antigen 9
RIKEN cDNA 4933407H18 gene
Intron of Arhgap26, Rho GTPase activating protein 26
zinc finger and BTB domain containing 46
RIKEN cDNA 2510009E07 gene
metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)
MTERF domain containing 3
Intron of 1700081L11Rik, RIKEN clone
RIKEN cDNA 9530053H05 gene
helicase with zinc finger domain
opposite strand transcription unit to Stag3
solute carrier family 12 (potassium/chloride transporters), member 9
bromodomain and WD repeat domain containing 1
oxysterol binding protein-like 9
WD repeat domain 91
guanosine monophosphate reductase 2
O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polyp
Forkhead box P1 (Foxp1), mRNA
ankyrin repeat domain 39
RNA binding motif protein 39
B and T lymphocyte associated
zinc finger protein 658
zinc finger protein 273
Intron of Arhgef11, Rho guanine nucleotide exchange factor (GEF) 11
Intron of Nav1, neuron navigator 1
Intron of Ccm2, cerebral cavernous malformation 2 homolog
Intron of Aftph, aftiphilin
zinc finger, MYM-type 5
kelch-like 22 (Drosophila)
RAP1, GTP-GDP dissociation stimulator 1
TAR DNA binding protein
RIKEN cDNA B930041F14 gene
myeloid/lymphoid or mixed-lineage leukemia 3
ATPase, class V, type 10D
SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. elegans)
ubiquitin specific peptidase 3
Rho GTPase activating protein 22
B-cell scaffold protein with ankyrin repeats 1
ER lipid raft associated 2
RIKEN cDNA A230050P20 gene
hypothetical protein 9530028C05
hypothetical protein 3830612M24
aldo-keto reductase family 1, member C12
deleted in lymphocytic leukemia,

Gene names of all the genes selected by a parametric (Partek) approach with a fold-change (up or down) ≥ 1.3 and a $p \leq 0.01$.

B.) Network of differentially expressed genes selected by a parametric approach in *HMGA1* transgenic mice at 2 months. IPA was performed on microarray data comparing transgenic to control lymphoid cells from mice. Using 14 differentially expressed genes as the focus gene set, identified by a parametric approach including $p \leq 0.01$, the highest-scoring network was Gene Expression, Cell Death, and Hematological System Development and Function (score = 24). Colors, arrows, lines and abbreviations are described under Figure 1.



