

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Relatively upregulated in males > 3-fold		
eukaryotic translation initiation factor 2, subunit 3, structural gene Y-linked	Eif2s3y NM_012011	46.0
ubiquitously transcribed tetratricopeptide repeat gene, Y chromosome	Uty NM_009484	12.8
caspase recruitment domain family, member 14	Card14 NM_130886	9.8
heat shock transcription factor 4	Hsf4 NM_011939	8.8
polymerase (DNA directed), mu	Polm NM_017401	7.9
RIKEN cDNA 2700094K13 gene	2700094K13Rik NM_001033166	7.8
complement component C7	C7 XM_904680	7.3
aldehyde dehydrogenase 1 family, member L2	Aldh1l2 NM_153543	7.3
carboxypeptidase A4	Cpa4 NM_027926	7.0
desmoglein 1 alpha	Dsg1a NM_010079	6.3
a disintegrin and metallopeptidase domain 15 (metargidin)	Adam15 NM_001037722	6.1
cytochrome P450, family 11, subfamily b, polypeptide 2	Cyp11b2 NM_009991	5.9
neurobeachin-like 2	Nbeal2 BC157956	5.3
contactin associated protein-like 5C	Cntnap5c NM_001081653	5.1
Prkr interacting protein 1 (IL11 inducible)	Prkrip1 NM_025774	4.9
DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, Y-linked	Ddx3y NM_012008	4.8
calpain 8	Capn8 NM_130890	4.5
solute carrier family 34 (sodium phosphate), member 3	Slc34a3 NM_080854	4.5
sterol regulatory element binding factor 2	Srebf2 NM_033218	4.4
RIKEN cDNA 6330549D23 gene	6330549D23Rik NR_003619	4.3
visual system homeobox 1 homolog (zebrafish)	Vsx1 NM_054068	4.3
caspase recruitment domain family, member 11	Card11 NM_175362	4.2
cholecystokinin	Cck NM_031161	4.1
predicted gene 5478	Gm5478 NR_003960	4.1
ankyrin repeat and IBR domain containing 1	Ankib1 NM_001003909	4.0
leucine rich repeat neuronal 4	Lrrn4 NM_177303	3.9
cDNA sequence BC039632	BC039632 BC147509	3.9
nuclear RNA export factor 3	Nxf3 NM_001024141	3.9
secreted and transmembrane 1B	Sectm1b NM_026907	3.8
olfactory receptor 767	Olfr767 NM_146318	3.8
interferon beta 1, fibroblast	Ifnb1 NM_010510	3.8
thrombospondin 1	Thbs1 NM_011580	3.8
natural killer cell group 7 sequence	Nkg7 NM_024253	3.7
RIKEN cDNA 2310007L24 gene	2310007L24Rik BC116233	3.7
Rho GDP dissociation inhibitor (GDI) gamma	Arhgdig NM_008113	3.7
hypoxia inducible factor 3, alpha subunit	Hif3a ENSMUST00000108492	3.7
pancreatic lipase	Pnlip NM_026925	3.7
ring finger protein 169	Rnf169 AK173319	3.7
zinc finger protein 385A	Zfp385a NM_013866	3.7
pleckstrin homology domain containing, family A member 7	Plekha7 NM_172743	3.7
CD27 antigen	Cd27 NM_001033126	3.7
retinoic acid receptor, alpha	Rara NM_009024	3.6
collagen, type VI, alpha 2	Col6a2 NM_146007	3.6
murinoglobulin 1	Gm7298 XM_917532	3.6
matrix metallopeptidase 20 (enamelysin)	Mmp20 NM_013903	3.5
amyotrophic lateral sclerosis 2 (juvenile) homolog (human)	Als2 NM_028717	3.5
formin-like 1	Fmn1 NM_019679	3.5
ankyrin repeat domain 13b	Ankrd13b NM_172945	3.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
discs, large (Drosophila) homolog-associated protein 2	Dlgap2 NM_172910	3.5
premature ovarian failure 1B	Pof1b NM_181579	3.5
adrenergic receptor, alpha 2b	Adra2b NM_009633	3.5
zinc finger protein of the cerebellum 5	Zic5 NM_022987	3.5
sodium channel, voltage-gated, type IX, alpha	Scn9a NM_018852	3.4
myosin 1H	Myo1h BC144867	3.4
Unknown	Gm13767 XM_001002717	3.4
calcium channel, voltage-dependent, alpha 2/delta subunit 4	Cacna2d4 NM_001033382	3.4
integrin beta 7	Itgb7 NM_013566	3.4
fibroblast growth factor 8	Fgf8 NM_010205	3.4
C-type lectin domain family 4, member a3	Clec4a3 ENSMUST00000117173	3.4
potassium voltage-gated channel, Isk-related subfamily, gene 4	Kcne4 NM_021342	3.3
docking protein 1	Dok1 NM_010070	3.3
nuclear receptor subfamily 4, group A, member 3	Nr4a3 NM_015743	3.3
RIKEN cDNA 2310057J16 gene	2310057J16Rik NM_027171	3.3
arginyl aminopeptidase (aminopeptidase B)	Rnpep NM_145417	3.3
tensin 3	Tns3 NM_001083587	3.3
GON-4-like protein (GON-4 homolog)	Gon4l NM_027389	3.3
TRH-degrading enzyme	Trhde NM_146241	3.3
T-cell acute lymphocytic leukemia 2	Tal2 NM_009317	3.3
methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Mthfd1l NM_172308	3.2
ATP-binding cassette, sub-family A (ABC1), member 14	Abca14 NM_026458	3.2
epithelial splicing regulatory protein 2	Esrp2 NM_176838	3.2
ATP/GTP binding protein-like 2	Agbl2 NM_178755	3.2
otoancorin	Otoa NM_139310	3.2
RNA binding motif protein 19	Rbm19 NM_028762	3.2
myelin transcription factor 1	Myt1 NM_008665	3.2
Ras association (RalGDS/AF-6) domain family (N-terminal) member 7	Rassf7 NM_025886	3.2
zinc finger protein 37	Zfp37 NM_009554	3.2
WD repeat domain 17	Wdr17 NM_028220	3.2
ADAMTS-like 3	Adamtsl3 XM_984557	3.1
forkhead box N1	Foxn1 NM_008238	3.1
RIKEN cDNA 4930579G22 gene	4930579G22Rik NM_026916	3.1
Gem-interacting protein	Gmip NM_198101	3.1
cadherin-like 26	Cdh26 NM_198656	3.1
proteoglycan 4 (megakaryocyte stimulating factor, articular superficial zone protein)	Prg4 NM_021400	3.1
RIKEN cDNA 2610101N10 gene	2610101N10Rik NM_001114977	3.1
follistatin-like 1	Fstl1 NM_008047	3.1
solute carrier family 13 (sodium/sulfate symporters), member 1	Slc13a1 NM_019481	3.1
polymerase (RNA) II (DNA directed) polypeptide A	Polr2a NM_009089	3.1
FXYP domain-containing ion transport regulator 5	Fxyd5 NM_001111073	3.1
pregnancy-specific glycoprotein 29	Psg29 NM_054064	3.0
kelch-like 1 (Drosophila)	Klhl1 NM_053105	3.0
homeo box A10	Hoxa10 NM_008263	3.0
ankyrin repeat domain 36	Ankrd36 NM_023816	3.0
ATP-binding cassette, sub-family A (ABC1), member 3	Abca3 NM_013855	3.0
gamma-aminobutyric acid (GABA) A receptor, pi	Gabrp NM_146017	3.0
matrilin 4	Matn4 NM_013592	3.0
coiled-coil domain containing 33	Ccdc33 NM_029212	3.0
anoctamin 2	Ano2 NM_153589	3.0

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Relatively upregulated in males > 2.5-fold		
JAZF zinc finger 1	Jazf1 NM_173406	2.9
monocyte to macrophage differentiation-associated 2	Mmd2 NM_175217	2.9
Fc receptor-like B	Fcrlb NM_001029984	2.9
Hedgehog-interacting protein	Hhip NM_020259	2.9
solute carrier family 45, member 3	Slc45a3 ENSMUST00000065693	2.9
GIPC PDZ domain containing family, member 3	Gipc3 NM_148951	2.9
vesicle-associated membrane protein 5	Vamp5 NM_016872	2.9
zinc finger protein 169	Zfp169 NM_026450	2.9
cAMP responsive element binding protein 5	Creb5 ENSMUST00000114409	2.9
lipoma HMGIC fusion partner-like 2	Lhfp12 NM_172589	2.9
predicted gene 88	Gm88 BC147714	2.9
keratinocyte differentiation associated protein	Krtdap NM_001033131	2.9
olfactory receptor 922	Olfr922 ENSMUST00000051004	2.9
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	Adamts9 ENSMUST00000113438	2.9
RAB37, member of RAS oncogene family	Rab37 NM_021411	2.9
podoplanin	Pdpn NM_010329	2.9
alanine-glyoxylate aminotransferase 2-like 1	Agxt2l1 NM_027907	2.9
AT rich interactive domain 1B (SWI-like)	Arid1b NM_001085355	2.9
PH domain and leucine rich repeat protein phosphatase 2	Phlpp2 NM_001122594	2.9
CD248 antigen, endosialin	Cd248 NM_054042	2.9
TOX high mobility group box family member 2	Tox2 ENSMUST00000099110	2.8
ISL1 transcription factor, LIM/homeodomain	Isl1 NM_021459	2.8
core-binding factor, runt domain, alpha subunit 2, translocated to, 3 (human)	Cbfa2t3 NM_009824	2.8
olfactory receptor 1233	Olfr1233 NM_146972	2.8
retinoblastoma binding protein 8	Rbbp8 NM_001081223	2.8
Unknown	Lilrb4 NM_013532	2.8
bridging integrator 3	Bin3 NM_021328	2.8
stathmin 1	Stmn1 NM_019641	2.8
cadherin 8	Cdh8 NM_001039154	2.8
mcf.2 transforming sequence	Mcf2 ENSMUST00000063507	2.8
calcineurin binding protein 1	Cabin1 NM_172549	2.8
zinc finger protein 697	Zfp697 NM_172863	2.8
ankyrin repeat domain 34A	Ankrd34a NM_001024851	2.8
coiled-coil domain containing 6	Ccdc6 NM_001111121	2.8
aldehyde oxidase 3-like 1	Aox3l1 NM_001008419	2.8
membrane-spanning 4-domains, subfamily A, member 7	Ms4a7 NM_027836	2.8
ADP-ribosylation factor-like 8A	Arl8a NM_026823	2.7
GTPase, IMAP family member 5	Gimap5 NM_175035	2.7
sodium channel, voltage-gated, type V, alpha	Scn5a NM_021544	2.7
tripartite motif-containing 61	Trim61 NM_153110	2.7
dishevelled associated activator of morphogenesis 2	Daam2 NM_001008231	2.7
cell division cycle associated 7 like	Cdca7l NM_146040	2.7
7-dehydrocholesterol reductase	Dhcr7 NM_007856	2.7
rad and gem related GTP binding protein 2	Rem2 NM_080726	2.7
T-cell leukemia, homeobox 2	Tlx2 NM_009392	2.7
sparc/osteonectin, cwcv and kazal-like domains proteoglycan 1	Spock1 NM_009262	2.7
RGP1 retrograde golgi transport homolog (S. cerevisiae)	Rgp1 NM_172866	2.7
CCAAT/enhancer binding protein zeta	Cebpz NM_001024806	2.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
fibroblast growth factor 12	Fgf12 NM_183064	2.7
collagen, type XXII, alpha 1	Col22a1 XM_907370	2.7
versican	Vcan NM_001081249	2.7
caspase 8	Casp8 NM_009812	2.7
olfactory receptor 389	Olfr389 NM_147009	2.7
SH3-binding domain kinase family, member 2	Sbk2 NM_001146329	2.7
potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2	Kcnn2 NM_080465	2.7
Rho GTPase activating protein 26	Arhgap26 NM_175164	2.7
cDNA sequence BC017643	BC017643 BC017643	2.7
RIKEN cDNA 1110034A24 gene	1110034A24Rik NM_027269	2.7
proteasome (prosome, macropain) 26S subunit, ATPase 2	Psmc2 NM_011188	2.7
forkhead box P4	Foxp4 NM_001110824	2.7
discoidin domain receptor family, member 2	Ddr2 NM_022563	2.7
zinc finger protein 213	Zfp213 NM_001033496	2.6
sideroflexin 2	Sfxn2 NM_053196	2.6
predicted gene 101	Gm101 NM_001115074	2.6
glutamic acid decarboxylase 2	Gad2 NM_008078	2.6
FMS-like tyrosine kinase 3	Flt3 NM_010229	2.6
proteasome (prosome, macropain) assembly chaperone 3	Psmg3 NM_025604	2.6
patched domain containing 1	Ptchd1 NM_001093750	2.6
RIKEN cDNA C230052I12 gene	C230052I12Rik NM_178643	2.6
NLR family, pyrin domain containing 1B	Nlrp1b NM_001040696	2.6
Rho-related BTB domain containing 2	Rhobtb2 NM_153514	2.6
caspase 8 associated protein 2	Casp8ap2 NM_011997	2.6
expressed sequence AW549877	AW549877 BC016504	2.6
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1	Nfatc1 NM_198429	2.6
cytospin B	Cytsb NM_001029936	2.6
mitogen-activated protein kinase kinase kinase 14	Map3k14 NM_016896	2.6
collagen, type VI, alpha 1	Col6a1 NM_009933	2.6
spectrin beta 3	Spnb3 NM_021287	2.6
podocalyxin-like 2	Podxl2 NM_176973	2.6
tumor necrosis factor receptor superfamily, member 23	Tnfrsf23 NM_024290	2.6
actin filament associated protein 1-like 2	Afap1l2 NM_146102	2.6
histone cluster 1, H1e	Hist1h1e NM_015787	2.6
F-box protein 17	Fbxo17 NM_015796	2.6
nuclear factor, erythroid derived 2	Nfe2 NM_008685	2.6
RAB11 family interacting protein 1 (class I)	Rab11fip1 NM_001080813	2.6
lysyl oxidase-like 1	Loxl1 NM_010729	2.6
interleukin 27 receptor, alpha	Il27ra NM_016671	2.5
Notch gene homolog 2 (Drosophila)	Notch2 NM_010928	2.5
bicaudal C homolog 1 (Drosophila)	Bicc1 NM_031397	2.5
ankyrin repeat domain 52	Ankrd52 NM_172790	2.5
potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3	Kcnn3 NM_080466	2.5
procollagen C-endopeptidase enhancer protein	Pcolce NM_008788	2.5
cripto, FRL-1, cryptic family 1	Cfc1 NM_007685	2.5
zinc finger, DHHC domain containing 8	Zdhhc8 NM_172151	2.5
low density lipoprotein receptor	Ldlr NM_010700	2.5
deltex 2 homolog (Drosophila)	Dtx2 NM_023742	2.5
RIKEN cDNA 4933428G20 gene	4933428G20Rik NM_021493	2.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
RIKEN cDNA 4930500O05 gene	4930500O05Rik NM_001085508	2.5
CMRF-35-like molecule 3	RP23-331L12.8 NM_199201	2.5
transmembrane protein 120A	Tmem120a NM_172541	2.5
arylsulfatase B	Arsb NM_009712	2.5
porcupine homolog (Drosophila)	Porcn NM_016913	2.5
D site albumin promoter binding protein	Dbp NM_016974	2.5
amyloid beta (A4) precursor protein binding, family A, member 1	Apba1 NM_177034	2.5
C-type lectin domain family 16, member A	Clec16a NM_177562	2.5
uridine phosphorylase 1	Upp1 NM_009477	2.5
calmodulin regulated spectrin-associated protein 1	Camsap1 NM_001115076	2.5
leucine-rich repeats and IQ motif containing 4	Lrriq4 NM_026668	2.5
zinc finger, C3HC type 1	Zc3hc1 NM_172735	2.5
schlafen like 1	Slfnl1 NM_177570	2.5
Indian hedgehog	Ihh NM_010544	2.5
family with sequence similarity 83, member C	Fam83c BC113797	2.5
ring finger protein 150	Rnf150 NM_177378	2.5
upstream transcription factor 2	Usf2 NM_011680	2.5
PR domain containing 2, with ZNF domain	Prdm2 NM_001081355	2.5
phytanoyl-CoA hydroxylase interacting protein	Phyhip NM_145981	2.5
alkaline ceramidase 2	Acer2 BC059819	2.5
serine incorporator 4	RP23-433P19.11 NM_001025371	2.5
dynein, axonemal, intermediate chain 1	Dnaic1 NM_175138	2.5
Relatively upregulated in males >2-fold		
protein tyrosine phosphatase, receptor type, J	Ptprj NM_008982	2.4
myogenic factor 6	Myf6 NM_008657	2.4
zinc finger protein 398	Zfp398 NM_173034	2.4
actin-like 6B	Actl6b NM_031404	2.4
growth differentiation factor 10	Gdf10 NM_145741	2.4
sperm associated antigen 6	Spag6 NM_015773	2.4
RIKEN cDNA 4933408J17 gene	4933408J17Rik AK016739	2.4
solute carrier family 39 (metal ion transporter), member 11	Slc39a11 NM_027216	2.4
calpain 5	Capn5 NM_007602	2.4
protocadherin alpha 10	Pcdha10 NM_009961	2.4
calmodulin binding transcription activator 2	Camta2 NM_178116	2.4
hyperpolarization-activated, cyclic nucleotide-gated K+ 1	Hcn1 NM_010408	2.4
RIKEN cDNA 5133400G04 gene	5133400G04Rik NM_029485	2.4
NK1 transcription factor related, locus 2 (Drosophila)	Nkx1-2 NM_009123	2.4
caspase 4, apoptosis-related cysteine peptidase	Casp4 NM_007609	2.4
polyhomeotic-like 1 (Drosophila)	Phc1 NM_007905	2.4
armadillo repeat gene deleted in velo-cardio-facial syndrome	Arvcf NM_033474	2.4
sushi-repeat-containing protein; retinitis pigmentosa GTPase regulator	Srpx NM_016911	2.4
fibulin 7	Fbln7 NM_024237	2.4
fibrous sheath-interacting protein 2	Fsip2 ENSMUST00000099963	2.4
agmatine ureohydrolase (agmatinase)	Agmat NM_001081408	2.4
nanos homolog 2 (Drosophila)	Nanos2 NM_194064	2.4
La ribonucleoprotein domain family, member 1	Larp1 NM_028451	2.4
glyoxylate reductase/hydroxypyruvate reductase	Grhpr NM_080289	2.4
growth arrest-specific 2 like 1	Gas2l1 NM_030228	2.4
IQ motif containing GTPase activating protein 1	Iqgap1 NM_016721	2.4
transient receptor potential cation channel, subfamily V, member 3	Trpv3 NM_145099	2.4

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DAVID GeneName	Symbol Accession	Fold Change Male/Female
CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase	Ctdsp1 NM_153088	2.4
transmembrane and coiled-coil domains 6	Tmco6 NM_028036	2.4
olfactory receptor 1166	Olfr1166 NM_146650	2.4
proteasome (prosome, macropain) subunit, beta type 10	Psmb10 NM_013640	2.4
signal-regulatory protein alpha	Sirpa NM_007547	2.4
defensin beta 7	Defb7 NM_139220	2.4
serine dehydratase-like	Sdsl NM_133902	2.4
bromodomain containing 3	Brd3 NM_001113574	2.4
mitogen-activated protein kinase kinase kinase kinase 3	Map4k3 NM_001081357	2.4
neuron navigator 2	Nav2 NM_175272	2.3
nuclear transcription factor-Y alpha	Nfya NM_001110832	2.3
tetratricopeptide repeat domain 29	Ttc29 NM_183096	2.3
placental specific protein 1	Plac1 NM_019538	2.3
RAB11 family interacting protein 3 (class II)	Rab11fip3 NM_001162869	2.3
thrombospondin 4	Thbs4 NM_011582	2.3
solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7	Slc17a7 NM_182993	2.3
complement factor properdin	Cfp NM_008823	2.3
zinc finger and BTB domain containing 7a	Zbtb7a NM_010731	2.3
C-type lectin domain family 4, member d	Clec4d NM_010819	2.3
hexokinase 3	Hk3 NM_001033245	2.3
RIKEN cDNA 1700057K13 gene	1700057K13Rik BC099580	2.3
gap junction protein, alpha 8	Gja8 NM_008123	2.3
Rho GTPase activating protein 19	Arhgap19 NM_027667	2.3
guanine deaminase	Gda NM_010266	2.3
regulator of G-protein signaling 11	Rgs11 NM_001081069	2.3
inositol polyphosphate 5-phosphatase J	Inpp5j NM_172439	2.3
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1	Smardc1 NM_031842	2.3
serine (or cysteine) peptidase inhibitor, clade E, member 2	Serpine2 NM_009255	2.3
nuclear factor I/C	Nfic NM_008688	2.3
homeo box C12	Hoxc12 ENSMUST00000055562	2.3
phosphatidylserine synthase 2	Ptdss2 NM_013782	2.3
Unknown	Gm14251 XM_001481161	2.3
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 interacting protein	Nfatc2ip NM_010900	2.3
mitochondrial translational initiation factor 3	Mtif3 ENSMUST00000066675	2.3
translocase of inner mitochondrial membrane 50 homolog (yeast)	Timm50 NM_025616	2.3
eukaryotic translation initiation factor 4E binding protein 2	Eif4ebp2 NM_010124	2.3
interleukin 2 receptor, gamma chain	Il2rg NM_013563	2.3
collagen, type XVIII, alpha 1	Col18a1 NM_001109991	2.3
growth arrest and DNA-damage-inducible, gamma interacting protein 1	Gadd45gip1 NM_183358	2.3
myeloid/lymphoid or mixed-lineage leukemia 2	Mll2 ENSMUST00000023741	2.3
cell division cycle 2 homolog A (S. pombe)	Cdc2a NM_007659	2.3
AE binding protein 1	Aebp1 NM_009636	2.3
general transcription factor II I repeat domain-containing 1	Gtf2ird1 NM_020331	2.3
3-ketodihydrosphingosine reductase	Kdsr NM_027534	2.3
lin-7 homolog B (C. elegans)	Lin7b NM_011698	2.3
speedy homolog A (Xenopus laevis)	Spdya NM_029254	2.3
leucine rich repeat containing 16B	Lrrc16b NM_001024645	2.3
CCR4-NOT transcription complex, subunit 3	Cnot3 NM_146176	2.3

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DAVID GeneName	Symbol Accession	Fold Change Male/Female
zinc finger, HIT domain containing 2	Znhit2 NM_013859	2.3
homeo box C10	Hoxc10 NM_010462	2.3
zinc finger protein 282	Zfp282 NM_146175	2.3
glucocorticoid modulatory element binding protein 1	Gmeb1 NM_020273	2.3
BCL2/adenovirus E1B interacting protein 1	Bnip1 NM_172149	2.3
phosphatidylinositol transfer protein, membrane-associated 2	Pitpnm2 NM_011256	2.3
bromodomain containing 4	Brd4 NM_020508	2.3
MRV integration site 1	Mrvi1 NM_010826	2.3
tight junction associated protein 1	Tjap1 NM_028751	2.3
short stature homeobox 2	Shox2 NM_013665	2.3
myelin protein zero-like 2	Mpzl2 NM_007962	2.3
sterile alpha motif domain containing 4B	Samd4b NM_175021	2.3
NUF2, NDC80 kinetochore complex component, homolog (S. cerevisiae)	Nuf2 NM_023284	2.3
chloride channel calcium activated 1	Clca1 NM_009899	2.3
regulating synaptic membrane exocytosis 2	Rims2 NM_053271	2.3
complement component 1, q subcomponent, beta polypeptide	C1qb NM_009777	2.3
immunoglobulin superfamily, member 6	Igsf6 NM_030691	2.3
endoplasmic reticulum (ER) to nucleus signalling 1	Ern1 NM_023913	2.3
zinc finger, DHHC domain containing 9	Zdhhc9 NM_172465	2.3
PTK2 protein tyrosine kinase 2	Ptk2 NM_007982	2.3
olfactomedin-like 3	Olfml3 NM_133859	2.3
similar to tripartite motif protein TRIM30	A530023O14Rik NM_175648	2.3
CXXC finger 4	Cxxc4 NM_001004367	2.3
PTK2 protein tyrosine kinase 2 beta	Ptk2b NM_001162366	2.2
cDNA sequence BC034090	BC034090 AK129406	2.2
RIKEN cDNA 5033421C21 gene	5033421C21Rik ENSMUST00000100890	2.2
bestrophin 3	Best3 NM_001007583	2.2
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4	Smarca4 NM_011417	2.2
Rho GTPase activating protein 20	Arhgap20 NM_175535	2.2
uridine-cytidine kinase 2	Uck2 NM_030724	2.2
predicted gene 12824	Gm12824 NM_001085549	2.2
growth factor receptor bound protein 2-associated protein 3	Gab3 NM_181584	2.2
family with sequence similarity 120, member A	Fam120a NM_001033268	2.2
transmembrane protein 134	Tmem134 NM_001078649	2.2
KRIT1, ankyrin repeat containing	Krit1 NM_030675	2.2
deleted in bladder cancer 1 (human)	Dbc1 NM_019967	2.2
DAZ interacting protein 1-like	Dzip1l NM_028258	2.2
ubiquitin-conjugating enzyme E2O	Ube2o NM_173755	2.2
LIM homeobox protein 3	Lhx3 NM_001039653	2.2
complement component 4A (Rodgers blood group)	C4a ENSMUST00000015595	2.2
BTB (POZ) domain containing 16	Btbd16 NM_001081038	2.2
zinc finger CCCH-type, antiviral 1-like	Zc3hav1l NM_172467	2.2
RIKEN cDNA 8430427H17 gene	8430427H17Rik NM_001001986	2.2
MAD homolog 3 (Drosophila)	Smad3 NM_016769	2.2
polymerase (DNA directed), kappa	Polk NM_012048	2.2
tet oncogene family member 2	Tet2 NM_001040400	2.2
Ras association and DIL domains	Radil NM_178702	2.2
notum pectinacetylerase homolog (Drosophila)	Notum NM_175263	2.2
serine peptidase inhibitor, Kazal type 7 (putative)	Spink7 ENSMUST00000076194	2.2
dermatan sulfate epimerase	Dse NM_172508	2.2

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Harvey rat sarcoma virus oncogene 1	Hras1 NM_008284	2.2
Ras association (RalGDS/AF-6) domain family member 5	Rassf5 NM_018750	2.2
energy homeostasis associated	Enho NM_027147	2.2
arylsulfatase G	Arsg NM_028710	2.2
ankyrin repeat domain 27 (VPS9 domain)	Ankrd27 NM_145633	2.2
chemokine (C-X-C motif) ligand 14	Cxcl14 NM_019568	2.2
Unknown	LOC670326 XR_031858	2.2
RIKEN cDNA 2310021P13 gene	2310021P13Rik BC151046	2.2
plexin D1	Plxnd1 NM_026376	2.2
synaptoporin	Synpr NM_028052	2.2
activating transcription factor 6 beta	Atf6b NM_017406	2.2
HORMA domain containing 2	Hormad2 NM_029458	2.2
keratin 81	Krt81 ENSMUST00000061185	2.2
erythrocyte protein band 4.1-like 1	Epb4.1l1 NM_013510	2.2
G protein-coupled receptor 183	Gpr183 NM_183031	2.2
TAF4A RNA polymerase II, TATA box binding protein (TBP)-associated factor	Taf4a NM_001081092	2.2
DNA fragmentation factor, beta subunit	Dffb NM_007859	2.2
retinoic acid receptor responder (tazarotene induced) 2	Rarres2 NM_027852	2.2
chondroadherin	Chad NM_007689	2.2
desmocollin 3	Dsc3 NM_007882	2.2
interleukin 17 receptor B	Il17rb NM_019583	2.2
expressed sequence AI451617	AI451617 NM_199146	2.2
endomucin	Emcn NM_016885	2.2
transforming growth factor, beta 1	Tgfb1 NM_011577	2.2
microtubule-associated protein tau	Mapt NM_001038609	2.2
myosin, heavy polypeptide 11, smooth muscle	Myh11 NM_013607	2.2
organic solute transporter beta	Ostb NM_178933	2.2
alpha-kinase 1	Alpk1 ENSMUST00000029662	2.2
transmembrane protein 132E	Tmem132e NM_023438	2.2
glycoprotein Ib, beta polypeptide	Gp1bb NM_001001999	2.2
superoxide dismutase 3, extracellular	Sod3 NM_011435	2.2
pyrroline-5-carboxylate reductase 1	Pycr1 NM_144795	2.2
paired-Ig-like receptor A1	Pira2 NM_011089	2.2
WNK lysine deficient protein kinase 2	Wnk2 NM_029361	2.2
gem (nuclear organelle) associated protein 5	Gemin5 NM_172558	2.2
LAG1 homolog, ceramide synthase 6	Lass6 NM_172856	2.2
cDNA sequence BC018242	BC018242 NM_144935	2.1
transmembrane protein 98	Tmem98 NM_029537	2.1
tetratricopeptide repeat domain 28	Ttc28 BC046779	2.1
anoctamin 7	Ano7 NM_207031	2.1
interferon regulatory factor 2	Irf2 NM_008391	2.1
mitochondrial ribosomal protein S16	Mrps16 NM_025440	2.1
centrosomal protein 192	Cep192 BC064462	2.1
mitogen-activated protein kinase 8 interacting protein 1	Mapk8ip1 NM_011162	2.1
ATP-binding cassette, sub-family G (WHITE), member 4	Abcg4 AF378330	2.1
DEP domain containing 1a	Depdc1a NM_029523	2.1
PHD finger protein 8	Phf8 NM_177201	2.1
membrane-spanning 4-domains, subfamily A, member 6D	Ms4a6d NM_026835	2.1
ATPase, Na ⁺ /K ⁺ transporting, beta 2 polypeptide	Atp1b2 NM_013415	2.1
E2F transcription factor 3	E2f3 NM_010093	2.1

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
exportin 7	Xpo7 NM_023045	2.1
teashirt zinc finger family member 3	Tshz3 NM_172298	2.1
predicted gene 9907	Gm9907 NM_019680	2.1
predicted gene 11285; similar to 60S ribosomal protein L37a	Gm11285 XR_032696	2.1
Sp140 nuclear body protein	Sp140 NM_001013817	2.1
dynammin binding protein	Dnmbp NM_028029	2.1
LIM-domain containing, protein kinase	Limk1 NM_010717	2.1
nuclear receptor coactivator 7	Ncoa7 NM_172495	2.1
zyxin	Zyx NM_011777	2.1
beta-site APP cleaving enzyme 1	Bace1 NM_011792	2.1
immunoglobulin superfamily, DCC subclass, member 4	Igdcc4 NM_020043	2.1
RIKEN cDNA F730043M19 gene	F730043M19Rik ENSMUST00000063828	2.1
aldo-keto reductase family 7, member A5 (aflatoxin aldehyde reductase)	Akr7a5 NM_025337	2.1
hyaluronic acid binding protein 2	Habp2 NM_146101	2.1
tenascin XB	Tnxb NM_031176	2.1
Unknown	Gm608 NM_001029889	2.1
solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1	Slc35d1 ENSMUST00000036195	2.1
RIKEN cDNA E130112L23 gene	E130112L23Rik NM_198249	2.1
RAS p21 protein activator 4	Rasa4 NM_133914	2.1
tribbles homolog 1 (Drosophila)	Trib1 NM_144549	2.1
salvador homolog 1 (Drosophila)	Sav1 NM_022028	2.1
RIKEN cDNA 1700027A23 gene	1700027A23Rik NM_029604	2.1
transformation/transcription domain-associated protein	Trrap NM_001081362	2.1
Crm, cramped-like (Drosophila)	Cramp1l NM_020608	2.1
family with sequence similarity 154, member B	Fam154b NM_177894	2.1
glycerophosphodiester phosphodiesterase domain containing 5	Gdpd5 NM_201352	2.1
glutamate receptor, ionotropic, NMDA3B	Grin3b NM_130455	2.1
early growth response 1	Egr1 NM_007913	2.1
phosphodiesterase 4B, cAMP specific	Pde4b NM_019840	2.1
microtubule-associated protein 1 A	Mtap1a NM_032393	2.1
zinc finger protein 532	Zfp532 NM_207255	2.1
PCTAIRE-motif protein kinase 1	Pctk1 NM_011049	2.1
Unknown	LOC433762 AY140896	2.1
cytoglobin	Cygb NM_030206	2.1
lysine (K)-specific demethylase 3A	Kdm3a NM_173001	2.1
plexin A2	Plxna2 NM_008882	2.1
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2	Smarcd2 NM_001130187	2.1
caspase 12	Casp12 NM_009808	2.1
family with sequence similarity 38, member A	Fam38a ENSMUST00000064316	2.1
ankyrin repeat domain 24	Ankrd24 NM_027480	2.1
uveal autoantigen with coiled-coil domains and ankyrin repeats	Uaca NM_028283	2.1
HLA-B associated transcript 2-like	Bat2l NM_001159634	2.1
protein kinase C and casein kinase substrate in neurons 1	Pacsin1 NM_011861	2.1
solute carrier family 38, member 8	Slc38a8 NM_001009950	2.1
RanBP-type and C3HC4-type zinc finger containing 1	Rbck1 NM_001083921	2.1
beta-carotene 15,15'-monooxygenase	Bcmo1 NM_021486	2.1
kelch-like 3 (Drosophila)	Klhl3 ENSMUST00000091583	2.1
sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	Sema6d NM_172537	2.1

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
sodium channel, voltage-gated, type IV, alpha	Scn4a NM_133199	2.1
RIKEN cDNA 4732429D16 gene	Cd300ld NM_145437	2.1
syntaxin binding protein 2	Stxbp2 NM_011503	2.1
UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 5	B4galt5 NM_019835	2.1
calcium/calmodulin-dependent serine protein kinase (MAGUK family)	Cask NM_009806	2.1
slit homolog 3 (Drosophila)	Slit3 NM_011412	2.1
mitochondrial ribosomal protein L54	Mrpl54 NM_025317	2.1
SPARC related modular calcium binding 1	Smoc1 NM_001146217	2.1
G-protein coupled receptor 3	Gpr3 NM_008154	2.1
sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (semaphorin) 7A	Sema7a NM_011352	2.1
GTPase, IMAP family member 8	Gimap8 NM_212486	2.1
metallothionein 4	Mt4 NM_008631	2.1
olfactory receptor 70	Olfr70 NM_019485	2.1
reversion-inducing-cysteine-rich protein with kazal motifs	Reck NM_016678	2.1
RIKEN cDNA 1700019A02 gene	1700019A02Rik ENSMUST00000072235	2.1
PRP40 pre-mRNA processing factor 40 homolog B (yeast)	Prpf40b NM_018786	2.1
guanine nucleotide binding protein, alpha 12	Gna12 NM_010302	2.1
MAP/microtubule affinity-regulating kinase 2	Mark2 NM_007928	2.1
mitogen-activated protein kinase kinase 2	Map2k2 NM_023138	2.1
TAO kinase 1	Taok1 NM_144825	2.1
diaphanous homolog 1 (Drosophila)	Diap1 NM_007858	2.1
keratin 13	Krt13 NM_010662	2.1
casein alpha s2-like B	Csn1s2b NM_009973	2.1
nuclear assembly factor 1 homolog (S. cerevisiae)	Naf1 ENSMUST00000118009	2.1
cartilage intermediate layer protein 2	Cilp2 NM_026818	2.1
golgi-specific brefeldin A-resistance factor 1	Gbf1 NM_178930	2.1
chemokine (C-C motif) ligand 11	Ccl11 NM_011330	2.1
frizzled homolog 2 (Drosophila)	Fzd2 NM_020510	2.1
G protein-coupled receptor 146	Gpr146 NM_030258	2.1
protein phosphatase 2A, regulatory subunit B (PR 53)	Ppp2r4 NM_138748	2.1
DNA methyltransferase 3B	Dnmt3b NM_001003961	2.1
basic helix-loop-helix family, member e40	Bhlhe40 NM_011498	2.1
zinc finger, DHHC domain containing 3	Zdhhc3 NM_026917	2.1
phospholipase C-like 1	Plcl1 NM_001114663	2.1
WD repeat domain 81	Wdr81 NM_138950	2.1
potassium voltage-gated channel, subfamily G, member 3	Kcng3 NM_153512	2.1
DENN/MADD domain containing 4B	Dennd4b NM_201407	2.1
transforming growth factor, beta receptor associated protein 1	Tgfbrap1 NM_001013025	2.1
matrix metalloproteinase 9	Mmp9 NM_013599	2.1
arginine glutamic acid dipeptide (RE) repeats	Rere NM_001085492	2.1
par-3 partitioning defective 3 homolog B (C. elegans)	Pard3b NM_001081050	2.1
SH2B adaptor protein 1	Sh2b1 NM_001081459	2.1
GTP binding protein 6 (putative)	Gtpbp6 NM_145147	2.1
ELK1, member of ETS oncogene family	Elk1 NM_007922	2.1
ring finger protein 213	Rnf213 AK173199	2.1
runt related transcription factor 1	Runx1 NM_001111021	2.1
anoctamin 8	Ano8 BC027790	2.1
fascin homolog 2, actin-bundling protein, retinal (Strongylocentrotus purpuratus)	Fscn2 NM_172802	2.0
tight junction protein 1	Tjp1 NM_009386	2.0

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
RIKEN cDNA 0610037P05 gene	0610037P05Rik BC011300	2.0
tyrosine kinase with immunoglobulin-like and EGF-like domains 1	Tie1 NM_011587	2.0
mediator complex subunit 29	Med29 NM_026042	2.0
family with sequence similarity 171, member B	Fam171b NM_175514	2.0
breakpoint cluster region	Bcr NM_001081412	2.0
S100 calcium binding protein A6 (calcyclin)	S100a6 NM_011313	2.0
poly (ADP-ribose) polymerase family, member 4	Parp4 NM_001145978	2.0
monooxygenase, DBH-like 1	Moxd1 NM_021509	2.0
TSC22 domain family, member 4	Tsc22d4 NM_023910	2.0
myosin, heavy polypeptide 14	Myh14 NM_028021	2.0
N-acetylneuraminate pyruvate lyase 2 (putative)	Dhdpsl NM_026152	2.0
collagen, type IV, alpha 2	Col4a2 NM_009932	2.0
KDM1 lysine (K)-specific demethylase 6B	Kdm6b NM_001017426	2.0
angiotensin I converting enzyme (peptidyl-dipeptidase A) 1	Ace NM_207624	2.0
v-rel reticuloendotheliosis viral oncogene homolog A (avian)	Rela NM_009045	2.0
glypican 5	Gpc5 NM_175500	2.0
forkhead box K1	Foxk1 NM_199068	2.0
chymotrypsin-like elastase family, member 1	Cela1 NM_033612	2.0
RIKEN cDNA 2310044G17 gene	2310044G17Rik BC026384	2.0
homeodomain interacting protein kinase 2	Hipk2 NM_001136065	2.0
GRAM domain containing 1B	Gramd1b NM_172768	2.0
PHD finger protein 2	Phf2 NM_011078	2.0
vasodilator-stimulated phosphoprotein	Vasp NM_009499	2.0
phosphatidylinositol-specific phospholipase C, X domain containing 1	Plcx1 NM_207279	2.0
RIKEN cDNA 2310068J16 gene	2310068J16Rik AK010113	2.0
proline-rich Gla (G-carboxyglutamic acid) polypeptide 2	Prrg2 NM_022999	2.0
parvin, beta	Parvb NM_133167	2.0
sorting nexin 16	Snx16 NM_029068	2.0
leucine-rich repeats and immunoglobulin-like domains 1	Lrig1 NM_008377	2.0
mitochondrial ribosomal protein L20	Mrpl20 NM_025570	2.0
SET domain containing 1A	Setd1a NM_178029	2.0
proteasome (prosome, macropain) 26S subunit, ATPase 3, interacting protein	Psmc3ip NM_008949	2.0
metastasis associated 1	Mta1 NM_054081	2.0
nuclear receptor co-repressor 2	Ncor2 NM_011424	2.0
SAPS domain family, member 2	Saps2 NM_026813	2.0
colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte-macrophage)	Csf2rb2 NM_007781	2.0
neuroigin 2	Nlgn2 NM_198862	2.0
proline rich 7 (synaptic)	Prr7 NM_001030296	2.0
expressed sequence R74862	R74862 BC005669	2.0
family with sequence similarity 125, member B	Fam125b BC049129	2.0
predicted gene 10530	Gm10530 ENSMUST00000097514	2.0
cytochrome b-245, beta polypeptide	Cybb NM_007807	2.0
eukaryotic translation initiation factor 2C, 2	Eif2c2 NM_153178	2.0
RIKEN cDNA 1810063B07 gene	1810063B07Rik NM_026209	2.0
zinc finger CCCH-type containing 18	Zc3h18 NM_001029993	2.0
ribosomal protein S14	Rps14 NM_020600	2.0
golgi associated, gamma adaptin ear containing, ARF binding protein 1	Gga1 NM_145929	2.0
centrosomal protein 170	Cep170 NM_001099637	2.0
RIKEN cDNA 2310014H01 gene	2310014H01Rik NM_175242	2.0

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
H19 fetal liver mRNA	H19 NR_001592	2.0
keratin 83	Krt83 NM_001003668	2.0
zinc finger protein 42	Zfp42 NM_009556	2.0
fructosamine 3 kinase	Fn3k NM_001038699	2.0
T-cell immunoglobulin and mucin domain containing 4	Timd4 NM_178759	2.0
Ras interacting protein 1	Rasip1 NM_028544	2.0
family with sequence similarity 49, member B	Fam49b NM_144846	2.0
endothelial cell-specific chemotaxis regulator	Ecscr NM_001033141	2.0
G protein-coupled receptor 177	Gpr177 NM_026582	2.0
small optic lobes homolog (Drosophila)	Solh BC058094	2.0
transducin (beta)-like 1 X-linked	Tbl1x NM_020601	2.0
DnaJ (Hsp40) homolog, subfamily B, member 12	Dnajb12 NM_019965	2.0
RIKEN cDNA 6030419C18 gene	6030419C18Rik BC096614	2.0
zinc finger, CCHC domain containing 14	Zcchc14 NM_080855	2.0
guanine nucleotide binding protein (G protein), alpha inhibiting 1	Gnai1 NM_010305	2.0
polymerase (DNA-directed), delta 3, accessory subunit	Pold3 NM_133692	2.0
a disintegrin and metallopeptidase domain 11	Adam11 NM_001110778	2.0
sterol regulatory element binding transcription factor 1	Srebf1 NM_011480	2.0
zinc finger, SWIM domain containing 6	Zswim6 NM_145456	2.0
microtubule-associated protein 6	Mtap6 NM_010837	2.0
sprouty homolog 4 (Drosophila)	Spry4 NM_011898	2.0
zinc finger and BTB domain containing 3	Zbtb3 NM_001098237	2.0
syntaxin 6	Stx6 NM_021433	2.0
protein kinase domain containing, cytoplasmic	Pkdcc NM_134117	2.0
RIKEN cDNA 1810012P15 gene	1810012P15Rik NM_001076681	2.0
NF-kappaB repressing factor	Nkrf NM_029891	2.0
integrator complex subunit 1	Ints1 NM_026748	2.0
RIKEN cDNA 2310067B10 gene	2310067B10Rik NM_028014	2.0
prospero-related homeobox 1	Prox1 NM_008937	2.0
tripartite motif-containing 3	Trim3 NM_018880	2.0
euchromatic histone methyltransferase 1	Ehmt1 NM_001012518	2.0
regulatory associated protein of MTOR, complex 1	Rptor NM_028898	2.0
valyl-tRNA synthetase 2, mitochondrial (putative)	Vars2 NM_175137	2.0
adaptor protein complex AP-2, alpha 1 subunit	Ap2a1 NM_007458	2.0
multiple EGF-like-domains 8	Megf8 NM_001160400	2.0
interferon activated gene 205	Ifi205 NM_172648	2.0
mitochondrial ribosomal protein L17	Mrpl17 NM_025301	2.0
RIKEN cDNA 9430020K01 gene	9430020K01Rik NM_001081963	2.0
GATS protein-like 2	Gatsl2 NM_030719	2.0
glycerol phosphate dehydrogenase 2, mitochondrial	Gpd2 NM_001145820	2.0
trafficking protein, kinesin binding 1	Trak1 NM_175114	2.0
development and differentiation enhancing factor 2	Ddef2 NM_001098168	2.0
major facilitator superfamily domain containing 4	Mfsd4 NM_172510	2.0
zinc finger, CCHC domain containing 2	Zcchc2 NM_001122676	2.0
anterior pharynx defective 1a homolog (C. elegans)	Aph1a NM_146104	2.0
serologically defined colon cancer antigen 3	Sdccag3 NM_026563	2.0
GRAM domain containing 4	Gramd4 NM_172611	2.0
formin-like 3	Fmn13 NM_011711	2.0
splicing factor, arginine/serine-rich 4 (SRp75)	Sfrs4 NM_020587	2.0
macrophage galactose N-acetyl-galactosamine specific lectin 2	Mgl2 NM_145137	2.0

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Relatively upregulated in males >1.5-fold		
coronin, actin binding protein, 2B	Coro2b NM_175484	1.9
TNFAIP3 interacting protein 1	Tnip1 NM_021327	1.9
HD domain containing 2	Hddc2 NM_027168	1.9
Casitas B-lineage lymphoma-like 1	Cbl1 NM_134048	1.9
RIKEN cDNA 2010002N04 gene	2010002N04Rik NM_134133	1.9
zinc finger protein 598	Zfp598 NM_183149	1.9
sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	Sema3c NM_013657	1.9
spondin 2, extracellular matrix protein	Spon2 NM_133903	1.9
glutaredoxin 5 homolog (S. cerevisiae)	Glrx5 NM_028419	1.9
procollagen lysine, 2-oxoglutarate 5-dioxygenase 2	Plod2 NM_001142916	1.9
adenosine deaminase, RNA-specific	Adar NM_019655	1.9
nuclear factor of activated T-cells 5	Nfat5 NM_133957	1.9
late cornified envelope 3B	Lce3b NM_025501	1.9
cDNA sequence BC057079	BC057079 NM_001081184	1.9
furin (paired basic amino acid cleaving enzyme)	Furin NM_011046	1.9
G protein-coupled receptor kinase-interactor 1	Git1 NM_001004144	1.9
sphingosine-1-phosphate receptor 2	S1pr2 NM_010333	1.9
ring finger protein 214	Rnf214 NM_178709	1.9
inscuteable homolog (Drosophila)	Insc NM_173767	1.9
checkpoint with forkhead and ring finger domains	Chfr NM_172717	1.9
arginyl aminopeptidase (aminopeptidase B)-like 1	Rnpepl1 NM_181405	1.9
bromodomain adjacent to zinc finger domain, 2A	Baz2a NM_054078	1.9
fibronectin 1	Fn1 NM_010233	1.9
protocadherin gamma subfamily A, 1	Pcdhga1 NM_033584	1.9
MON2 homolog (yeast)	Mon2 NM_153395	1.9
WD repeat domain 38	Wdr38 NM_029687	1.9
arylsulfatase A	Arsa NM_009713	1.9
nidogen 2	Nid2 NM_008695	1.9
RIKEN cDNA 4732471D19 gene	4732471D19Rik NM_176987	1.9
asparagine-linked glycosylation 8 homolog (yeast, alpha-1,3-glucosyltransferase)	Alg8 NM_199035	1.9
eukaryotic translation initiation factor 2C, 4	Eif2c4 NM_153177	1.9
thyroid hormone receptor alpha	Thra NM_178060	1.9
cartilage intermediate layer protein, nucleotide pyrophosphohydrolase	Cilp NM_173385	1.9
malignant fibrous histiocytoma amplified sequence 1	Mfhas1 NM_001081279	1.9
upstream transcription factor 1	Usf1 NM_009480	1.9
CDC42 GTPase-activating protein	Cdgap NM_020260	1.9
breast cancer anti-estrogen resistance 1	Bcar1 NM_009954	1.9
actin, alpha 1, skeletal muscle	Acta1 NM_009606	1.9
syntaxin 11	Stx11 ENSMUST00000042861	1.9
chloride intracellular channel 1	Clic1 NM_033444	1.9
solute carrier family 16 (monocarboxylic acid transporters), member 2	Slc16a2 NM_009197	1.9
transmembrane and coiled-coil domains 7	Tmco7 NM_173037	1.9
cytochrome P450, family 3, subfamily a, polypeptide 44	Cyp3a44 NM_177380	1.9
adaptor protein complex AP-1, beta 1 subunit	Ap1b1 NM_007454	1.9
mediator of DNA damage checkpoint 1	Mdc1 NM_001010833	1.9
nuclear receptor subfamily 3, group C, member 2	Nr3c2 NM_001083906	1.9
tubulin polymerization-promoting protein family member 2	Tppp2 NM_001128634	1.9
small EDRK-rich factor 1	Serf1 NM_011353	1.9

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Jun dimerization protein 2	Jdp2 AB034697	1.9
transformation related protein 53	Trp53 NM_011640	1.9
zinc finger protein 3	Zfp3 NM_177565	1.9
NIMA (never in mitosis gene a)-related expressed kinase 4	Nek4 NM_011849	1.9
coiled-coil domain containing 93	Ccdc93 NM_001025156	1.9
low-density lipoprotein receptor-related protein 10	Lrp10 NM_022993	1.9
protein O-fucosyltransferase 2	Pofut2 NM_030262	1.9
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1	Smarcc1 NM_009211	1.9
cell division cycle 45 homolog (S. cerevisiae)-like	Cdc45l NM_009862	1.9
CREB regulated transcription coactivator 3	Crtc3 NM_173863	1.9
mediator of RNA polymerase II transcription, subunit 25 homolog (yeast)	Med25 NM_029365	1.9
exostoses (multiple)-like 3	Extl3 NM_018788	1.9
family with sequence similarity 125, member A	Fam125a NM_028617	1.9
Werner syndrome homolog (human)	Wrn NM_011721	1.9
fermitin family homolog 3 (Drosophila)	Fermt3 NM_153795	1.9
transient receptor potential cation channel, subfamily V, member 4	Trpv4 NM_022017	1.9
BMP-binding endothelial regulator	Bmper NM_028472	1.9
disabled homolog 2 (Drosophila) interacting protein	Dab2ip NM_001114125	1.9
diacylglycerol kinase zeta	Dgkz ENSMUST00000111304	1.9
B-cell CLL/lymphoma 9	Bcl9 NM_029933	1.9
androgen binding protein gamma	Abpg NM_178308	1.9
netrin G2	Ntng2 NM_133500	1.9
WW domain binding protein 7	Wbp7 NM_029274	1.9
cleavage and polyadenylation specific factor 7	Cpsf7 NM_172302	1.9
serine/threonine kinase 32B	Stk32b NM_022416	1.9
protein phosphatase 1, regulatory (inhibitor) subunit 16A	Ppp1r16a NM_033371	1.9
CTF18, chromosome transmission fidelity factor 18 homolog (S. cerevisiae)	Chtf18 NM_145409	1.9
solute carrier family 39 (zinc transporter), member 14	Slc39a14 NM_001135151	1.9
intercellular adhesion molecule 4, Landsteiner-Wiener blood group	Icam4 NM_023892	1.9
SH3/ankyrin domain gene 3	Shank3 NM_021423	1.9
RAB guanine nucleotide exchange factor (GEF) 1	Rabgef1 NM_019983	1.9
B lymphoid kinase	Blk NM_007549	1.9
zinc finger, MIZ-type containing 1	Zmiz1 NM_183208	1.9
integrin alpha 9	Itga9 NM_133721	1.9
mixed lineage kinase domain-like	MLkl NM_029005	1.9
synaptosomal-associated protein 29	Snap29 NM_023348	1.9
zinc and ring finger 1	Znrf1 NM_133206	1.9
CD68 antigen	Cd68 NM_009853	1.9
predicted gene 5577	Gm5577 AK020089	1.9
plexin domain containing 1	Plxdc1 NM_028199	1.9
Ttk protein kinase	Ttk NM_009445	1.9
jumonji domain containing 1C	Jmjd1c NM_207221	1.9
methylthioribose-1-phosphate isomerase homolog (S. cerevisiae)	Mri1 NM_026423	1.9
1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase, beta)	Agpat2 NM_026212	1.9
family with sequence similarity 53, member A	Fam53a NM_178390	1.9
calcium/calmodulin-dependent protein kinase II alpha	Camk2a NM_009792	1.9
ADP-ribosylation factor 5	Arf5 NM_007480	1.9
dimethylarginine dimethylaminohydrolase 1	Ddah1 NM_026993	1.9

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
zinc fingers and homeoboxes 3	Zhx3 NM_177263	1.9
ankyrin repeat domain 39	Ankrd39 NM_026241	1.9
tachykinin receptor 1	Tacr1 NM_009313	1.9
RAS protein-specific guanine nucleotide-releasing factor 1	Rasgrf1 NM_011245	1.9
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	Ddx54 NM_028041	1.9
acyl-CoA synthetase long-chain family member 5	Acsf5 NM_027976	1.9
regulator of G-protein signaling 20	Rgs20 NM_021374	1.9
BTB (POZ) domain containing 6	Btbd6 NM_201646	1.9
WAS/WASL interacting protein family, member 2	Wipf2 NM_197940	1.9
cadherin 1	Cdh1 NM_009864	1.9
multimerin 2	Mmrn2 NM_153127	1.9
Unknown	Gp49a NM_008147	1.9
ATPase type 13A3	Atp13a3 NM_001128096	1.9
myosin VB	Myo5b NM_201600	1.9
myocardin	Myocd NM_145136	1.9
zinc finger, NFX1-type containing 1	Znfx1 NM_001033196	1.9
Unknown	Rpl37a NM_009084	1.9
Unknown	LOC100047867 XM_001479852	1.9
chemokine (C-C motif) ligand 9	Ccl9 NM_011338	1.9
mesenchyme homeobox 1	Meox1 NM_010791	1.9
transmembrane protein 63a	Tmem63a NM_144794	1.9
DEAH (Asp-Glu-Ala-His) box polypeptide 16	Dhx16 NM_026987	1.9
zinc finger protein, multitype 1	Zfp161 NM_009569	1.9
RIKEN cDNA 2310014D11 gene	2310014D11Rik AK009333	1.9
claudin 15	Cldn15 NM_021719	1.9
leprecan 1	Lepre1 NM_019782	1.9
similar to 60S ribosomal protein L37a	LOC640991 XM_918258	1.9
Unknown	BC059842 FJ998170	1.9
LIM and SH3 protein 1	Lasp1 NM_010688	1.9
Hus1 homolog b (S. pombe)	Hus1b ENSMUST00000102943	1.9
Unknown	Camk2g NM_178597	1.9
RIKEN cDNA 9430038I01 gene	9430038I01Rik NM_029886	1.9
unc-5 homolog C (C. elegans)-like	Unc5cl NM_152823	1.9
potassium voltage-gated channel, shaker-related subfamily, beta member 2	Kcnab2 NM_010598	1.9
RIKEN cDNA E030049G20 gene	E030049G20Rik NM_001081756	1.9
tankyrase 1 binding protein 1	Tnks1bp1 NM_001081260	1.9
tousled-like kinase 1	Tlk1 NM_172664	1.9
calpain 3	Capn3 NM_007601	1.9
nuclear receptor interacting protein 2	Nrip2 NM_001162858	1.9
deleted in liver cancer 1	Dlc1 NM_015802	1.9
DNA-damage-inducible transcript 4-like	Ddit4l NM_030143	1.9
septin 9	40430 NM_001113486	1.9
RIKEN cDNA 9430025M13 gene	9430025M13Rik AK034698	1.9
mediator complex subunit 13-like	Med13l NM_172424	1.9
sphingomyelin synthase 2	Sgms2 NM_028943	1.9
aminolevulinate, delta-, dehydratase	Alad NM_008525	1.9
intersectin 1 (SH3 domain protein 1A)	Itsn1 NM_010587	1.9
family with sequence similarity 78, member B	Fam78b NM_001160262	1.9
zinc finger protein 827	Zfp827 NM_178267	1.9
translocase of inner mitochondrial membrane 22 homolog (yeast)	Timm22 NM_019818	1.9

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
c-src tyrosine kinase	Csk NM_007783	1.9
thrombospondin, type I, domain containing 7A	Thsd7a ENSMUST00000122369	1.9
PHD finger protein 21B	Phf21b NM_001081166	1.9
COMM domain containing 7	Commd7 NM_133850	1.8
chemokine (C-C motif) ligand 21A	Ccl21a NM_011124	1.8
BAT2 domain containing 1	Bat2d NM_001081290	1.8
synaptopodin 2-like	Synpo2l NM_175132	1.8
scribbled homolog (Drosophila)	Scrib NM_134089	1.8
AT rich interactive domain 5B (MRF1-like)	Arid5b NM_023598	1.8
guanine nucleotide binding protein (G protein), beta 2	Gnb2 NM_010312	1.8
expressed sequence AU040320	AU040320 NM_001035526	1.8
KDM3B lysine (K)-specific demethylase 3B	Kdm3b NM_001081256	1.8
syntrophin, basic 1	Sntb1 BC003748	1.8
transmembrane serine protease 6	Tmprss6 NM_027902	1.8
predicted gene 2292	Gm2292 XM_001478816	1.8
Rho guanine nucleotide exchange factor (GEF) 5	Arhgef5 NM_133674	1.8
HLA-B-associated transcript 3	Bat3 NM_057171	1.8
plexin C1	Plxnc1 NM_018797	1.8
macrophage galactose N-acetyl-galactosamine specific lectin 1	Mgl1 NM_010796	1.8
interleukin 8 receptor, beta	Il8rb NM_009909	1.8
Unknown	9130213B05Rik EF564364	1.8
inositol polyphosphate-5-phosphatase E	Inpp5e NM_033134	1.8
phosphodiesterase 4A, cAMP specific	Pde4a NM_183408	1.8
zinc finger protein 362	Zfp362 NM_001081098	1.8
YTH domain containing 2	Ythdc2 NM_001163013	1.8
glycogen synthase kinase 3 beta	Gsk3b NM_019827	1.8
melanoma antigen, family D, 1	Maged1 NM_019791	1.8
ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R)	Elavl1 NM_010485	1.8
cytohesin 4	Cyth4 NM_028195	1.8
dual serine/threonine and tyrosine protein kinase	Dstk NM_172516	1.8
guanylate cyclase activator 1a (retina)	Guca1a NM_008189	1.8
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 13	Adamts13 NM_001001322	1.8
midnolin	Midn NM_021565	1.8
neurotrophin receptor associated death domain	Nradd NM_026012	1.8
RIKEN cDNA 2410025L10 gene	2410025L10Rik NM_001142642	1.8
DiGeorge syndrome critical region gene 6	Dgcr6 NM_010047	1.8
abhydrolase domain containing 8	Abhd8 NM_022419	1.8
adenylate cyclase 4	Adcy4 NM_080435	1.8
MAP-kinase activating death domain	Madd NM_145527	1.8
RIKEN cDNA C030046E11 gene	C030046E11Rik NM_001081319	1.8
polymerase (DNA directed) sigma	PolS NM_198600	1.8
GATA zinc finger domain containing 2A	Gatad2a NM_145596	1.8
ataxin 7-like 3	Atxn7l3 NM_001098836	1.8
KDEL (Lys-Asp-Glu-Leu) containing 2	Kdelc2 NM_212445	1.8
triple functional domain (PTPRF interacting)	Trio NM_001081302	1.8
collagen, type I, alpha 2	Col1a2 NM_007743	1.8
fascin homolog 1, actin bundling protein (Strongylocentrotus purpuratus)	Fscn1 NM_007984	1.8
LEM domain containing 2	Lemd2 NM_146075	1.8

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	Nfatc3 NM_010901	1.8
integrin alpha 6	Itga6 NM_008397	1.8
leucine-rich repeat kinase 2	Lrrk2 NM_025730	1.8
phospholipid scramblase 3	Plscr3 NM_023564	1.8
interleukin 4 induced 1	Il4i1 NM_010215	1.8
palladin, cytoskeletal associated protein	Palld NM_001081390	1.8
general transcription factor III A	Gtf3a NM_025652	1.8
FEV (ETS oncogene family)	Fev NM_153111	1.8
protein phosphatase 2, regulatory subunit B (B56), beta isoform	Ppp2r5b NM_198168	1.8
coiled-coil and C2 domain containing 1A	Cc2d1a NM_145970	1.8
SH2B adaptor protein 2	Sh2b2 NM_018825	1.8
potassium voltage gated channel, Shaw-related subfamily, member 4	Kcnc4 NM_145922	1.8
cytochrome P450, family 4, subfamily f, polypeptide 39	Cyp4f39 NM_177307	1.8
mannoside acetylglucosaminyltransferase 4, isoenzyme B	Mgat4b NM_145926	1.8
CDK5 and Abl enzyme substrate 1	Cables1 NM_001146287	1.8
RIKEN cDNA A930011G23 gene	A930011G23Rik ENSMUST00000074365	1.8
collagen, type V, alpha 1	Col5a1 NM_015734	1.8
mediator of RNA polymerase II transcription, subunit 12 homolog (yeast)-like	Med12l NM_177855	1.8
C1q and tumor necrosis factor related protein 1	C1qtnf1 NM_019959	1.8
N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2	Ndst2 NM_010811	1.8
protein tyrosine phosphatase, receptor type, U	Ptpru NM_011214	1.8
ankyrin repeat domain 16	Ankrd16 NM_177268	1.8
tripartite motif-containing 47	Trim47 NM_172570	1.8
phosphofructokinase, liver, B-type	Pfkl NM_008826	1.8
serine/arginine repetitive matrix 2	Srrm2 NM_175229	1.8
SECIS binding protein 2-like	Secisbp2l NM_177608	1.8
eukaryotic translation initiation factor 4, gamma 1	Eif4g1 NM_145941	1.8
FYVE, RhoGEF and PH domain containing 5	Fgd5 NM_172731	1.8
F-box and leucine-rich repeat protein 17	Fbxl17 ENSMUST00000024761	1.8
ATPase family, AAA domain containing 5	Atad5 NM_001029856	1.8
formin-like 2	Fmn12 NM_172409	1.8
CaM kinase-like vesicle-associated	Camkv NM_145621	1.8
phosphodiesterase 1C	Pde1c NM_011054	1.8
ankyrin repeat domain 11	Ankrd11 NM_001081379	1.8
glycine amidinotransferase (L-arginine:glycine amidinotransferase)	Gatm NM_025961	1.8
RIKEN cDNA D630039A03 gene	D630039A03Rik BC095953	1.8
kinesin family member 1C	Kif1c NM_153103	1.8
PHD finger protein 12	Phf12 NM_174852	1.8
immunoglobulin-like domain containing receptor 1	Ildr1 NM_134109	1.8
RNA binding motif protein 24	Rbm24 NM_001081425	1.8
chromodomain helicase DNA binding protein 4	Chd4 NM_145979	1.8
lymphocyte antigen 9	Ly9 NM_008534	1.8
HEG homolog 1 (zebrafish)	Heg1 NM_175256	1.8
Unknown	LOC638149 XR_033821	1.8
CD14 antigen	Cd14 NM_009841	1.8
ubiquitin carboxyl-terminal esterase L4	Uchl4 NM_033607	1.8
myeloid/lymphoid or mixed-lineage leukemia 1	Mll1 NM_001081049	1.8
Pbx/knotted 1 homeobox	Pknox1 NR_027493	1.8
RAS-like, family 10, member B	Rasl10b NM_001013386	1.8
syntaxin binding protein 1	Stxbp1 NM_001113569	1.8

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
E2F transcription factor 1	E2f1 ENSMUST00000000894	1.8
roporin 1-like	Ropn1l NM_145852	1.8
Rho GTPase-activating protein	Grit NM_177379	1.8
lipin 2	Lpin2 NM_022882	1.8
WD repeat domain 37	Wdr37 NM_172445	1.8
insulin-like growth factor I receptor	Igf1r NM_010513	1.8
DCN1, defective in cullin neddylation 1, domain containing 1 (S. cerevisiae)	Dcun1d1 NM_033623	1.8
Kruppel-like factor 5	Klf5 NM_009769	1.8
CD55 antigen	Cd55 NM_010016	1.8
unc-119 homolog (C. elegans)	Unc119 NM_011676	1.8
SH3 domain binding glutamic acid-rich protein-like 3	Sh3bgrl3 NM_080559	1.8
immunoglobulin superfamily, member 11	Igsf11 NM_170599	1.8
eukaryotic translation initiation factor 5B	Eif5b NM_198303	1.8
RIKEN cDNA 9330159F19 gene	9330159F19Rik NM_001162537	1.8
WAP four-disulfide core domain 12	Wfdc12 NM_138684	1.8
branched chain aminotransferase 1, cytosolic	Bcat1 NM_001024468	1.8
EFR3 homolog B (S. cerevisiae)	Efr3b NM_001082483	1.8
urotensin 2 receptor	Uts2r NM_145440	1.8
ring finger protein 217	Rnf217 NM_001146349	1.8
paired related homeobox 1	Prrx1 NM_011127	1.8
Unknown	Gm9743 NR_027316	1.8
RIKEN cDNA 1110001D15 gene	Dvwa NM_026763	1.8
suppressor of cytokine signaling 7	Socs7 NM_138657	1.8
family with sequence similarity 120, member C	Fam120c NM_198105	1.8
phosphatidylinositol glycan anchor biosynthesis, class G	Pigg NM_001081234	1.8
solute carrier family 9 (sodium/hydrogen exchanger), member 1	Slc9a1 NM_016981	1.8
predicted gene 10397	Gm10397 ENSMUST00000100823	1.8
Notch gene homolog 4 (Drosophila)	Notch4 NM_010929	1.8
developmental pluripotency associated 1	Dppa1 NM_178247	1.8
myosin, heavy polypeptide 8, skeletal muscle, perinatal	Myh8 NM_177369	1.8
Dicer1, Dcr-1 homolog (Drosophila)	Dicer1 NM_148948	1.8
syndecan 3	Sdc3 NM_011520	1.8
smoothelin-like 2	Smtnl2 NM_177776	1.8
RIKEN cDNA 1110006G14 gene	1110006G14Rik ENSMUST00000032900	1.8
FCH domain only 1	Fcho1 NM_028715	1.8
RIKEN cDNA 3425401B19 gene	3425401B19Rik ENSMUST00000096038	1.8
AF4/FMR2 family, member 1	Aff1 NM_001080798	1.8
histocompatibility 2, T region locus 10	H2-T10 NM_010395	1.8
RIKEN cDNA E330021D16 gene	E330021D16Rik BC099944	1.8
fibulin 1	Fbln1 NM_010180	1.8
BCL2-antagonist/killer 1	Bak1 NM_007523	1.8
protein O-fucosyltransferase 1	Pofut1 NM_080463	1.8
predicted gene 15698	Gm15698 NR_003564	1.8
coactosin-like 1 (Dictyostelium)	Cotl1 NM_028071	1.8
pseudouridine synthase 1	Pus1 NM_001025561	1.8
kinesin family member 2A	Kif2a NM_008442	1.8
ribosome binding protein 1	Rrbp1 NM_024281	1.8
Unknown	AU042671 ENSMUST00000065641	1.8
predicted gene 5105	Gm5105 NM_177860	1.8
endothelial PAS domain protein 1	Epas1 NM_010137	1.8

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
calcyon neuron-specific vesicular protein	Caly BC049663	1.8
peroxisomal biogenesis factor 6	Pex6 NM_145488	1.8
NEDD4 binding protein 1	N4bp1 NM_030563	1.8
homeodomain interacting protein kinase 1	Hipk1 NM_010432	1.8
RIKEN cDNA 9030418K01 gene	9030418K01Rik NM_001081289	1.8
RIKEN cDNA 1700021K19 gene	1700021K19Rik BC067390	1.8
FYVE, RhoGEF and PH domain containing 6	Fgd6 NM_053072	1.8
RIKEN cDNA 1190005I06 gene	1190005I06Rik BC027666	1.8
carcinoembryonic antigen-related cell adhesion molecule 1	Ceacam1 NM_001039185	1.8
heat shock factor 2	Hsf2 NM_008297	1.8
zinc finger protein 239	Zfp239 NM_001001792	1.8
myeloid cell nuclear differentiation antigen	Mnda NM_001033450	1.8
SRY-box containing gene 12	Sox12 NM_011438	1.8
filamin, beta	Flnb NM_134080	1.8
tubby-like protein 3	Tulp3 NM_011657	1.8
ski sarcoma viral oncogene homolog (avian)	Ski NM_011385	1.8
stromal interaction molecule 1	Stim1 NM_009287	1.8
TYRO protein tyrosine kinase binding protein	Tyrobp NM_011662	1.8
serine/threonine kinase 16	Stk16 NM_011494	1.8
RIKEN cDNA 1700019L03 gene	1700019L03Rik BC118617	1.8
Htra serine peptidase 1	Htra1 NM_019564	1.8
acyl-CoA synthetase family member 3	Acsf3 NM_144932	1.8
ribosomal protein L26	Rpl26 NM_009080	1.8
TRAF-interacting protein with forkhead-associated domain	Tifa NM_145133	1.8
epidermal growth factor-containing fibulin-like extracellular matrix protein 2	Efemp2 NM_021474	1.8
RIKEN cDNA E130311K13 gene	E130311K13Rik NM_177856	1.8
phospholipid transfer protein	Pltp NM_011125	1.8
eyes absent 4 homolog (Drosophila)	Eya4 NM_010167	1.8
RIKEN cDNA 1700084C01 gene	1700084C01Rik BC150846	1.8
actinin, alpha 1	Actn1 NM_134156	1.8
protocadherin 19	Pcdh19 NM_001105245	1.8
GCN1 general control of amino-acid synthesis 1-like 1 (yeast)	Gcn1l1 NM_172719	1.8
aminoacylase 1	Acy1 NM_025371	1.8
claudin 1	Cldn1 NM_016674	1.8
dynamin 1	Dnm1 NM_010065	1.8
Unknown	LOC100039359 ENSMUST00000100834	1.8
calcium/calmodulin-dependent protein kinase kinase 1, alpha	Camkk1 NM_018883	1.8
Dr1 associated protein 1 (negative cofactor 2 alpha)	Drap1 NM_024176	1.8
histocompatibility 2, M region locus 10.3	H2-M10.3 NM_201608	1.8
WW domain binding protein 11	Wbp11 NM_021714	1.8
component of Sp100-rs	Csprs BC071209	1.8
coiled-coil domain containing 90A	Ccdc90a NM_001081059	1.7
GTPase, IMAP family member 1	Gimap1 NM_008376	1.7
DEP domain containing 1B	Depdc1b NM_178683	1.7
solute carrier family 41, member 1	Slc41a1 NM_173865	1.7
Rtf1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)	Rtf1 NM_030112	1.7
aldehyde dehydrogenase family 5, subfamily A1	Aldh5a1 NM_172532	1.7
expressed sequence AU021034	AU021034 BC120488	1.7
La ribonucleoprotein domain family, member 5	Larp5 NM_172585	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 11	Ndufa11 NM_027244	1.7
TAO kinase 3	Taok3 ENSMUST00000111978	1.7
pleiomorphic adenoma gene-like 1	Plagl1 NM_009538	1.7
proline rich 12	Prr12 NM_175022	1.7
trinucleotide repeat containing 6C	Tnrc6c NM_198022	1.7
family with sequence similarity 98, member B	Fam98b NM_026620	1.7
microtubule associated monooxygenase, calponin and LIM domain containing 2	Mical2 NM_177282	1.7
proprotein convertase subtilisin/kexin type 6	Pcsk6 NM_011048	1.7
LIM domain binding 3	Ldb3 NM_011918	1.7
spermatogenesis associated 7	Spata7 NM_178914	1.7
forkhead box A2	Foxa2 NM_010446	1.7
pogo transposable element with ZNF domain	Pogz NM_172683	1.7
expressed sequence AI848100	AI848100 BC138379	1.7
multiple inositol polyphosphate histidine phosphatase 1	Minpp1 NM_010799	1.7
retinoblastoma binding protein 5	Rbbp5 NM_172517	1.7
dystrophia myotonica-protein kinase	Dmpk NM_032418	1.7
secreted acidic cysteine rich glycoprotein	Sparc NM_009242	1.7
collagen, type II, alpha 1	Col2a1 NM_031163	1.7
expressed sequence AU016765	AU016765 ENSMUST00000097295	1.7
RIKEN cDNA 2900026A02 gene	2900026A02Rik BC147338	1.7
vascular cell adhesion molecule 1	Vcam1 NM_011693	1.7
Ras and Rab interactor 3	Rin3 NM_177620	1.7
T-box 2	Tbx2 NM_009324	1.7
Rho GTPase activating protein 28	Arhgap28 NM_172964	1.7
glucosamine (N-acetyl)-6-sulfatase	Gns NM_029364	1.7
neogenin	Neo1 NM_008684	1.7
chromatin modifying protein 2A	Chmp2a NM_026885	1.7
hyperpolarization-activated, cyclic nucleotide-gated K+ 2	Hcn2 NM_008226	1.7
procollagen-lysine, 2-oxoglutarate 5-dioxygenase 1	Plod1 NM_011122	1.7
A kinase (PRKA) anchor protein 10	Akap10 NM_019921	1.7
pleckstrin homology domain containing, family G (with RhoGef domain) member 2	Plekhg2 NM_138752	1.7
BCL6 interacting corepressor	Bcor NM_029510	1.7
secretory carrier membrane protein 5	Scamp5 NM_020270	1.7
SR-related CTD-associated factor 1	Scaf1 NM_001008422	1.7
apolipoprotein A-V	Apoa5 NM_080434	1.7
amidohydrolase domain containing 2	Amdhd2 NM_172935	1.7
cathepsin E	Ctse NM_007799	1.7
frequenin homolog (Drosophila)	Freq NM_019681	1.7
podocalyxin-like	Podxl NM_013723	1.7
Unknown	0610037D15Rik BC022733	1.7
phosphatidylinositol 3-kinase, catalytic, beta polypeptide	Pik3cb NM_029094	1.7
component of oligomeric golgi complex 1	Cog1 NM_013581	1.7
mitogen-activated protein kinase kinase kinase 7 interacting protein 2	Map3k7ip2 NM_138667	1.7
RIKEN cDNA 1500001M20 gene	1500001M20Rik NM_026894	1.7
START domain containing 10	Stard10 NM_019990	1.7
tetratricopeptide repeat domain 13	Ttc13 NM_145607	1.7
leucine rich repeat containing 32	Lrrc32 NM_001113379	1.7
paraneoplastic antigen MA2	Pnma2 NM_175498	1.7
cytochrome P450, family 4, subfamily v, polypeptide 3	Cyp4v3 NM_133969	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
rhomboid 5 homolog 2 (Drosophila)	Rhbdf2 NM_172572	1.7
actin binding LIM protein family, member 3	Ablim3 NM_198649	1.7
cAMP responsive element binding protein 3-like 2	Creb3l2 NM_178661	1.7
POU domain, class 4, transcription factor 1	Pou4f1 NM_011143	1.7
pleckstrin homology domain containing, family M (with RUN domain) member 1	Plekhn1 NM_183034	1.7
apolipoprotein E	Apoe NM_009696	1.7
DEAH (Asp-Glu-Ala-His) box polypeptide 37	Dhx37 NM_203319	1.7
special AT-rich sequence binding protein 1	Satb1 NM_009122	1.7
heparan sulfate 6-O-sulfotransferase 1	Hs6st1 NM_015818	1.7
coiled-coil domain containing 97	Ccdc97 NM_028771	1.7
huntingtin interacting protein 1	Hip1 NM_146001	1.7
ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylglactosaminide alpha-2,6-sialyltransferase 4	St6galnac4 NM_011373	1.7
jumonji C domain-containing histone demethylase 1 homolog D (S. cerevisiae)	Jhdm1d NM_001033430	1.7
alanyl (membrane) aminopeptidase	Anpep NM_008486	1.7
solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2	Slc6a2 NM_009209	1.7
predicted gene 128	Gm128 BC092540	1.7
gasdermin C-like, pseudogene	Gsdmcl-ps AK016931	1.7
vacuolar protein sorting 4b (yeast)	Vps4b NM_009190	1.7
family with sequence similarity 102, member B	Fam102b ENSMUST00000046924	1.7
mitogen-activated protein kinase-activated protein kinase 3	Mapkapk3 NM_178907	1.7
cofilin 1, non-muscle	Cfl1 NM_007687	1.7
dystrotelin	Dytn NM_001081658	1.7
zinc finger protein 784	Zfp784 NM_001039532	1.7
ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 3	Arap3 NM_139206	1.7
MKL/myocardin-like 2	Mkl2 NM_153588	1.7
THAP domain containing, apoptosis associated protein 1	Thap1 NM_199042	1.7
glutamine fructose-6-phosphate transaminase 2	Gfpt2 NM_013529	1.7
zinc finger, DHHC domain containing 18	Zdhhc18 NM_001017968	1.7
REX1, RNA exonuclease 1 homolog (S. cerevisiae)	Rexo1 NM_025852	1.7
ATPase, H ⁺ transporting, lysosomal V0 subunit D1	Atp6v0d1 NM_013477	1.7
meningioma 1	Mn1 NM_001081235	1.7
histone deacetylase 7	Hdac7 NM_019572	1.7
GATA binding protein 4	Gata4 NM_008092	1.7
male enhanced antigen 1	Mea1 NM_010787	1.7
RIKEN cDNA 4732418C07 gene	4732418C07Rik BC059213	1.7
dihydrofolate reductase	Dhfr NM_010049	1.7
AP1 gamma subunit binding protein 1	Synrg NM_001115009	1.7
zinc finger protein 106	Zfp106 NM_011743	1.7
family with sequence similarity 108, member C	Fam108c NM_133722	1.7
ataxin 2-like	Atxn2l NM_183020	1.7
schlafen 10	Slfn10 NM_181542	1.7
programmed cell death 6 interacting protein	Pdcd6ip NM_011052	1.7
arrestin, beta 2	Arrb2 NM_145429	1.7
potassium channel tetramerisation domain containing 11	Kctd11 NM_153143	1.7
splA/ryanodine receptor domain and SOCS box containing 1	Spsb1 NM_029035	1.7
Unknown	Atn1 NM_007881	1.7
pericentriolar material 1	Pcm1 NM_023662	1.7
discoidin, CUB and LCCL domain containing 2	Dcbld2 NM_028523	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
family with sequence similarity 62 (C2 domain containing), member B	Esyt2 NM_028731	1.7
zinc finger and BTB domain containing 7C	Zbtb7c NM_145356	1.7
adaptor-related protein complex 2, sigma 1 subunit	Ap2s1 NM_198613	1.7
two pore segment channel 2	Tpcn2 NM_146206	1.7
transcription termination factor, RNA polymerase II	Ttf2 NM_001013026	1.7
sex comb on midleg homolog 1	Scmh1 NM_013883	1.7
tuberous sclerosis 2	Tsc2 NM_011647	1.7
glutamine-rich 1	Qrich1 NM_001114119	1.7
G protein-coupled receptor 153	Gpr153 NM_178406	1.7
MYST histone acetyltransferase (monocytic leukemia) 3	Myst3 NM_001081149	1.7
BTB (POZ) domain containing 3	Btbd3 NM_145534	1.7
hexosaminidase A	Hexa NM_010421	1.7
cDNA sequence BC019943	BC019943 NM_001112729	1.7
whirlin	Whrn NM_028640	1.7
mitochondrial ribosomal protein S7	Mrps7 NM_025305	1.7
katanin p60 (ATPase-containing) subunit A1	Katna1 NM_011835	1.7
BCL2-interacting killer	Bik NM_007546	1.7
AT rich interactive domain 1A (SWI-like)	Arid1a NM_001080819	1.7
RGM domain family, member A	Rgma NM_177740	1.7
polymerase (RNA) I polypeptide E	Polr1e NM_022811	1.7
TSC22 domain family, member 2	Tsc22d2 NM_001081229	1.7
nuclear factor I/X	Nfix NM_001081982	1.7
membrane-spanning 4-domains, subfamily A, member 4C	Ms4a4c NM_029499	1.7
protein phosphatase 2 (formerly 2A), regulatory subunit B (PR 52), alpha isoform	Ppp2r2a NM_028032	1.7
zinc finger protein 821	Zfp821 NM_029468	1.7
Unknown	Lba1 BC086653	1.7
zinc finger protein 597	Zfp597 NM_001033159	1.7
RIKEN cDNA E130309D14 gene	E130309D14Rik BC150886	1.7
predicted gene 10524	Gm10524 ENSMUST00000097503	1.7
thrombospondin, type I, domain containing 4	Thsd4 NM_001040426	1.7
RIO kinase 1 (yeast)	Riok1 NM_024242	1.7
SET binding protein 1	Setbp1 NM_053099	1.7
UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10	Galnt10 NM_134189	1.7
nuclear transcription factor, X-box binding-like 1	Nfxl1 NM_133921	1.7
matrix metalloproteinase 23	Mmp23 NM_011985	1.7
netrin 4	Ntn4 NM_021320	1.7
elongation factor RNA polymerase II 2	Eli2 NM_138953	1.7
RIKEN cDNA 1700007K09 gene	1700007K09Rik NM_027037	1.7
echinoderm microtubule associated protein like 1	Eml1 NM_001043335	1.7
growth factor receptor bound protein 14	Grb14 NM_016719	1.7
huntingtin interacting protein 1 related	Hip1r NM_145070	1.7
sushi domain containing 2	Susd2 NM_027890	1.7
Unknown	40426 NM_213614	1.7
potassium channel tetramerisation domain containing 17	Kctd17 NM_001081367	1.7
SH3 and PX domains 2A	Sh3pxd2a NM_008018	1.7
RNA polymerase II associated protein 3	Gm5697 XR_004787	1.7
TNFRSF1A-associated via death domain	Tradd NM_001033161	1.7
potassium channel, subfamily K, member 1	Kcnk1 NM_008430	1.7
lysosomal-associated membrane protein 1	Lamp1 NM_010684	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
protein tyrosine phosphatase, non-receptor type 9	Ptpn9 NM_019651	1.7
mitochondrial ribosomal protein S18A	Mrps18a NM_026768	1.7
pleckstrin homology domain containing, family M (with RUN domain) member 2	Plekhn2 NM_001033150	1.7
fibulin 2	Fbln2 NM_007992	1.7
selectin, endothelial cell	Sele NM_011345	1.7
ribosomal protein L36	Rpl36 NM_018730	1.7
multiple EGF-like-domains 11	Megf11 NM_172522	1.7
SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. elegans)	Smg1 NM_001031814	1.7
neuronal pentraxin 1	Nptx1 NM_008730	1.7
Sec31 homolog B (S. cerevisiae)	Sec31b NM_001033343	1.7
fibroblast growth factor receptor 3	Fgfr3 NM_008010	1.7
ADAMTS-like 5	Adamtsl5 NM_001113548	1.7
sal-like 4 (Drosophila)	Sall4 NM_175303	1.7
hemopoietic cell kinase	Hck NM_010407	1.7
guanylate kinase 1	Guk1 NM_008193	1.7
formin homology 2 domain containing 3	Fhod3 NM_175276	1.7
src homology 2 domain-containing transforming protein B	Shb NM_001033306	1.7
progesterone and adipoQ receptor family member IX	Paqr9 NM_198414	1.7
four and a half LIM domains 3	Fhl3 NM_010213	1.7
rhomboid family 1 (Drosophila)	Rhbdf1 NM_010117	1.7
Braf transforming gene	Braf NM_139294	1.7
mitochondrial ribosomal protein L28	Mrpl28 NM_024227	1.7
mannosyl-oligosaccharide glucosidase	Mogs NM_020619	1.7
aarF domain containing kinase 1	Adck1 NM_028105	1.7
grainyhead-like 3 (Drosophila)	Grhl3 NM_001013756	1.7
phosphofurin acidic cluster sorting protein 2	Pacs2 NM_001081170	1.7
protein kinase C, alpha	Prkca NM_011101	1.7
predicted gene 5149	Gm5149 ENSMUST00000092878	1.7
dishevelled 3, dsh homolog (Drosophila)	Dvl3 NM_007889	1.7
lysocardiolipin acyltransferase 1	Lclat1 NM_001081071	1.7
Yip1 interacting factor homolog B (S. cerevisiae)	Yif1b NM_029887	1.7
RIKEN cDNA 9030624J02 gene	9030624J02Rik BC043674	1.7
transmembrane protein 127	Tmem127 NM_175145	1.7
predicted gene 1614	Gm1614 ENSMUST00000097619	1.7
MAD homolog 1 (Drosophila)	Smad1 NM_008539	1.7
kelch domain containing 2	Klhd2 NM_027117	1.7
ubiquitin specific peptidase 31	Usp31 NM_001033173	1.7
secretin	Sct NM_011328	1.7
myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Mllt3 NM_027326	1.7
Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6	Arhgef6 NM_152801	1.7
RALBP1 associated Eps domain containing protein 2	Reps2 NM_178256	1.7
SET domain containing 6	Setd6 NM_001035123	1.7
bioorientation of chromosomes in cell division 1-like	Bod1l NM_001081422	1.7
glycosyltransferase 25 domain containing 1	Glt25d1 NM_146211	1.7
complement component 5a receptor 1	C5ar1 NM_007577	1.7
ephrin B3	Efnb3 NM_007911	1.7
Rho guanine nucleotide exchange factor (GEF) 15	Arhgef15 NM_177566	1.7
family with sequence similarity 78, member A	Fam78a BC137951	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
retinoic acid induced 1	Rai1 NM_009021	1.7
H1 histone family, member X	H1fx NM_198622	1.7
myosin X	Myo10 NM_019472	1.7
ribonuclease P/MRP 30 subunit (human)	Rpp30 NM_019428	1.7
surfactant associated protein B	Sftpb NM_147779	1.7
kinesin family member 21A	Kif21a NM_001109040	1.7
structural maintenance of chromosomes 4	Smc4 NM_133786	1.7
cDNA sequence BC017647	BC017647 NM_145430	1.7
protocadherin 1	Pcdh1 NM_029357	1.7
upstream binding protein 1	Ubp1 NM_001083319	1.7
family with sequence similarity 13, member B	Fam13b BC031465	1.7
Fc receptor, IgE, high affinity I, gamma polypeptide	Fcer1g NM_010185	1.7
centrosomal protein 350	Cep350 BC089561	1.7
RIKEN cDNA 4930402H24 gene	4930402H24Rik BC052447	1.7
nuclear receptor subfamily 1, group D, member 1	Nr1d1 NM_145434	1.7
angiotensin-like 1	Amotl1 NM_001081395	1.7
WW domain binding protein 2	Wbp2 NM_016852	1.7
RIKEN cDNA 6430526N21 gene	6430526N21Rik NM_001033383	1.7
myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6	MLlt6 NM_139311	1.7
multiple EGF-like-domains 6	Megf6 NM_001162977	1.7
nudix (nucleoside diphosphate linked moiety X)-type motif 6	Nudt6 NM_153561	1.7
UPF3 regulator of nonsense transcripts homolog A (yeast)	Upf3a NM_025924	1.7
protein kinase C, epsilon	Prkce NM_011104	1.7
coiled-coil domain containing 50	Ccdc50 NM_026202	1.7
RecQ protein-like 4	Recql4 NM_058214	1.7
filamin binding LIM protein 1	Fblim1 NM_133754	1.7
ATPase family, AAA domain containing 3A	Atad3a NM_179203	1.7
Sjogren's syndrome nuclear autoantigen 1	Ssna1 NM_023464	1.7
G protein-coupled receptor 151	Gpr151 NM_181543	1.7
natriuretic peptide receptor 2	Npr2 NM_173788	1.7
Pbx/knotted 1 homeobox 2	Pknox2 NM_148950	1.7
mitochondria-associated protein involved in granulocyte-macrophage colony-stimulating factor-induced apoptosis	Magmas NM_025571	1.7
RIKEN cDNA A730018C14 gene	A730018C14Rik ENSMUST00000050754	1.7
neural precursor cell expressed, developmentally down-regulated gene 1	Nedd1 NM_008682	1.7
protein inhibitor of activated STAT 3	Pias3 NM_146135	1.7
splA/ryanodine receptor domain and SOCS box containing 4	Spsb4 NM_145134	1.7
RNA binding motif, single stranded interacting protein 2	Rbms2 NM_019711	1.7
large tumor suppressor 2	Lats2 NM_015771	1.7
TBC1 domain family, member 9B	Tbc1d9b NM_029745	1.7
solute carrier organic anion transporter family, member 5A1	Slco5a1 NM_172841	1.7
DEAH (Asp-Glu-Ala-His) box polypeptide 33	Dhx33 NM_178367	1.7
xylosyltransferase II	Xylt2 NM_145828	1.7
castor homolog 1, zinc finger (Drosophila)	Casz1 NM_001159344	1.7
low density lipoprotein receptor-related protein 1	Lrp1 NM_008512	1.7
AT hook, DNA binding motif, containing 1	Ahdcd1 NM_146155	1.7
odd Oz/ten-m homolog 3 (Drosophila)	Odz3 NM_011857	1.7
activating signal cointegrator 1 complex subunit 1	Ascc1 NM_026937	1.7
ubiquitin-conjugating enzyme E2R 2	Ube2r2 NM_026275	1.7
platelet derived growth factor, alpha	Pdgfra NM_008808	1.7

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
myosin XVIIIa	Myo18a ENSMUST00000108375	1.7
RIKEN cDNA 4933408B17 gene	4933408B17Rik NM_177773	1.7
oxysterol binding protein	Osbp NM_001033174	1.7
Unknown	BC037112 BC099925	1.7
heat shock protein 12B	Hspa12b NM_028306	1.7
LysM, putative peptidoglycan-binding, domain containing 2	Lysmd2 NM_027309	1.7
poly (ADP-ribose) polymerase family, member 3	Parp3 NM_145619	1.7
malic enzyme 1, NADP(+)-dependent, cytosolic	Me1 NM_008615	1.7
SH3 domain containing ring finger 1	Sh3rf1 NM_021506	1.7
Rho guanine nucleotide exchange factor (GEF) 10	Arhgef10 NM_172751	1.7
paroxysmal nonkinesinogenic dyskinesia	Pnkd NM_025580	1.6
coiled-coil domain containing 134	Ccdc134 NM_172428	1.6
sphingosine-1-phosphate receptor 3	S1pr3 NM_010101	1.6
EH domain binding protein 1-like 1	Ehbp1l1 NM_001114597	1.6
widely-interspaced zinc finger motifs	Wiz NM_212438	1.6
protein phosphatase 1, catalytic subunit, alpha isoform	Ppp1ca NM_031868	1.6
DnaJ (Hsp40) homolog, subfamily B, member 14	Dnajb14 NM_001033155	1.6
RIKEN cDNA 2810474O19 gene	2810474O19Rik NM_026054	1.6
major facilitator superfamily domain containing 10	Mfsd10 NM_026660	1.6
v-abl Abelson murine leukemia viral oncogene homolog 2 (arg, Abelson-related gene)	Abl2 NM_001136104	1.6
anoctamin 1, calcium activated chloride channel	Ano1 NM_178642	1.6
retinoblastoma binding protein 4	Rbbp4 NM_009030	1.6
SLIT-ROBO Rho GTPase activating protein 2	Srgap2 NM_001081011	1.6
zinc finger protein 202	Zfp202 NM_030713	1.6
discs, large homolog-associated protein 4 (Drosophila)	Dlgap4 NM_146128	1.6
dedicator of cytokinesis 7	Dock7 NM_026082	1.6
par-3 (partitioning defective 3) homolog (C. elegans)	Pard3 NM_001013581	1.6
ankyrin repeat domain 28	Ankrd28 NM_001024604	1.6
zinc finger and BTB domain containing 1	Zbtb1 NM_178744	1.6
integrin alpha 5 (fibronectin receptor alpha)	Itga5 NM_010577	1.6
family with sequence similarity 109, member A	Fam109a NM_175474	1.6
mitogen-activated protein kinase kinase kinase 4	Map3k4 NM_011948	1.6
cytochrome b-561	Cyb561 NM_007805	1.6
zinc finger with KRAB and SCAN domains 1	Zkscan1 NM_133906	1.6
2'-5' oligoadenylate synthetase 2	Oas2 NM_145227	1.6
G protein-coupled receptor kinase 6	Grk6 NM_001038018	1.6
mitogen-activated protein kinase kinase kinase 1	Map3k1 NM_011945	1.6
per-hexamer repeat gene 4	Phxr4 X12806	1.6
deformed epidermal autoregulatory factor 1 (Drosophila)	Deaf1 NR_027769	1.6
odd Oz/ten-m homolog 2 (Drosophila)	Odz2 NM_011856	1.6
Unknown	Gm5068 XM_204772	1.6
poly (ADP-ribose) polymerase family, member 8	Parp8 NM_001081009	1.6
epidermal growth factor receptor pathway substrate 15	Eps15 NM_007943	1.6
transmembrane protein 110	Tmem110 NM_028839	1.6
L antigen family, member 3	Lage3 NM_025410	1.6
RAB, member of RAS oncogene family-like 4	Rabl4 NM_025931	1.6
Cnksr family member 3	Cnksr3 NM_172546	1.6
ankyrin repeat and SOCS box-containing 7	Asb7 NR_003961	1.6
predicted gene 9881	Gm9881 ENSMUST000000068783	1.6
cerebral cavernous malformation 2 homolog (human)	Ccm2 NM_146014	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
fibrosin	Fbrs NM_010183	1.6
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	Smarcd3 NM_025891	1.6
DNA segment, Chr 18, ERATO Doi 653, expressed	D18Ertd653e BC096371	1.6
phospholipase A2, group XIIB	Pla2g12b NM_023530	1.6
zinc finger E-box binding homeobox 1	Zeb1 NM_011546	1.6
inhibitor of growth family, member 4	Ing4 NM_133345	1.6
xin actin-binding repeat containing 1	Xirp1 NM_001081339	1.6
v-crk sarcoma virus CT10 oncogene homolog (avian)-like	Crkl NM_007764	1.6
taspase, threonine aspartase 1	Tasp1 NM_175225	1.6
PFTAIRe protein kinase 1	Pftk1 NM_011074	1.6
RIKEN cDNA 3200002M19 gene	3200002M19Rik BC006736	1.6
activity-dependent neuroprotective protein	Adnp NM_009628	1.6
protein phosphatase 2, regulatory subunit B (B56), delta isoform	Ppp2r5d NM_009358	1.6
BCL2-associated athanogene 2	Bag2 NM_145392	1.6
patatin-like phospholipase domain containing 7	Pnpla7 NM_146251	1.6
centrosomal protein 68	Cep68 NM_172260	1.6
PHD finger protein 19	Phf19 NM_028716	1.6
reticulon 4	Rtn4 NM_194054	1.6
pumilio 1 (Drosophila)	Pum1 NM_030722	1.6
RIKEN cDNA 1300018J18 gene	1300018J18Rik NM_027905	1.6
E1A binding protein p300	Ep300 NM_177821	1.6
copine III	Cpne3 NM_027769	1.6
CDC2-related kinase, arginine/serine-rich	Crks NM_001109626	1.6
zinc finger protein 628	Zfp628 NM_170759	1.6
transketolase	Tkt NM_009388	1.6
PX domain containing serine/threonine kinase	Pxk NM_178279	1.6
coronin, actin binding protein 1B	Coro1b NM_011778	1.6
RIKEN cDNA 2810428I15 gene	2810428I15Rik BC028495	1.6
THAP domain containing 4	Thap4 NM_025920	1.6
splicing factor 1	Sf1 NM_001110791	1.6
death associated protein kinase 1	Dapk1 NM_029653	1.6
protein phosphatase 1, regulatory subunit 9B	Ppp1r9b NM_172261	1.6
Ras association (RalGDS/AF-6) domain family member 3	Rassf3 NM_138956	1.6
polymerase (RNA) mitochondrial (DNA directed)	Polrmt NM_172551	1.6
protein arginine methyltransferase 10 (putative)	Prmt10 NM_001081240	1.6
phospholipase C, delta 1	Plcd1 NM_019676	1.6
excision repair cross-complementing rodent repair deficiency, complementation group 6	Ercc6 NM_001081221	1.6
leucine rich repeat containing 4	Lrrc4 NM_138682	1.6
pleckstrin homology domain containing, family H (with MyTH4 domain) member 3	Plekhh3 NM_146030	1.6
feminization 1 homolog b (C. elegans)	Fem1b NM_010193	1.6
transportin 2 (importin 3, karyopherin beta 2b)	Tnpo2 NM_145390	1.6
RIKEN cDNA 2310040G07 gene	2310040G07Rik ENSMUST00000101090	1.6
hemicentin 2	Hmcn2 ENSMUST00000074390	1.6
laminin, gamma 1	Lamc1 NM_010683	1.6
NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10	Ndufb10 NM_026684	1.6
eukaryotic translation initiation factor 5A2	Eif5a2 NM_177586	1.6
SHANK-associated RH domain interacting protein	Sharpin NM_025340	1.6
RIKEN cDNA 9930021J03 gene	9930021J03Rik AK220440	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, p105	Nfkb1 NM_008689	1.6
serine/threonine kinase 38	Stk38 NM_134115	1.6
SET and MYND domain containing 2	Smyd2 NM_026796	1.6
leiomodins 3 (fetal)	Lmod3 NM_001081157	1.6
slingshot homolog 3 (Drosophila)	Ssh3 NM_198113	1.6
inositol 1,4,5-triphosphate receptor 2	Itpr2 NM_019923	1.6
mutS homolog 3 (E. coli)	Msh3 NM_010829	1.6
folliculin interacting protein 2	Fnip2 NM_001162999	1.6
G protein-coupled receptor 161	Gpr161 NM_001081126	1.6
RIKEN cDNA B230380D07 gene	B230380D07Rik NM_172772	1.6
death-associated protein	Dap NM_146057	1.6
atonal homolog 8 (Drosophila)	Atoh8 NM_153778	1.6
alanine-glyoxylate aminotransferase 2-like 2	Agxt2l2 NM_028398	1.6
RNA binding motif, single stranded interacting protein 1	Rbms1 NM_001141932	1.6
tyrosyl-tRNA synthetase 2 (mitochondrial)	Yars2 NM_198246	1.6
RIKEN cDNA A830039N20 gene	A830039N20Rik BC038501	1.6
mitochondrial ribosomal protein L11	Mrpl11 NM_025553	1.6
Unknown	Gm10515 ENSMUST00000097433	1.6
STEAP family member 3	Steap3 NM_001085409	1.6
neural precursor cell expressed, developmentally down-regulated gene 4-like	Nedd4l NM_001114386	1.6
collagen, type III, alpha 1	Col3a1 NM_009930	1.6
membrane-associated ring finger (C3HC4) 5	40242 NM_027314	1.6
apoptosis-inducing, TAF9-like domain 1	Apitd1 NM_027263	1.6
cysteine rich transmembrane BMP regulator 1 (chordin like)	Crim1 NM_015800	1.6
myosin ID	Myo1d NM_177390	1.6
ST3 beta-galactoside alpha-2,3-sialyltransferase 3	St3gal3 NM_009176	1.6
RIKEN cDNA E130306D19 gene	E130306D19Rik NM_001013377	1.6
predicted gene 5142	Gm5142 NM_001004158	1.6
Unknown	Akap2 NM_001035533	1.6
RIKEN cDNA 4933407C03 gene	4933407C03Rik BC158118	1.6
leucine-rich PPR-motif containing	Lrpprc NM_028233	1.6
zinc finger, MYND domain containing 19	Zmynd19 NM_026021	1.6
potassium inwardly-rectifying channel, subfamily J, member 9	Kcnj9 NM_008429	1.6
tetraspanin 5	Tspan5 NM_019571	1.6
eukaryotic translation elongation factor 1 gamma	Eef1g NM_026007	1.6
RIKEN cDNA C030044B11 gene	C030044B11Rik NR_015601	1.6
von Willebrand factor A domain containing 3A	Vwa3a NM_177697	1.6
ATP-binding cassette, sub-family B (MDR/TAP), member 4	Abcb4 NM_008830	1.6
Unknown	LOC674623 XR_031213	1.6
KRI1 homolog (S. cerevisiae)	Kri1 NM_145416	1.6
leucine-rich repeats and calponin homology (CH) domain containing 1	Lrch1 NM_001033439	1.6
bone morphogenetic protein 1	Bmp1 NM_009755	1.6
ligase III, DNA, ATP-dependent	Lig3 NM_010716	1.6
Rho GTPase activating protein 18	Arhgap18 NM_176837	1.6
DAZ associated protein 1	Dazap1 NM_133188	1.6
apolipoprotein B mRNA editing enzyme, catalytic polypeptide 3	Apobec3 NM_001160415	1.6
parathyromosin	Ptms NM_026988	1.6
mitogen-activated protein kinase 8 interacting protein 3	Mapk8ip3 NM_013931	1.6
nuclear receptor subfamily 2, group F, member 2	Nr2f2 NM_009697	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
RIKEN cDNA 2410131K14 gene	2410131K14Rik NM_001081236	1.6
transducin-like enhancer of split 3, homolog of Drosophila E(spl)	Tle3 NM_001083927	1.6
RIKEN cDNA B230312A22 gene	B230312A22Rik BC046771	1.6
transforming growth factor, beta 3	Tgfb3 NM_009368	1.6
catenin (cadherin associated protein), delta 1	Ctnnd1 NM_007615	1.6
RIKEN cDNA 1110032A13 gene	1110032A13Rik BC064066	1.6
zinc finger protein 687	Zfp687 NM_030074	1.6
U7 small nuclear RNA	Rnu7 NR_024201	1.6
H6 homeo box 1	Hmx1 NM_010445	1.6
glial cell line derived neurotrophic factor family receptor alpha 4	Gfra4 ENSMUST00000110235	1.6
ring finger protein 44	Rnf44 NR_027395	1.6
neurolysin (metallopeptidase M3 family)	Nln NM_029447	1.6
UBX domain protein 7	Ubxn7 NM_177633	1.6
solute carrier family 22 (organic anion transporter), member 8	Slc22a8 NM_031194	1.6
metastasis suppressor 1-like	Mtss1l NM_198625	1.6
SET domain containing 5	Setd5 NM_028385	1.6
LanC (bacterial lantibiotic synthetase component C)-like 2	Lancl2 NM_133737	1.6
bone marrow stromal cell antigen 1	Bst1 NM_009763	1.6
wingless related MMTV integration site 10b	Wnt10b NM_011718	1.6
deoxyuridine triphosphatase	Dut NM_001159646	1.6
extraembryonic, spermatogenesis, homeobox 1	Esx1 NM_007957	1.6
mesoderm posterior 1	Mesp1 NM_008588	1.6
WAS/WASL interacting protein family, member 3	Wipf3 BC044880	1.6
coiled-coil domain containing 34	Ccdc34 NM_026613	1.6
calcium homeostasis endoplasmic reticulum protein	Cherp NM_138585	1.6
protein tyrosine phosphatase, non-receptor type 3	Ptpn3 NM_011207	1.6
latent transforming growth factor beta binding protein 2	Ltbp2 NM_013589	1.6
RIKEN cDNA 4930432M17 gene	4930432M17Rik ENSMUST00000098646	1.6
hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)	H6pd NM_173371	1.6
glutamate-cysteine ligase, catalytic subunit	Gclc NM_010295	1.6
nucleoporin 205	Nup205 NM_027513	1.6
fibroblast growth factor receptor-like 1	Fgfrl1 NM_054071	1.6
AP2 associated kinase 1	Aak1 NM_001040106	1.6
kyphoscoliosis peptidase	Ky NM_024291	1.6
plastin 1 (I-isoform)	Pls1 NM_001033210	1.6
RIKEN cDNA 4922501C03 gene	4922501C03Rik NM_199316	1.6
ataxin 7-like 1	Atxn7l1 NM_001033436	1.6
transmembrane protein 149	Tmem149 NM_145580	1.6
coiled-coil domain containing 92	Ccdc92 NM_144819	1.6
zinc finger, MYND domain containing 11	Zmynd11 NM_144516	1.6
serine/threonine kinase 35	Stk35 NM_183262	1.6
CUE domain containing 1	Cuedc1 NM_198013	1.6
zinc finger, matrin-like	Zfml NM_008717	1.6
glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A	Grin1a NM_178602	1.6
gamma-aminobutyric acid (GABA) B receptor, 1	Gabbr1 NM_019439	1.6
RIKEN cDNA 1810031K17 gene	1810031K17Rik BC028815	1.6
striatin, calmodulin binding protein 4	Strn4 NM_133789	1.6
tetratricopeptide repeat domain 17	Ttc17 NM_183106	1.6
within bgcn homolog (Drosophila)	Wibg BC049647	1.6
amine oxidase, copper containing 3	Aoc3 NM_009675	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
interleukin 6 signal transducer	Il6st NM_010560	1.6
spire homolog 1 (Drosophila)	Spire1 NM_194355	1.6
solute carrier family 36 (proton/amino acid symporter), member 4	Slc36a4 NM_172289	1.6
nucleoporin like 1	Nupl1 NM_170591	1.6
zinc finger with KRAB and SCAN domains 17	Zkscan17 NM_172941	1.6
two pore channel 1	Tpcn1 NM_145853	1.6
apelin receptor	Aplnr NM_011784	1.6
ubiquitin protein ligase E3 component n-recognin 2	Ubr2 NM_146078	1.6
ras responsive element binding protein 1	Rreb1 NM_001013392	1.6
protocadherin gamma subfamily A, 5	Pcdhga5 NM_033588	1.6
BEN domain containing 3	Bend3 NM_199028	1.6
laminin B1 subunit 1	Lamb1-1 NM_008482	1.6
nucleobindin 1	Nucb1 NM_008749	1.6
sorting nexin family member 21	Snx21 NM_133924	1.6
Vcalcineurin-like phosphoesterase domain containing 1	Cpped1 NM_146067	1.6
calreticulin	Calr NM_007591	1.6
dual specificity phosphatase 5	Dusp5 NM_001085390	1.6
Notch gene homolog 1 (Drosophila)	Notch1 NM_008714	1.6
xin actin-binding repeat containing 2	Xirp2 NM_001024618	1.6
nuclear receptor coactivator 6	Ncoa6 NM_019825	1.6
preproenkephalin	Penk NM_001002927	1.6
RIKEN cDNA 1110018G07 gene	1110018G07Rik NM_178065	1.6
leucine rich repeat (in FLII) interacting protein 2	Lrrfip2 NM_027742	1.6
uracil DNA glycosylase	Ung NM_001040691	1.6
vacuolar protein sorting 39 (yeast)	Vps39 NR_027618	1.6
HLA-B associated transcript 2	Bat2 NM_020027	1.6
FAST kinase domains 5	Fastkd5 NM_198176	1.6
mitochondrial ribosomal protein S34	Mrps34 NM_023260	1.6
zinc finger protein 275	Zfp275 NM_031494	1.6
cadherin 2	Cdh2 NM_007664	1.6
regulator of calcineurin 1	Rcan1 NM_001081549	1.6
microtubule-associated protein 4	Mtap4 NM_008633	1.6
epidermal growth factor receptor	Egfr NM_207655	1.6
protein kinase, cAMP dependent regulatory, type II alpha	Prkar2a NM_008924	1.6
zinc finger protein 318	Zfp318 NM_207671	1.6
ring finger protein 25	Rnf25 NM_021313	1.6
apoptotic chromatin condensation inducer 1	Acin1 NR_024029	1.6
orthopedia homolog (Drosophila)	Otp NM_011021	1.6
excision repair cross-complementing rodent repair deficiency, complementation group 1	Ercc1 NM_007948	1.6
RIKEN cDNA E130309D02 gene	E130309D02Rik NM_172726	1.6
zinc fingr protein 551	Zfp551 NM_001033820	1.6
tubulin tyrosine ligase	Ttl NM_027192	1.6
family with sequence similarity 155, member A	Fam155a NM_173446	1.6
5',3'-nucleotidase, mitochondrial	Nt5m NM_134029	1.6
autophagy-related 9A (yeast)	Atg9a NM_001003917	1.6
PCTAIRE-motif protein kinase 3	Pctk3 NM_008795	1.6
active BCR-related gene	Abr NM_198018	1.6
DEAD (Asp-Glu-Ala-Asp) box polypeptide 28	Ddx28 NM_028038	1.6
protocadherin beta 14	Pcdhb14 NM_053139	1.6
histone deacetylase 4	Hdac4 NM_207225	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
RIKEN cDNA 1700034J05 gene	1700034J05Rik ENSMUST00000036592	1.6
zinc finger, MYM-type 6	Zmym6 NM_177462	1.6
annexin A7	Anxa7 NM_009674	1.6
growth arrest specific 2	Gas2 NM_008087	1.6
heat shock 105kDa/110kDa protein 1	Hsph1 NM_013559	1.6
solute carrier family 7, member 6 opposite strand	Slc7a6os NM_001007567	1.6
neuro-oncological ventral antigen 1	Nova1 ENSMUST00000021438	1.6
misshapen-like kinase 1 (zebrafish)	Mink1 NM_016713	1.6
mitogen-activated protein kinase kinase kinase kinase 2	Map4k2 NM_009006	1.6
PHD finger protein 21A	Phf21a NM_138755	1.6
ubiquitin-like 7 (bone marrow stromal cell-derived)	Ubl7 NM_001122873	1.6
ZXD family zinc finger C	Zxdc NM_030260	1.6
coiled-coil and C2 domain containing 2B	Cc2d2b XM_994191	1.6
glucosidase beta 2	Gba2 NM_172692	1.6
centrosome and spindle pole associated protein 1	Cspp1 NM_026493	1.6
plexin A4	Plxna4 NM_175750	1.6
LPS-responsive beige-like anchor	Lrba NM_030695	1.6
HEAT repeat containing 6	Heatr6 NM_145432	1.6
WD repeat domain 43	2610029G23Rik BC035042	1.6
insulin-like growth factor 1	Igf1 NM_010512	1.6
transcription factor 3	Tcf3 NM_001079822	1.6
cDNA sequence BC049730	BC049730 BC049730	1.6
Hus1 homolog (S. pombe)	Hus1 NM_008316	1.6
mitochondrial ribosomal protein S35	Mrps35 NM_145573	1.6
cryptochrome 1 (photolyase-like)	Cry1 NM_007771	1.6
KISS1 receptor	Kiss1r NM_053244	1.6
protein tyrosine phosphatase, receptor type, S	Ptpsr NM_011218	1.6
DCP1 decapping enzyme homolog A (S. cerevisiae)	Dcp1a NM_133761	1.6
GDP-mannose pyrophosphorylase B	Gmppb NM_177910	1.6
ring finger protein 31	Rnf31 NM_194346	1.6
heat shock protein 2	Hspb2 NM_024441	1.6
oviductal glycoprotein 1	Ovgp1 NM_007696	1.6
transmembrane emp24 domain containing 3	Tmed3 NM_025360	1.6
OTU domain, ubiquitin aldehyde binding 1	Otub1 NM_134150	1.6
TBC1 domain family, member 9	Tbc1d9 NM_001111304	1.6
ubiquitin-conjugating enzyme E2, J1	Ube2j1 NM_019586	1.6
aspartyl aminopeptidase	Dnpep NM_001110831	1.6
grancalcin	Gca NM_145523	1.6
Sec24 related gene family, member D (S. cerevisiae)	Sec24d NM_027135	1.6
collagen, type IV, alpha 1	Col4a1 NM_009931	1.6
prune homolog (Drosophila)	Prune NM_173347	1.6
homeo box D4	Hoxd4 NM_010469	1.6
Sp2 transcription factor	Sp2 NM_030220	1.6
RIKEN cDNA 1700081L11 gene	1700081L11Rik BC043121	1.6
zinc finger protein 651	Zfp651 BC030045	1.6
CAP-GLY domain containing linker protein 2	Clip2 NM_009990	1.6
cellular retinoic acid binding protein I	Crabp1 NM_013496	1.6
cyclin D1	Ccnd1 NM_007631	1.6
coagulation factor IX	F9 NM_007979	1.6
family with sequence similarity 13, member C	Fam13c NM_024244	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	Prex1 NM_177782	1.6
neurotrophic tyrosine kinase, receptor, type 1	Ntrk1 NM_001033124	1.6
RIKEN cDNA 9130011J15 gene	9130011J15Rik BC055692	1.6
transmembrane protein 106A	Tmem106a NM_144830	1.6
alkB, alkylation repair homolog 1 (E. coli)	Alkbh1 NM_001102565	1.6
PR domain containing 4	Prdm4 NM_181650	1.6
DIP2 disco-interacting protein 2 homolog B (Drosophila)	Dip2b NM_001159361	1.6
kinesin family member 3C	Kif3c NM_008445	1.6
AVL9 homolog (S. cerevisiae)	Avl9 NM_030235	1.6
phosphatidylinositol-4-phosphate 5-kinase, type 1 gamma	Pip5k1c NM_008844	1.6
protein-O-mannosyltransferase 2	Pomt2 NM_153415	1.6
inositol polyphosphate-5-phosphatase D	Inpp5d NM_010566	1.6
keratin 73	Krt73 NM_212485	1.6
engulfment and cell motility 2, ced-12 homolog (C. elegans)	Elmo2 NM_207705	1.6
transient receptor potential cation channel, subfamily V, member 2	Trpv2 NM_011706	1.6
predicted gene 967	Fam189a2 NM_001114174	1.6
Rap guanine nucleotide exchange factor (GEF) 1	Rapgef1 NM_001039087	1.6
phosphoglucomutase 5	Pgm5 NM_175013	1.6
protein tyrosine phosphatase, receptor type, D	Ptprd NM_001014288	1.6
tubulin tyrosine ligase-like family, member 4	Ttll4 NM_001014974	1.6
Rho guanine nucleotide exchange factor (GEF) 12	Arhgef12 NM_027144	1.6
kinesin family member 16B	Kif16b NM_001081133	1.6
chimerin (chimaerin) 2	Chn2 ENSMUST00000114403	1.6
cytohesin 3	Cyth3 NM_011182	1.6
glutathione peroxidase 3	Gpx3 NM_001083929	1.6
clathrin, heavy polypeptide (Hc)	Cltc NM_001003908	1.6
RIKEN cDNA 4933426M11 gene	4933426M11Rik BC040401	1.6
RAR-related orphan receptor gamma	Rorc NM_011281	1.6
transmembrane channel-like gene family 6	Tmc6 NM_145439	1.6
sarcosine dehydrogenase	Sardh NM_138665	1.6
thyrotropin releasing hormone receptor 2	Trhr2 NM_133202	1.6
NADH dehydrogenase (ubiquinone) 1 beta subcomplex 8	Ndufb8 NM_026061	1.6
chromodomain helicase DNA binding protein 7	Chd7 NM_001081417	1.6
suppression of tumorigenicity 13	St13 NM_133726	1.6
RIKEN cDNA 2310065K24 gene	2310065K24Rik NM_028221	1.6
Rho GTPase activating protein 21	Arhgap21 NM_001128084	1.6
cDNA sequence BC021381	BC021381 NM_145382	1.6
plakophilin 4	Pkp4 NM_026361	1.6
leucine rich repeat containing 3B	Lrrc3b NM_146052	1.6
erythrocyte protein band 4.1	Epb4.1 NM_183428	1.6
prokineticin 2	Prok2 NM_015768	1.6
eukaryotic elongation factor-2 kinase	Eef2k NM_007908	1.6
neurobeachin	Nbea NM_030595	1.6
acyl-CoA synthetase family member 2	Acsf2 NM_153807	1.6
cleavage stimulation factor, 3' pre-RNA, subunit 3	Cstf3 NM_145529	1.6
signal transducer and activator of transcription 5B	Stat5b NM_001113563	1.6
angiomin	Amot NM_153319	1.6
transforming growth factor, beta 2	Tgfb2 NM_009367	1.6
EH-domain containing 3	Ehd3 NM_020578	1.6
N-acetyltransferase 9 (GCN5-related, putative)	Nat9 NM_025400	1.6

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
phosphatidylglycerophosphate synthase 1	Pgs1 NM_133757	1.6
RIKEN cDNA 6430527G18 gene	6430527G18Rik AF525300	1.6
yippee-like 5 (Drosophila)	Ypel5 NM_027166	1.6
lemur tyrosine kinase 2	Lmtk2 NM_001081109	1.6
TRAF3 interacting protein 2	Traf3ip2 NM_134000	1.6
LIM domain only 4	Lmo4 NM_010723	1.6
catenin beta interacting protein 1	Ctnnbip1 NM_023465	1.6
tescalcin	Tesc NM_021344	1.6
zinc finger, FYVE domain containing 9	Zfyve9 NM_183300	1.6
DNA polymerase N	Poln NM_181857	1.6
mediator complex subunit 24	Med24 NM_011869	1.6
erythrocyte protein band 4.1-like 2	Epb4.1l2 NM_013511	1.6
FAT tumor suppressor homolog 1 (Drosophila)	Fat1 NM_001081286	1.6
endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1	Ergic1 NM_026170	1.6
RIKEN cDNA A730011L01 gene	A730011L01Rik NM_177394	1.6
mannosidase, alpha, class 1B, member 1	Man1b1 NM_001029983	1.6
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	Atp8a1 NM_001038999	1.6
sorbin and SH3 domain containing 2	Sorbs2 NM_172752	1.6
ERGIC and golgi 3	Ergic3 NM_025516	1.6
solute carrier family 35, member E3	Slc35e3 NM_029875	1.6
dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1b	Dyrk1b NM_001037957	1.6
solute carrier family 39 (metal ion transporter), member 6	Slc39a6 NM_139143	1.6
guanosine diphosphate (GDP) dissociation inhibitor 1	Gdi1 NM_010273	1.6
neurofibromatosis 1	Nf1 NM_010897	1.6
mediator complex subunit 23	Med23 NM_027347	1.6
zinc finger protein 295	Zfp295 NM_175428	1.6
kinesin family member C3	Kifc3 NM_010631	1.6
nitric oxide synthase 1 (neuronal) adaptor protein	Nos1ap NM_001109985	1.6
RRP9, small subunit (SSU) processome component, homolog (yeast)	Rrp9 NM_145620	1.6
RAD54 like 2 (S. cerevisiae)	Rad54l2 NM_030730	1.6
splicing factor, arginine/serine-rich 15	Sfrs15 NM_178923	1.6
transmembrane protein 39b	Tmem39b NM_199305	1.6
TRAF3 interacting protein 1	Traf3ip1 NM_028718	1.6
nascent polypeptide-associated complex alpha polypeptide	Naca NM_001113199	1.6
DNA segment, Chr 17, ERATO Doi 663, expressed	D17Ertd663e ENSMUST00000105044	1.5
thymoma viral proto-oncogene 1	Akt1 NM_009652	1.5
gamma-aminobutyric acid (GABA) A receptor, subunit epsilon	Gabre NM_017369	1.5
phospholipase B domain containing 2	Plbd2 NM_023625	1.5
zinc finger CCCH type containing 11A	Zc3h11a NM_144530	1.5
lipase, family member M	Lipm NM_023903	1.5
mindbomb homolog 2 (Drosophila)	Mib2 NM_145124	1.5
promyelocytic leukemia	Pml NM_008884	1.5
proteasome (prosome, macropain) 26S subunit, non-ATPase, 8	Psm8 NM_026545	1.5
transient receptor potential cation channel, subfamily C, member 3	Trpc3 NM_019510	1.5
filamin, alpha	Flna NM_010227	1.5
valyl-tRNA synthetase	Vars NM_011690	1.5
NECAP endocytosis associated 1	Necap1 NM_026267	1.5
TCDD-inducible poly(ADP-ribose) polymerase	Tiparp NM_178892	1.5
actin related protein 2/3 complex, subunit 5-like	Arpc5l NM_028809	1.5
IQ motif and Sec7 domain 1	Iqsec1 NM_001134383	1.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
pleckstrin homology domain containing, family A member 6	Plekha6 NM_182930	1.5
myotubularin related protein 9	Mtmr9 NM_177594	1.5
EF hand domain family A1	Efha1 NM_028643	1.5
septin 4	40425 NM_011129	1.5
predicted gene 11428	Gm11428 NM_001081957	1.5
mediator of RNA polymerase II transcription, subunit 11 homolog (S. cerevisiae)	Med11 NM_025397	1.5
rhomboid domain containing 2	Rhbdd2 NM_146002	1.5
lysine (K)-specific demethylase 2B	Kdm2b NM_001003953	1.5
RasGEF domain family, member 1A	Rasgef1a NM_027526	1.5
collagen, type I, alpha 1	Col1a1 NM_007742	1.5
doublesex and mab-3 related transcription factor like family C2	Dmrtc2 NM_027732	1.5
ral guanine nucleotide dissociation stimulator	Ralgds NM_001145835	1.5
ring finger protein 126	Rnf126 NM_144528	1.5
ATPase type 13A2	Atp13a2 NM_029097	1.5
transmembrane protein 53	Tmem53 NM_026837	1.5
C-type lectin domain family 2, member d	Clec2d NM_053109	1.5
mitogen-activated protein kinase 8 interacting protein 2	Mapk8ip2 NM_021921	1.5
Unknown	Gm9009 XR_004814	1.5
kelch-like 8 (Drosophila)	Klhl8 NM_178741	1.5
regucalcin	Rgn NM_009060	1.5
oncostatin M receptor	Osmr NM_011019	1.5
tripartite motif-containing 68	Trim68 NM_198012	1.5
RIKEN cDNA 4833413D08 gene	4833413D08Rik BC047134	1.5
RAB36, member RAS oncogene family	Rab36 NM_029781	1.5
heparan sulfate 2-O-sulfotransferase 1	Hs2st1 NM_011828	1.5
pleckstrin homology-like domain, family B, member 1	Phldb1 NM_153537	1.5
growth factor receptor bound protein 2-associated protein 1	Gab1 NM_021356	1.5
myelocytomatosis oncogene	Myc NM_010849	1.5
Lix1-like	Lix1l ENSMUST00000062058	1.5
vacuolar protein sorting 13A (yeast)	Vps13a NM_173028	1.5
cleft lip and palate associated transmembrane protein 1	Clptm1 NM_019649	1.5
nucleus accumbens associated 1, BEN and BTB (POZ) domain containing	Nacc1 NM_025788	1.5
cytochrome c oxidase, subunit VIb polypeptide 1	Cox6b1 NM_025628	1.5
predicted gene 6924	Gm6924 XM_893664	1.5
WD and tetratricopeptide repeats 1	Wdtdc1 NM_199306	1.5
tensin like C1 domain-containing phosphatase	Tenc1 NM_153533	1.5
pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 8	Plekha8 NM_001001335	1.5
RIKEN cDNA 4932418E24 gene	4932418E24Rik NM_177841	1.5
tripartite motif-containing 24	Trim24 NM_145076	1.5
dopey family member 2	Dopey2 NM_027293	1.5
mitogen-activated protein kinase kinase kinase 8	Map3k8 NM_007746	1.5
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 2	Adamts2 NM_175643	1.5
CDC42 binding protein kinase beta	Cdc42bpb NM_183016	1.5
predicted gene 5737	Gm5737 XR_035619	1.5
reelin	Reln NM_011261	1.5
zinc finger, DHHC-type containing 22	Zdhhc22 NM_001080943	1.5
synovial apoptosis inhibitor 1, synoviolin	Syvn1 NM_028769	1.5
transmembrane and coiled-coil domains 2	Tmcc2 NM_178874	1.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
dual specificity phosphatase 6	Dusp6 NM_026268	1.5
zinc finger protein 148	Zfp148 NM_011749	1.5
ClpB caseinolytic peptidase B homolog (E. coli)	Clpb NM_009191	1.5
phosphatidylinositol 4-kinase type 2 alpha	Pi4k2a NM_145501	1.5
CCR4-NOT transcription complex, subunit 6-like	Cnot6l NM_144910	1.5
exportin 6	Xpo6 NM_028816	1.5
integrin alpha V	Itgav NM_008402	1.5
DCN1, defective in cullin neddylation 1, domain containing 4 (S. cerevisiae)	Dcun1d4 NM_178896	1.5
Unknown	Gm7614 XR_032236	1.5
splicing factor 3a, subunit 2	Sf3a2 NM_013651	1.5
G patch domain containing 4	Gpatch4 NM_025663	1.5
family with sequence similarity 181, member B	Fam181b NM_021427	1.5
EGL nine homolog 3 (C. elegans)	Egln3 NM_028133	1.5
tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1	Tanc1 NM_198294	1.5
cartilage associated protein	Crtap NM_019922	1.5
mitochondrial ribosomal protein L12	Mrpl12 NM_027204	1.5
Rho GTPase activating protein 10	Arhgap10 NM_030113	1.5
phospholipase C, epsilon 1	Plce1 NM_019588	1.5
p21 protein (Cdc42/Rac)-activated kinase 7	Pak7 NM_172858	1.5
zinc finger CCCH type containing 7B	Zc3h7b NM_001081016	1.5
apoptosis antagonizing transcription factor	Aatf NM_019816	1.5
keratin 1	Krt1 NM_008473	1.5
WD repeat domain, phosphoinositide interacting 1	Wipi1 NM_145940	1.5
GRAM domain containing 1A	Gramd1a NM_027898	1.5
cysteine-rich with EGF-like domains 2	Creld2 NM_029720	1.5
coiled coil domain containing 88A	Ccdc88a NM_176841	1.5
RIKEN cDNA 1700020N15 gene	Gm6812 NM_001098842	1.5
protein-kinase, interferon-inducible double stranded RNA dependent inhibitor, repressor of (P58 repressor)	Prkrir NM_028410	1.5
frizzled-related protein	Frzb NM_011356	1.5
myopalladin	Mypn NM_182992	1.5
ring finger protein 216	Rnf216 NM_080561	1.5
BCL2-associated athanogene 3	Bag3 NM_013863	1.5
laminin, alpha 2	Lama2 NM_008481	1.5
iduronate 2-sulfatase	Ids NM_010498	1.5
ATR interacting protein	Atrip NM_172774	1.5
solute carrier family 44, member 2	Slc44a2 NM_152808	1.5
plexin A1	Plxna1 NM_008881	1.5
SRY-box containing gene 13	Sox13 NM_011439	1.5
retinoblastoma 1	Rb1 NM_009029	1.5
nuclear receptor subfamily 4, group A, member 2	Nr4a2 NM_001139509	1.5
cartilage oligomeric matrix protein	Comp NM_016685	1.5
ryanodine receptor 3	Ryr3 BC116740	1.5
fumarylacetoacetate hydrolase domain containing 2A	Fahd2a NM_029629	1.5
MyoD family inhibitor domain containing	Mdfic NM_175088	1.5
carbonic anhydrase 8	Car8 NM_007592	1.5
serine (or cysteine) peptidase inhibitor, clade E, member 1	Serpine1 NM_008871	1.5
potassium voltage-gated channel, subfamily H (eag-related), member 1	Kcnh1 NM_010600	1.5
staphylococcal nuclease and tudor domain containing 1	Snd1 NM_019776	1.5
FCF1 small subunit (SSU) processome component homolog (S. cerevisiae)	Fcf1 NM_028632	1.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
tubulin, beta 6	Tubb6 NM_026473	1.5
ubiquitin specific peptidase 1	Usp1 NM_146144	1.5
importin 8	Ipo8 NM_001081113	1.5
dishevelled, dsh homolog 1 (Drosophila)	Dvl1 NM_010091	1.5
sodium channel, voltage-gated, type VIII, alpha	Scn8a NM_001077499	1.5
ubiquitin-conjugating enzyme E2, J2 homolog (yeast)	Ube2j2 NM_021402	1.5
SH3-domain binding protein 4	Sh3bp4 NM_133816	1.5
F-box protein 8	Fbxo8 NM_015791	1.5
zinc finger protein 652	Zfp652 NM_201609	1.5
sulfatase 1	Sulf1 NM_172294	1.5
DEAD (Asp-Glu-Ala-Asp) box polypeptide 10	Ddx10 NM_029936	1.5
sorting nexin 8	Snx8 NM_172277	1.5
thyroid adenoma associated	Thada NM_183021	1.5
family with sequence similarity 100, member B	Gm7367 NR_003376	1.5
FK506 binding protein 3	Fkbp3 NM_013902	1.5
RIKEN cDNA A830018L16 gene	A830018L16Rik NM_001160369	1.5
ubiquitin domain containing 1	Ubt1 NM_145500	1.5
SEC16 homolog A (S. cerevisiae)	Sec16a NM_153125	1.5
bromodomain containing 1	Brd1 NM_001033274	1.5
C-type lectin domain family 4, member g	Clec4g NM_029465	1.5
syncoilin	Sync NM_023485	1.5
receptor tyrosine kinase-like orphan receptor 1	Ror1 NM_013845	1.5
tubulin polymerization-promoting protein family member 3	Tppp3 NM_026481	1.5
nuclear receptor subfamily 1, group D, member 2	Nr1d2 NM_011584	1.5
mechanistic target of rapamycin (serine/threonine kinase)	Mtor NM_020009	1.5
NLR family, pyrin domain containing 6	Nlrp6 NM_001081389	1.5
zinc finger protein 871	Zfp871 NM_172458	1.5
RIKEN cDNA 1700034F02 gene	1700034F02Rik BC137683	1.5
serine/threonine kinase 38 like	Stk38l NM_172734	1.5
RIKEN cDNA 1110008P14 gene	1110008P14Rik NM_198001	1.5
RNA polymerase II associated protein 2	Rpap2 NM_144911	1.5
CUE domain containing 2	Cuedc2 NM_024192	1.5
Ras association (RalGDS/AF-6) domain family member 2	Rassf2 NM_175445	1.5
SET domain containing (lysine methyltransferase) 8	Setd8 NM_030241	1.5
tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase	Tnks NM_175091	1.5
fibroblast growth factor receptor 1	Fgfr1 NM_010206	1.5
CDC14 cell division cycle 14 homolog B (S. cerevisiae)	Cdc14b NM_172587	1.5
pellino 3	Peli3 NM_172835	1.5
keratin 42	Krt42 NM_212483	1.5
proteasome (prosome, macropain) subunit, beta type 8 (large multifunctional peptidase 7)	Psm8 NM_010724	1.5
presenilin 1	Psen1 NM_008943	1.5
multiple PDZ domain protein	Mpdz NM_010820	1.5
UTP20, small subunit (SSU) processome component, homolog (yeast)	Utp20 NM_175158	1.5
myeloma overexpressed 2	Myeov2 BC147334	1.5
mitochondrial ribosomal protein L52	Mrpl52 NM_026851	1.5
Wolf-Hirschhorn syndrome candidate 1 (human)	Whsc1 NM_001081102	1.5
calcium binding protein 39	Cab39 NM_133781	1.5
DNA segment, Chr 1, ERATO Doi 448, expressed	D1Erd448e ENSMUST00000097783	1.5
cytochrome P450, family 2, subfamily u, polypeptide 1	Cyp2u1 NM_027816	1.5
spermidine synthase	Srm NM_009272	1.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
glycogen synthase kinase 3 alpha	Gsk3a NM_001031667	1.5
matrix metalloproteinase 15	Mmp15 NM_008609	1.5
Sec1 family domain containing 2	Scfd2 NM_001114660	1.5
1-acylglycerol-3-phosphate O-acyltransferase 6 (lysophosphatidic acid acyltransferase, zeta)	Agpat6 NM_018743	1.5
solute carrier organic anion transporter family, member 2a1	Slco2a1 NM_033314	1.5
sorbin and SH3 domain containing 1	Sorbs1 NM_009166	1.5
polyhomeotic-like 3 (Drosophila)	Phc3 NM_153421	1.5
protein kinase C, delta	Prkcd NM_011103	1.5
Unknown	Gm10334 NM_001103153	1.5
placental growth factor	Pgf NM_008827	1.5
optineurin	Optn NM_181848	1.5
sodium channel, voltage-gated, type I, beta	Scn1b NM_011322	1.5
RIKEN cDNA B930041F14 gene	B930041F14Rik ENSMUST00000099265	1.5
transforming growth factor, beta receptor III	Tgfbr3 NM_011578	1.5
ets variant gene 6 (TEL oncogene)	Etv6 NM_007961	1.5
pregnancy upregulated non-ubiquitously expressed CaM kinase	Pnck NM_012040	1.5
suppressor of cytokine signaling 5	Socs5 NM_019654	1.5
DEAD (Asp-Glu-Ala-Asp) box polypeptide 51	Ddx51 NM_027156	1.5
prickle like 1 (Drosophila)	Prickle1 NM_001033217	1.5
expressed sequence AU021092	AU021092 BC150828	1.5
B-cell CLL/lymphoma 9-like	Bcl9l NM_030256	1.5
poly (ADP-ribose) polymerase family, member 6	Parp6 NM_029922	1.5
excision repair cross-complementing rodent repair deficiency, complementation group 3	Ercc3 NM_133658	1.5
heat shock factor 1	Hsf1 NM_008296	1.5
solute carrier family 26 (sulfate transporter), member 2	Slc26a2 NM_007885	1.5
myosin, light chain 12B, regulatory	Myl12b NM_023402	1.5
platelet derived growth factor receptor, beta polypeptide	Pdgfrb NM_001146268	1.5
plasmacytoma variant translocation 1	Pvt1 NR_003368	1.5
transmembrane protein 56	Tmem56 NM_178936	1.5
legumain	Lgmn NM_011175	1.5
adaptor-related protein complex 3, delta 1 subunit	Ap3d1 NM_007460	1.5
RIKEN cDNA 4930408O21 gene	4930408O21Rik BC147551	1.5
RAS protein activator like 2	Rasa2 NM_177644	1.5
septin 14	1700017B05Rik NM_028820	1.5
Unknown	Palm2 NM_172868	1.5
zinc finger protein 758	Zfp758 NM_145484	1.5
SH2B adaptor protein 3	Sh2b3 NM_008507	1.5
solute carrier family 23 (nucleobase transporters), member 2	Slc23a2 NM_018824	1.5
sprouty homolog 2 (Drosophila)	Spry2 NM_011897	1.5
ribosomal RNA processing 8, methyltransferase, homolog (yeast)	Rrp8 NM_025897	1.5
chromodomain helicase DNA binding protein 1	Chd1 NM_007690	1.5
G protein-coupled receptor 113	Gpr113 NM_001014394	1.5
spectrin alpha 2	Spna2 NM_001076554	1.5
kinesin-associated protein 3	Kifap3 NM_010629	1.5
protein tyrosine phosphatase, receptor type, B	Ptprb NM_029928	1.5
sorting nexin 1	Snx1 NM_019727	1.5
interferon stimulated exonuclease gene 20-like 2	Isg20l2 NM_177663	1.5
GC-rich promoter binding protein 1-like 1	Gbp1l1 NM_029868	1.5
synapse defective 1, Rho GTPase, homolog 1 (C. elegans)	Syde1 NM_027875	1.5

Additional Table 2a. Differentially expressed cardiac genes in males compared to females (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Symbol Accession	Fold Change Male/Female
Mid1 interacting protein 1 (gastrulation specific G12-like (zebrafish))	Mid1ip1 NM_026524	1.5
prefoldin 1	Pfdn1 NM_026027	1.5
Unknown	6330442E10Rik BC079613	1.5
WD repeat domain 68	Dcaf7 NM_027946	1.5
kelch-like 18 (Drosophila)	Klhl18 NM_177771	1.5
lethal giant larvae homolog 1 (Drosophila)	Lgl1 NM_001159405	1.5
LIM domain only 2	Lmo2 NM_008505	1.5
ring finger protein 187	Rnf187 AB030190	1.5
Rho guanine nucleotide exchange factor (GEF) 10-like	Arhgef10l NM_172415	1.5
tripartite motif-containing 30	Trim30 NM_009099	1.5
caldesmon 1	Cald1 NM_145575	1.5
expressed sequence C77080	C77080 NM_001033189	1.5
GLIS family zinc finger 2	Glis2 NM_031184	1.5
solute carrier family 4 (anion exchanger), member 4	Slc4a4 NM_018760	1.5
Fc receptor, IgG, low affinity III	Fcgr3 NM_010188	1.5
cleavage stimulation factor, 3' pre-RNA subunit 2	Cstf2 NM_133196	1.5
oxysterol binding protein-like 6	Osbp16 NM_145525	1.5
salivary protein 1	Spt1 NM_009267	1.5
phosphatase and actin regulator 2	Phactr2 NM_001033257	1.5
solute carrier family 4 (anion exchanger), member 3	Slc4a3 NM_009208	1.5
neuropeptide FF receptor 2	Npffr2 NM_133192	1.5
purine-nucleoside phosphorylase 2	Pnp2 NM_001123371	1.5
protein disulfide isomerase associated 3	Pdia3 NM_007952	1.5
disabled homolog 2 (Drosophila)	Dab2 NM_023118	1.5
tumor necrosis factor receptor superfamily, member 13c	Tnfrsf13c NM_028075	1.5
RIKEN cDNA 2010309E21 gene	Fam136a BC103775	1.5
G kinase anchoring protein 1	Gkap1 NM_019832	1.5
RIKEN cDNA B230118H07 gene	B230118H07Rik DQ112092	1.5
prolactin releasing hormone receptor	Prlhr NM_201615	1.5
glutamate receptor interacting protein 2	Grip2 NM_001159507	1.5
nuclear receptor subfamily 5, group A, member 2	Nr5a2 NM_030676	1.5
M-phase phosphoprotein 8	Mphosph8 NM_023773	1.5
RIKEN cDNA 1700011L22 gene	1700011L22Rik ENSMUST00000034109	1.5
WAS/WASL interacting protein family, member 1	Wipf1 NM_153138	1.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
Relatively upregulated in females ≥3-fold		
inactive X specific transcripts	Xist NR_001463	55.6
interleukin 12 receptor, beta 2	Il12rb2 NM_008354	41.7
TBC1 domain family, member 30	Tbc1d30 NM_029057	28.5
renal tumor antigen	Stk30 BC039981	26.1
RIKEN cDNA 2610109H07 gene	2610109H07Rik NM_027426	22.0
Na ⁺ /H ⁺ exchanger domain containing 1	Nhedc1 ENSMUST00000090209	19.9
RIKEN cDNA A430105I19 gene	A430105I19Rik NM_001001982	18.0
RIKEN cDNA 4930488N24 gene	EG635895 NM_001122977	17.6
SPHK1 interactor, AKAP domain containing	Sphkap NM_172430	16.7
zinc finger protein 446	Zfp446 NM_175558	16.4
N-terminal EF-hand calcium binding protein 2	Necab2 NM_054095	14.4
WD repeat domain 51A	Wdr51a NM_027354	13.7
ATP-binding cassette, sub-family A (ABC1), member 17	Abca17 NM_001031621	13.2
matrix metalloproteinase 7	Mmp7 NM_010810	13.0
caudal type homeo box 2	Cdx2 NM_007673	12.9
glycine receptor, alpha 4 subunit	Glr4 NM_010297	12.6
myosin VIIb	Myo7b NM_032394	12.3
solute carrier family 3, member 1	Slc3a1 NM_009205	12.1
keratin 36	Krt36 NR_003957	11.8
predicted gene 10044	Gm10044 ENSMUST00000090634	11.7
Sh3 domain YSC-like 1	Sh3yl1 NM_013709	11.7
BCL2-like 14 (apoptosis facilitator)	Bcl2l14 NM_025778	11.6
villin-like	Vill NM_011700	11.5
integrin, alpha 10	Itga10 NM_001081053	11.2
complement component 1, r subcomponent	C1rb NM_001113356	11.1
T cell receptor associated transmembrane adaptor 1	Trat1 ENSMUST00000099715	10.5
tetratricopeptide repeat domain 21A	Ttc21a NM_028735	10.5
THAP domain containing, apoptosis associated protein 3	Thap3 ENSMUST00000105665	10.2
glutamate receptor, metabotropic 7	Grm7 NM_177328	10.1
collectin sub-family member 10	Colec10 NM_173422	9.7
wingless related MMTV integration site 8b	Wnt8b NM_011720	9.4
deubiquitinating enzyme 2a	Dub2a NM_001001559	9.0
predicted gene 11190	Gm11190 ENSMUST00000068419	9.0
RIKEN cDNA 9130409I23 gene	9130409I23Rik BC147379	8.9
Fanconi anemia, complementation group G	Fancg NM_053081	8.9
L-amino acid oxidase 1	Lao1 NM_133892	8.8
expressed sequence C79407	C79407 BC021832	8.8
RIKEN cDNA 4930506C21 gene	4930506C21Rik AK043779	8.7
similar to dachshous 2 isoform 2	LOC633371 XR_031743	8.6
pyroglutamylated RFamide peptide	Qrfp NM_183424	8.5
purinergic receptor P2X, ligand-gated ion channel, 2	P2rx2 NM_153400	8.5
fibrillin 2	Fbn2 NM_010181	8.4
predicted gene 9920	Gm9920 ENSMUST00000100659	8.3
zinc fingerprotein 618	Zfp618 NM_028326	8.2
CD70 antigen	Cd70 NM_011617	8.2
transmembrane protein 132A	Tmem132a NM_133804	8.2
chemokine (C-X-C motif) ligand 17	Cxcl17 NM_153576	8.2
butyrophilin, subfamily 2, member A2	Btn2a2 NM_175938	8.2
synaptotagmin IX	Syt9 NM_021889	8.1

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
expressed sequence AI428936	AI428936 NM_153577	8.0
growth arrest-specific 2 like 2	Gas2l2 NM_001013759	8.0
HMG box domain containing 4	Hmgxb4 NM_178017	7.8
hyaluronan mediated motility receptor (RHAMM)	Hmmr NM_013552	7.7
zinc finger protein 783	Zfp783 NR_027963	7.7
RIKEN cDNA 9330154K18 gene	9330154K18Rik AK034078	7.7
antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5	Mfi2 NM_013900	7.7
N-acetylated alpha-linked acidic dipeptidase-like 1	Naaladl1 NM_001009546	7.6
intraflagellar transport 140 homolog (Chlamydomonas)	Ift140 NM_134126	7.6
sodium channel, voltage-gated, type III, beta	Scn3b NM_153522	7.5
coiled-coil domain containing 78	Ccdc78 ENSMUST00000095500	7.3
hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 2	Hsd3b2 NM_153193	7.3
tumor necrosis factor (ligand) superfamily, member 14	Tnfsf14 NM_019418	7.1
suppression inducing transmembrane adaptor 1	Sit1 NM_019436	7.1
expressed sequence AA467197	AA467197 ENSMUST00000047498	7.0
mannosidase, endo-alpha-like	Maneal NM_001007573	7.0
nuclear receptor subfamily 1, group H, member 5	Nr1h5 NM_198658	7.0
chitinase like protein 2	Bclp2 NM_001080816	7.0
Fraser syndrome 1 homolog (human)	Fras1 NM_175473	6.9
cDNA sequence AY036118	AY036118 AY036118	6.9
S100 calcium binding protein A3	S100a3 NM_011310	6.8
RIKEN cDNA 1700011A15 gene	1700011A15Rik BC048463	6.7
olfactory receptor 631	Olfr631 NM_146959	6.6
zinc finger CCCH type containing 12A	Zc3h12a NM_153159	6.6
Opa interacting protein 5	Oip5 NM_001042653	6.6
zinc finger protein 354B	Zfp354b NM_013744	6.6
desmoglein 4	Dsg4 NM_181564	6.6
Unknown	LOC100044795 XM_001473515	6.5
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 14	Adamts14 NM_001081127	6.5
transmembrane protease, serine 11f	Tmprss11f NM_178730	6.4
Unknown	40427 ENSMUST00000053456	6.4
predicted gene 12541	Gm12541 ENSMUST00000068009	6.4
poliovirus receptor-related 4	Pvr14 NM_027893	6.4
predicted gene 853	Gm853 BC147395	6.4
WD repeat domain 52	Wdr52 BC100518	6.4
sphingomyelin phosphodiesterase, acid-like 3B	Smpdl3b NM_133888	6.4
nephronectin	Npnt NM_033525	6.3
Down syndrome cell adhesion molecule	Dscam NM_031174	6.3
olfactory receptor 521	Olfr521 NM_146356	6.3
calcium channel, voltage-dependent, beta 1 subunit	Cacnb1 NM_145121	6.3
cDNA sequence BC055111	BC055111 NM_183182	6.2
calcyphosphine 2	Caps2 NM_178278	6.2
mucolipin 3	Mcoln3 NM_134160	6.2
small nucleolar RNA, C/D box 82	Snord82 NR_002851	6.2
kinesin family member 20B	Kif20b NM_183046	6.2
Unknown	1700007N14Rik ENSMUST00000111175	6.0
killer cell lectin-like receptor subfamily K, member 1	Klrk1 NM_033078	6.0
UDP glucuronosyltransferase 2 family, polypeptide A3	Ugt2a3 NM_028094	6.0

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
fractured callus expressed transcript 1	Fxc1 ENSMUST00000084778	6.0
G protein-coupled receptor kinase 1	Grk1 NM_011881	6.0
aristaless-like homeobox 3	Alx3 NM_007441	5.8
NLR family, pyrin domain containing 4D	Nlrp4d AY596195	5.8
BAI1-associated protein 3	Baiap3 BC158116	5.8
fibroblast growth factor receptor 4	Fgfr4 NM_008011	5.8
HAUS augmin-like complex, subunit 1	Haus1 NM_146089	5.8
SRY-box containing gene 15	Sox15 NM_009235	5.7
IQ motif containing K	Iqck NM_001081446	5.7
olfactory receptor 1125	Olfr1125 NM_147028	5.7
RIKEN cDNA 4930555F03 gene	4930555F03Rik ENSMUST00000033963	5.7
docking protein 5	Dok5 NM_029761	5.6
formiminotransferase cyclodeaminase	Ftcd NM_080845	5.6
RIKEN cDNA 2610028A01 gene	2610028A01Rik NM_028228	5.6
aspartoacylase	Aspa NM_023113	5.5
hepatitis A virus cellular receptor 1	Havcr1 NM_134248	5.5
family with sequence similarity 3, member B	Fam3b NM_020622	5.5
PDZ domain containing 3	Pdzd3 NM_133226	5.5
predicted gene 13089	Gm13089 ENSMUST00000073532	5.5
Rpgrip1-like	Rpgrip1l NM_173431	5.5
BarH-like 1 (Drosophila)	Barhl1 ENSMUST00000113847	5.5
amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 4	Als2cr4 NM_001033449	5.4
3-hydroxyanthranilate 3,4-dioxygenase	Hao NM_025325	5.4
tolloid-like 2	Tll2 NM_011904	5.4
cytochrome P450, family 17, subfamily a, polypeptide 1	Cyp17a1 NM_007809	5.4
fibronectin type 3 and ankyrin repeat domains 1	Fank1 ENSMUST00000065359	5.3
M phase phosphoprotein 6	Mphosph6 NM_026758	5.3
RIKEN cDNA 2410089E03 gene	2410089E03Rik ENSMUST00000053264	5.2
cholinergic receptor, nicotinic, gamma polypeptide	Chrng NM_009604	5.2
protease, serine, 35	Prss35 BC075675	5.2
solute carrier family 24, member 5	Slc24a5 NM_175034	5.2
RIKEN cDNA B830028B13 gene	B830028B13Rik NM_001143802	5.2
cholinergic receptor, nicotinic, beta polypeptide 3	Chrn3 NM_173212	5.1
janus kinase and microtubule interacting protein 2	Jakmip2 ENSMUST00000097589	5.1
solute carrier family 39 (zinc transporter), member 12	Slc39a12 NM_001012305	5.1
histidine-rich glycoprotein	Hrg NM_053176	5.0
potassium voltage-gated channel, subfamily Q, member 5	Kcnq5 NM_023872	5.0
carboxypeptidase A6	Cpa6 NM_177834	5.0
Unknown	LOC100047557 XM_001478429	4.9
progesterone and adipoQ receptor family member V	Paqr5 NM_028748	4.9
RIKEN cDNA 2010110P09 gene	2010110P09Rik NM_027363	4.9
cDNA sequence BC030500	BC030500 BC030500	4.9
vang-like 2 (van gogh, Drosophila)	Vangl2 NM_033509	4.8
RIKEN cDNA 4921530D09 gene	4921530D09Rik ENSMUST00000028309	4.8
encoding X-linked lymphocyte-regulated 3C	Xlr3c NM_011727	4.8
l(3)mbt-like 4 (Drosophila)	L3mbtl4 BC147119	4.8
RIKEN cDNA 6720416L17 gene	6720416L17Rik ENSMUST00000100000	4.8
potassium voltage-gated channel, shaker-related subfamily, beta member 3	Kcnab3 NM_010599	4.8
F-box and leucine-rich repeat protein 13	Fbxl13 NM_177076	4.8
family with sequence similarity 62 (C2 domain containing), member C	Esyt3 NM_177775	4.8

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
thioredoxin domain containing 2 (spermatzoa)	Txndc2 NM_001146002	4.7
glycogen synthase 2	Gys2 NM_145572	4.7
transmembrane protein 108	Tmem108 NM_178638	4.7
zinc finger CCCH type containing 12D	Zc3h12d NM_172785	4.7
cyclin-dependent kinase 3	Cdk3 NR_004853	4.7
stabilin 2	Stab2 NM_138673	4.7
stem-loop binding protein	Slbp ENSMUST00000075670	4.7
anoctamin 4	Ano4 NM_178773	4.7
tryptase alpha/beta 1	Tpsab1 NM_031187	4.7
sex hormone binding globulin	Shbg NM_011367	4.7
potassium voltage-gated channel, subfamily Q, member 4	Kcnq4 NM_001081142	4.7
sodium channel, voltage-gated, type I, alpha	Scn1a NM_018733	4.6
SHC (Src homology 2 domain containing) family, member 4	Shc4 NM_199022	4.6
acyl-CoA synthetase medium-chain family member 4	Acsm4 NM_178414	4.6
chitinase, acidic	Chia NM_023186	4.6
connector enhancer of kinase suppressor of Ras 2	Cnksr2 NM_177751	4.6
interferon, alpha 14	Ifna14 BC120722	4.6
Purkinje cell protein 4	Pcp4 NM_008791	4.6
collagen and calcium binding EGF domains 1	Ccbe1 NM_178793	4.5
renin 1 structural	Ren1 NM_031192	4.5
tubulin tyrosine ligase-like family, member 3	TtlI3 NM_133923	4.5
RNA binding motif protein 47	Rbm47 NM_178446	4.5
leukocyte cell-derived chemotaxin 2	Lect2 NM_010702	4.5
unkempt homolog (Drosophila)	Unk NM_172569	4.5
small nuclear ribonucleoprotein 35 (U11/U12)	Snrnp35 NM_029532	4.5
matrix metalloproteinase 10	Mmp10 NM_019471	4.5
DNA segment, Chr 5, ERATO Doi 577, expressed	D5Ert577e NM_177187	4.4
Unknown	Gm16367 BC099967	4.4
Unknown	Gm7792 ENSMUST00000101023	4.4
B-box and SPRY domain containing	Bspry NM_138653	4.4
predicted gene 10637	Gm10637 ENSMUST00000098528	4.4
tau tubulin kinase 1	Ttbk1 NM_001162864	4.4
RIKEN cDNA 1700041C02 gene	Ccdc30 NM_029286	4.4
cytochrome P450, family 1, subfamily a, polypeptide 1	Cyp1a1 NM_009992	4.3
predicted gene 9968	Gm9968 ENSMUST00000068934	4.3
predicted gene, EG624120	Gm16401 ENSMUST00000072800	4.3
adhesion molecule with Ig like domain 3	Amigo3 NM_177275	4.3
NEL-like 2 (chicken)	Nell2 NM_016743	4.3
similar to Zinc finger protein 267 (Zinc finger protein HZF2)	Gm5581 ENSMUST00000072940	4.3
Fras1 related extracellular matrix protein 2	Frem2 NM_172862	4.3
peptidylprolyl isomerase (cyclophilin) like 5	Ppil5 NM_001081406	4.3
DNA replication helicase 2 homolog (yeast)	Dna2 NM_177372	4.3
solute carrier family 25, member 35	Slc25a35 ENSMUST00000018884	4.2
predicted gene 11435	Gm11435 NM_001045543	4.2
carcinoembryonic antigen-related cell adhesion molecule 16	Ceacam16 NM_001033419	4.2
solute carrier family 16 (monocarboxylic acid transporters), member 8	Slc16a8 NM_020516	4.1
a disintegrin and metalloproteinase domain 6A	Adam6a NM_174885	4.1
family with sequence similarity 115, member C	Fam115c AK131169	4.1
T cell receptor alpha variable 9N-3	Trav9n-3 XM_001479640	4.1
homeo box C4	Hoxc4 NM_013553	4.1

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
BH3 interacting domain death agonist	Bid NM_007544	4.1
RIKEN cDNA 4932411G14 gene	4932411G14Rik NM_177711	4.1
Unknown	Higd1c NM_001002900	4.1
predicted gene 14340	Gm14340 ENSMUST00000098982	4.1
RIKEN cDNA F630111L10 gene	F630111L10Rik AK170843	4.1
zinc finger and SCAN domain containing 5B	Zscan5b NM_133204	4.1
acetoacetyl-CoA synthetase	Aacs NM_030210	4.1
transglutaminase 7	Tgm7 NM_001160424	4.0
cytochrome P450, family 4, subfamily f, polypeptide 13	Cyp4f13 NM_130882	4.0
small Cajal body-specific RNA 8	Scarna8 AF357402	4.0
MARVEL (membrane-associating) domain containing 3	Marveld3 NM_028584	4.0
melanoma associated antigen (mutated) 1-like 1	Mum1l1 ENSMUST00000113045	4.0
matrix metalloproteinase 12	Mmp12 NM_008605	4.0
synaptonemal complex protein 3	Sycp3 NM_011517	4.0
acyl-CoA thioesterase 12	Acot12 NM_028790	4.0
transient receptor potential cation channel, subfamily C, member 2	Trpc2 ENSMUST00000106950	3.9
galactose-3-O-sulfotransferase 3	Gal3st3 NM_001024717	3.9
transient receptor potential cation channel, subfamily M, member 3	Trpm3 NM_177341	3.9
ferric-chelate reductase 1	Frrs1 NM_001113478	3.9
cathepsin R	Ctsr NM_020284	3.9
zinc finger protein 839	Zfp839 NM_028365	3.9
RIKEN cDNA 1300002K09 gene	1300002K09Rik NM_028788	3.9
hemogen	Hemgn NM_053149	3.9
ferredoxin reductase	Fdxr NM_007997	3.9
POU domain, class 6, transcription factor 2	Pou6f2 NM_175006	3.9
signal peptide, CUB domain, EGF-like 3	Scube3 NM_001004366	3.9
protein phosphatase 4, regulatory subunit 4	Ppp4r4 NM_028980	3.8
RIKEN cDNA C630004L07 gene	C630004L07Rik AK049864	3.8
neurexin I	Nrxn1 NM_020252	3.8
RIKEN cDNA 1700045I19 gene	1700045I19Rik NR_003640	3.8
islet cell autoantigen 1-like	Ica1l NM_027407	3.8
WAP four-disulfide core domain 10	Wfdc10 DQ437333	3.8
vesicle-associated membrane protein 1	Vamp1 NM_009496	3.8
RIKEN cDNA D430042O09 gene	D430042O09Rik AK122309	3.8
cytochrome P450, family 7, subfamily b, polypeptide 1	Cyp7b1 NM_007825	3.8
Unknown	Gm2889 XR_032134	3.8
fucosyltransferase 7	Fut7 NM_013524	3.8
RNA, Y3 small cytoplasmic (associated with Ro protein)	Rny3 NR_024202	3.8
zinc finger, SWIM domain containing 2	Zswim2 NM_027964	3.8
predicted gene 1631	Gm1631 NM_201366	3.8
WD repeat domain 8	Wdr8 NM_021499	3.8
neurogenic differentiation 6	Neurod6 NM_009717	3.8
glycolipid transfer protein domain containing 1	Gltpd1 NM_024472	3.8
forkhead box P2	Foxp2 NM_053242	3.8
protein phosphatase 1, regulatory (inhibitor) subunit 16B	Ppp1r16b ENSMUST00000052927	3.8
nitric oxide synthase 1, neuronal	Nos1 NM_008712	3.7
RIKEN cDNA B230216G23 gene	B230216G23Rik ENSMUST00000088263	3.7
carbamoyl-phosphate synthetase 1	Cps1 BC067211	3.7
pre T-cell antigen receptor alpha	Ptcra NM_011195	3.7
hexamethylene bis-acetamide inducible 2	Hexim2 NM_027658	3.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
ankyrin repeat domain 53	Ankrd53 NM_029245	3.7
signal transducer and activator of transcription 4	Stat4 NM_011487	3.7
complement component 1, q subcomponent-like 2	C1ql2 NM_207233	3.7
amyloid beta (A4) precursor protein-binding, family A, member 2	Apba2 NM_007461	3.7
predicted gene 5840	Gm5840 NM_001080811	3.7
GIN5 complex subunit 1 (Psf1 homolog)	Gins1 ENSMUST00000028948	3.6
secretory leukocyte peptidase inhibitor	Slpi NM_011414	3.6
alkB, alkylation repair homolog 4 (E. coli)	Alkbh4 ENSMUST00000041100	3.6
RIKEN cDNA 4930432K21 gene	4930432K21Rik BC075658	3.6
Unknown	Gm5098 ENSMUST00000104904	3.6
Williams-Beuren syndrome chromosome region 17 homolog (human)	Wbscr17 NM_145218	3.6
RIKEN cDNA 4933434I20 gene	4933434I20Rik NM_026233	3.6
TNF receptor-associated factor 3	Traf3 NM_011632	3.6
PDZ and LIM domain 2	Pdlim2 NM_145978	3.6
cytoplasmic polyadenylated homeobox	Cphx NM_175342	3.6
C-type lectin domain family 2, member e	Clec2e NM_153506	3.6
prostaglandin D2 synthase 2, hematopoietic	Hpgds NM_019455	3.6
complement component 8, gamma polypeptide	C8g NM_027062	3.6
solute carrier family 7 (cationic amino acid transporter, y+ system), member 4	Slc7a4 NM_144852	3.6
chemokine (C-C motif) receptor 10	Ccr10 NM_007721	3.6
tripartite motif-containing 17	Trim17 NM_031172	3.6
RIKEN cDNA 5730460C07 gene	5730460C07Rik ENSMUST00000081193	3.5
kinesin family member 6	Kif6 AK083760	3.5
ENTH domain containing 1	Enthd1 ENSMUST00000096347	3.5
RIKEN cDNA 4930512M02 gene	4930512M02Rik ENSMUST00000077905	3.5
RIKEN cDNA 1700042B14 gene	1700042B14Rik BC100353	3.5
phenylalanine hydroxylase	Pah NM_008777	3.5
microtubule associated serine/threonine kinase 1	Mast1 NM_019945	3.5
TEA domain family member 2	Tead2 NM_011565	3.5
DnaJ (Hsp40) homolog, subfamily C, member 6	Dnajc6 ENSMUST00000038207	3.5
zinc finger protein 112	Zfp112 NM_021307	3.5
C-type lectin domain family, member I	Clec2l NM_001101507	3.5
galanin	Gal NM_010253	3.5
RIKEN cDNA 1700094C09 gene	1700094C09Rik BC048522	3.5
hypothetical protein LOC100045792	Ect2l ENSMUST00000095817	3.5
RIKEN cDNA 1700025H01 gene	1700025H01Rik ENSMUST00000061675	3.5
regulator of G protein signaling 7	Rgs7 NM_011880	3.5
runt-related transcription factor 1	Runx1t1 NM_001111027	3.5
Rho-guanine nucleotide exchange factor	Rgnef NM_012026	3.5
platelet-derived growth factor receptor-like	Pdgfrl NM_026840	3.4
non-metastatic cells 4, protein expressed in	Nme4 NM_019731	3.4
mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme C (putative)	Mgat4c NM_001162369	3.4
dpy-19-like 2 (C. elegans)	Dpy19l2 AK029497	3.4
cDNA sequence BC027072	BC027072 BC046516	3.4
ectodysplasin-A	Eda NM_010099	3.4
NK2 transcription factor related, locus 6 (Drosophila)	Nkx2-6 NM_010920	3.4
transmembrane protein 190	Tmem190 ENSMUST00000013235	3.4
dynein, axonemal, heavy chain 14	Dnahc14 ENSMUST00000060610	3.4

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
kinesin family member 23	Kif23 NM_024245	3.4
RIKEN cDNA 2900083I11 gene	2900083I11Rik NM_021403	3.4
predicted gene 5708	Gm5708 XR_032892	3.4
basic leucine zipper transcription factor, ATF-like 2	Batf2 NM_028967	3.4
helicase, POLQ-like	Helq NM_001081107	3.3
RIKEN cDNA 9130008F23 gene	9130008F23Rik NM_027834	3.3
sodium channel, nonvoltage-gated 1 beta	Scnn1b NM_011325	3.3
hemolytic complement	Hc NM_010406	3.3
nuclear receptor subfamily 1, group I, member 3	Nr1i3 NM_009803	3.3
coagulation factor C homolog (Limulus polyphemus)	Coch NM_007728	3.3
RIKEN cDNA 4930403N07 gene	4930403N07Rik ENSMUST00000021494	3.3
cytochrome P450, family 2, subfamily d, polypeptide 10	Cyp2d10 NM_010005	3.3
RIKEN cDNA B230315N10 gene	B230315N10Rik BC040349	3.3
BAH domain and coiled-coil containing 1	Bahcc1 NM_198423	3.3
A kinase (PRKA) anchor protein 3	Akap3 NM_009650	3.3
RIKEN cDNA 2810422O20 gene	2810422O20Rik BC050143	3.3
olfactory receptor 1216	Olf1216 NM_146893	3.3
RAS-related C3 botulinum substrate 3	Rac3 NM_133223	3.3
serine (or cysteine) peptidase inhibitor, clade B, member 5	Serp1b5 NM_009257	3.3
Eph receptor A5	Epha5 NM_007937	3.3
fibroblast growth factor receptor substrate 3	Frs3 NM_144939	3.3
parathyroid hormone 2 receptor	Pth2r NM_139270	3.3
phosphoinositide-3-kinase, regulatory subunit 5, p101	Pik3r5 NM_177320	3.3
4-nitrophenylphosphatase domain and non-neuronal SNAP25-like protein homolog 1 (C. elegans)	Nipsnap1 NM_008698	3.3
dolichyl-phosphate mannosyltransferase polypeptide 3	Dpm3 BC037761	3.3
stathmin-like 3	Stmn3 NM_009133	3.3
histocompatibility 2, M region locus 2	H2-M2 NM_008204	3.2
RIKEN cDNA D430018E03 gene	D430018E03Rik ENSMUST00000014133	3.2
RIKEN cDNA 4930404A10 gene	4930404A10Rik NM_029105	3.2
Unknown	Gm5188 ENSMUST00000037962	3.2
Rho guanine nucleotide exchange factor (GEF) 1	Arhgef1 NM_001130150	3.2
solute carrier family 25, member 28	Slc25a28 NM_145156	3.2
cDNA sequence BC024139	BC024139 NM_001142968	3.2
carcinoembryonic antigen-related cell adhesion molecule	Ceacam3 ENSMUST00000108491	3.2
late cornified envelope 1B	Lce1b NM_026822	3.2
glial cells missing homolog 1 (Drosophila)	Gcm1 NM_008103	3.2
collagen, type IV, alpha 6	Col4a6 NM_053185	3.2
zona pellucida glycoprotein 3	Zp3 NM_011776	3.2
small nucleolar RNA host gene 11 (non-protein coding)	Snhg11 NM_175692	3.2
neural cell adhesion molecule 2	Ncam2 NM_001113208	3.2
transmembrane protease, serine 9	Tmprss9 NM_001081688	3.2
coiled-coil domain containing 120	Ccdc120 NM_207202	3.2
musculin	Msc NM_010827	3.2
Fas apoptotic inhibitory molecule 2	Faim2 NM_028224	3.2
ets variant gene 3-like	Etv3l XM_909234	3.2
retinol dehydrogenase 1 (all trans)	Rdh1 NM_080436	3.2
family with sequence similarity 83, member F	Fam83f NM_145986	3.2
predicted gene 10785	Gm10785 ENSMUST00000114029	3.2
GLI-Kruppel family member GLI1	Gli1 NM_010296	3.2

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
RIKEN cDNA 1700030J22 gene	1700030J22Rik BC100501	3.1
cyclic nucleotide gated channel beta 1	Cngb1 BC045114	3.1
GTP binding protein 2	Gtpbp2 NM_019581	3.1
acyl-coenzyme A amino acid N-acyltransferase 2	Acnat2 NM_145368	3.1
trichoplein, keratin filament binding	Tchp NM_029992	3.1
carboxypeptidase Z	Cpz NM_153107	3.1
RIKEN cDNA 4930564C03 gene	4930564C03Rik ENSMUST00000052701	3.1
cyclic nucleotide gated channel alpha 3	Cnga3 NM_009918	3.1
glycerol kinase-like 1	Gykl1 NM_010293	3.1
contactin 2	Cntn2 NM_177129	3.1
inter-alpha trypsin inhibitor, heavy chain 3	Itih3 NM_008407	3.1
threonine aldolase 1	Tha1 NM_027919	3.1
Bcl2-like 10	Bcl2l10 NM_013479	3.1
family with sequence similarity 176, member B	Fam176b BC029204	3.1
Gm4833	Gm4833 XR_031272	3.1
toll-like receptor adaptor molecule 1	Ticam1 NM_174989	3.1
discs, large (Drosophila) homolog-associated protein 5	Dlgap5 NM_144553	3.1
Unknown	BC027582 BC027582	3.1
epithelial membrane protein 3	Emp3 NM_010129	3.1
death-associated protein kinase 2	Dapk2 NM_010019	3.1
WD repeat domain 63	Wdr63 NM_172864	3.0
ceroid lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeyer-Vogt disease)	Cln3 NM_001146311	3.0
vomeroneasal 2, receptor 110	Vmn2r110 NM_001104572	3.0
RIKEN cDNA 9430015G10 gene	9430015G10Rik NM_177205	3.0
bruno-like 4, RNA binding protein (Drosophila)	Brunol4 NM_001146292	3.0
mucin 6, gastric	Muc6 NM_181729	3.0
glucagon receptor	Gcgr NM_008101	3.0
dynein, axonemal, heavy chain 2	Dnahc2 NM_001081330	3.0
reproductive homeobox 12	Rhox12 NM_001025083	3.0
receptor-interacting serine-threonine kinase 4	Ripk4 NM_023663	3.0
acyl-CoA thioesterase 3	Acot3 NM_134246	3.0
olfactory marker protein	Omp NM_011010	3.0
RIKEN cDNA 4930471G03 gene	4930471G03Rik NR_015571	3.0
RNA binding motif protein 4	Rbm4 NM_009032	3.0
lanosterol synthase	Lss NM_146006	3.0
ethanol induced 1	Etohi1 ENSMUST00000098999	3.0
grainyhead-like 1 (Drosophila)	Grhl1 NM_001161406	3.0
RAB4B, member RAS oncogene family	Rab4b NM_029391	3.0
tyrosine aminotransferase	Tat NM_146214	3.0
FERM domain containing 7	Frmd7 ENSMUST00000060650	3.0
cysteine-rich protein 3	Crip3 NM_181664	3.0
inhibitor of DNA binding 4	Id4 NM_031166	3.0
a disintegrin and metallopeptidase domain 3 (cyritestin)	Adam3 NM_009619	3.0
predicted gene 1467	Gm1467 XM_357906	3.0
crumbs homolog 1 (Drosophila)	Crb1 NM_133239	3.0
Unknown	C130092O11Rik AK173231	3.0
bromodomain and WD repeat domain containing 3	Brwd3 NM_001081477	3.0
RIKEN cDNA E230008N13 gene	E230008N13Rik ENSMUST00000043958	3.0
PARK2 co-regulated	Pacrg NM_027032	3.0
DSN1, MIND kinetochore complex component, homolog (S. cerevisiae)	Dsn1 NM_025853	3.0

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
Relatively upregulated in females ≥2.5 - fold		
interleukin 17F	Il17f NM_145856	2.9
angiotensin I converting enzyme (peptidyl-dipeptidase A) 2	Ace2 NM_001130513	2.9
retinol dehydrogenase 7	Rdh7 NM_001150749	2.9
human immunodeficiency virus type I enhancer binding protein 3	Hivep3 NM_010657	2.9
RIKEN cDNA 2900011O08 gene	2900011O08Rik BC022741	2.9
protein tyrosine phosphatase, non-receptor type 13	Ptpn13 NM_011204	2.9
RIKEN cDNA 1700028J19 gene	1700028J19Rik ENSMUST00000037220	2.9
dihydropyrimidinase	Dpys NM_022722	2.9
Parkinson disease 7 domain containing 1	Pddc1 NM_172116	2.9
reprimin, TP53 dependent G2 arrest mediator candidate	Rprm NM_023396	2.9
MAM domain containing 4	Mamdc4 NM_001081199	2.9
receptor (TNFRSF)-interacting serine-threonine kinase 2	Ripk2 NM_138952	2.9
zinc finger, DHHC domain containing 6	Zdhc6 NM_001033573	2.9
ral guanine nucleotide dissociation stimulator-like 3	Rgl3 NM_023622	2.9
IQ motif containing G	Iqcg NM_178378	2.9
B-cell leukemia/lymphoma 3	Bcl3 NM_033601	2.9
seminal vesicle antigen-like 2	Sval2 NM_032542	2.9
RIKEN cDNA 1700029F09 gene	1700029F09Rik BC119032	2.9
predicted gene 9888	Gm9888 ENSMUST000000064735	2.9
junctional sarcoplasmic reticulum protein 1	Jsrp1 NM_028001	2.9
distal-less homeobox 6	Dlx6 NM_010057	2.9
pleckstrin and Sec7 domain containing 2	Psd2 NM_028707	2.9
Ca ²⁺ -dependent secretion activator	Cadps NM_012061	2.9
NADH-ubiquinone oxidoreductase chain 4L	ND4L ENSMUST000000084013	2.9
chemokine (C-X-C motif) ligand 10	Cxcl10 NM_021274	2.9
transmembrane protein 60	Tmem60 NM_177601	2.9
roporin, rhophilin associated protein 1	Ropn1 NM_030744	2.9
Unknown	Fam38b2 ENSMUST000000046860	2.9
matrix metalloproteinase 8	Mmp8 NM_008611	2.9
gastrokin 1	Gkn1 NM_025466	2.9
phospholipase D family, member 5	Pld5 NM_176916	2.9
transmembrane protein 184a	Tmem184a NM_001161548	2.9
ubiquilin 3	Ubqln3 NM_198623	2.8
predicted gene 10535	Gm10535 ENSMUST000000097567	2.8
zinc finger and BTB domain containing 5	Zbtb5 NM_173399	2.8
kelch-like 25 (Drosophila)	Klhl25 NM_029652	2.8
chromatin modifying protein 4C	Chmp4c NM_025519	2.8
ELOVL family member 6, elongation of long chain fatty acids (yeast)	Elovl6 BC098492	2.8
homeo box A2	Hoxa2 NM_010451	2.8
napsin A aspartic peptidase	Napsa NM_008437	2.8
defensin beta 23	Defb23 NM_001037933	2.8
CD33 antigen	Cd33 AK046303	2.8
potassium channel tetramerisation domain containing 19	Kctd19 NM_177791	2.8
RAS-like, family 11, member A	Rasl11a NM_026864	2.8
predicted gene 7582	Gm7582 XM_979163	2.8
WNK lysine deficient protein kinase 3	Wnk3 ENSMUST000000096285	2.8
proline rich 5 like	Prr5l NM_001083810	2.8
predicted gene 6577	Gm6577 NM_001037924	2.8

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
CKLF-like MARVEL transmembrane domain containing 5	Cmtm5 NM_026066	2.8
RIKEN cDNA 2810039B14 gene	2810039B14Rik XM_001481291	2.8
RIKEN cDNA E130114P18 gene	E130114P18Rik ENSMUST00000107065	2.8
GPI anchored molecule like protein	Gml ENSMUST00000089693	2.8
RIKEN cDNA 0610010O12 gene	0610010O12Rik BC028765	2.8
RIKEN cDNA A430072C10 gene	A430072C10Rik AK040169	2.8
complement component 1, r subcomponent-like	C1rl NM_181344	2.8
calcium channel, voltage-dependent, beta 3 subunit	Cacnb3 NM_007581	2.8
breast cancer 1	Brca1 NM_009764	2.8
Unknown	4833430A08Rik AK132601	2.8
T-cell acute lymphocytic leukemia 1	Tal1 ENSMUST00000030489	2.8
TD and POZ domain containing 1	Tdpoz1 NM_148949	2.8
zinc finger, DHHC domain containing 23	Zdhhc23 NM_001007460	2.8
myogenic differentiation 1	Myod1 NM_010866	2.8
inhibitor of growth family, member 2	Ing2 NM_023503	2.8
predicted gene 14149	Gm14149 ENSMUST00000087474	2.8
platelet-activating factor receptor	Ptafr NM_001081211	2.8
predicted gene 1082	Gm1082 BC065044	2.8
cDNA sequence BC031441	BC031441 BC094043	2.8
interaction protein for cytohesin exchange factors 1	Ipcef1 NM_001033391	2.8
zinc finger protein 707	Zfp707 NM_001081065	2.7
coagulation factor XIII, beta subunit	F13b NM_031164	2.7
EDAR (ectodysplasin-A receptor)-associated death domain	Edaradd NM_133643	2.7
predicted gene 8304	Gm8304 XM_001477007	2.7
MYST histone acetyltransferase 1	Myst1 NM_026370	2.7
predicted gene 7372	Gm7372 XR_031550	2.7
RIKEN cDNA 2610017I09 gene	2610017I09Rik NR_027826	2.7
CUB and Sushi multiple domains 3	Csmd3 NM_001081391	2.7
RIKEN cDNA 1700007G11 gene	1700007G11Rik BC049770	2.7
pleckstrin and Sec7 domain containing 4	Psd4 NM_177611	2.7
expressed sequence AI593442	AI593442 NM_178906	2.7
arrestin domain containing 5	Arrdc5 NM_029799	2.7
keratin 9	Krt9 NM_201255	2.7
Unknown	Gm9568 XR_032493	2.7
forkhead box B2	Foxb2 NM_008023	2.7
ATP-binding cassette, sub-family C (CFTR/MRP), member 3	Abcc3 NM_029600	2.7
mannose-binding lectin (protein A) 1	Mbl1 NM_010775	2.7
carcinoembryonic antigen-related cell adhesion molecule 12	Ceacam12 NM_026087	2.6
chromodomain protein, Y chromosome-like	Cdyl NM_009881	2.6
gulonolactone (L-) oxidase	Gulo NM_178747	2.6
tripartite motif-containing 50	Trim50 NM_178240	2.6
BCL2-like 2	Bcl2l2 NM_007537	2.6
hedgehog interacting protein-like 1	Hhip1 NM_001044380	2.6
IAP promoted placental gene	Ipp NM_008389	2.6
PDZK1 interacting protein 1	Pdzk1ip1 NM_026018	2.6
CD200 receptor 3	Cd200r3 NM_001128132	2.6
predicted gene 5087	Gm5087 NM_177813	2.6
Unknown	5033413D22Rik ENSMUST00000019955	2.6
anterior gradient homolog 3 (Xenopus laevis)	Agr3 ENSMUST00000042101	2.6
E2F transcription factor 7	E2f7 NM_178609	2.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
Unknown	Gm12528 ENSMUST00000107544	2.6
coiled coil domain containing 28B	Ccdc28b AK031278	2.6
tripartite motif-containing 31	Trim31 NM_146077	2.6
glycoprotein hormones, alpha subunit	Cga NM_009889	2.6
tet oncogene family member 3	Tet3 ENSMUST00000056191	2.6
membrane-spanning 4-domains, subfamily A, member 2	Ms4a2 NM_013516	2.6
kallikrein 1-related peptidase b27	Klk1b27 NM_020268	2.6
RIKEN cDNA 1810063B05 gene	1810063B05Rik NM_174987	2.6
polymerase (DNA-directed), delta 4	Pold4 NM_027196	2.6
phospholipase C, delta 3	Plcd3 NM_152813	2.6
Myb-related transcription factor, partner of profilin	Mypop NM_145579	2.6
thrombopoietin	Thpo NM_009379	2.6
Unknown	LOC100045342 XR_030763	2.6
cation channel, sperm associated 1	Catsper1 NM_139301	2.6
solute carrier family 14 (urea transporter), member 1	Slc14a1 NM_028122	2.6
RIKEN cDNA 1700028K03 gene	1700028K03Rik NM_182745	2.6
family with sequence similarity 65, member C	Fam65c BC130272	2.6
thymidine kinase 1	Tk1 NM_009387	2.6
predicted gene 15623	Gm15623 AK037770	2.6
glucose-fructose oxidoreductase domain containing 2	Gfod2 NM_027469	2.6
Unknown	LOC100045547 XM_001474499	2.6
potassium channel, subfamily V, member 2	Kcnv2 NM_183179	2.6
katanin p60 subunit A-like 2	Katnal2 BC056963	2.6
solute carrier family 35, member F1	Slc35f1 NM_178675	2.6
catechol-O-methyltransferase domain containing 1	Comtd1 NM_026965	2.6
homeo box B8	Hoxb8 NM_010461	2.5
Williams-Beuren syndrome chromosome region 16 homolog (human)	Wbscr16 NM_033572	2.5
guanylate cyclase 1, soluble, beta 2	Gucy1b2 NM_172810	2.5
ADAMTS-like 4	Adamtsl4 NM_144899	2.5
cytochrome P450, family 26, subfamily c, polypeptide 1	Cyp26c1 BC151098	2.5
CUB domain containing protein 2	Cdcp2 NM_172873	2.5
coiled-coil domain containing 39	Ccdc39 NM_026222	2.5
armadillo repeat containing 4	Armc4 NM_001081393	2.5
pleckstrin homology-like domain, family A, member 2	Phlda2 NM_009434	2.5
aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	Aasdhppt NM_026276	2.5
phospholipase C, eta 2	Plch2 NM_175556	2.5
pirin	Pir NM_027153	2.5
glutamate receptor, ionotropic, kainate 3	Grik3 NM_001081097	2.5
WD repeat domain 49	Wdr49 XM_143339	2.5
GAR1 ribonucleoprotein homolog (yeast)	Gar1 NM_026578	2.5
leucine rich repeat containing 46	Lrrc46 NM_027026	2.5
Musashi homolog 1(Drosophila)	Msi1 NM_008629	2.5
cornichon homolog 2 (Drosophila)	Cnih2 NM_009920	2.5
predicted gene 757	Gm757 BC147426	2.5
family with sequence similarity 129, member C	Fam129c ENSMUST00000073799	2.5
RIKEN cDNA A630038E17 gene	A630038E17Rik BC111819	2.5
deubiquitinating enzyme 1	Dub1 NM_007887	2.5
RIKEN cDNA 1700040I03 gene	1700040I03Rik BC115452	2.5
fibroblast growth factor 4	Fgf4 NM_010202	2.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
contactin associated protein-like 5B	Ctnap5b NM_172851	2.5
calcium channel, voltage-dependent, gamma subunit 7	Cacng7 NM_133189	2.5
WD repeat domain 16	Wdr16 NM_027963	2.5
serine (or cysteine) peptidase inhibitor, clade B (ovalbumin), member 12	Serpib12 NM_027971	2.5
epithelial splicing regulatory protein 1	Esrp1 NM_194055	2.5
serine (or cysteine) peptidase inhibitor, clade A, member 3B	Serpina3b NM_173024	2.5
zinc finger, FYVE domain containing 28	Zfyve28 BC042774	2.5
nudix (nucleoside diphosphate linked moiety X)-type motif 18	Nudt18 BC036718	2.5
NudC domain containing 2	Nudcd2 NM_026023	2.5
tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	Tnfrsf11b NM_008764	2.5
RIKEN cDNA 2610301B20 gene	2610301B20Rik NM_026005	2.5
kinesin family member 17	Kif17 NM_010623	2.5
nicotinamide nucleotide adenyltransferase 2	Nmnat2 NM_175460	2.5
RIKEN cDNA 3110070M22 gene	3110070M22Rik NR_027974	2.5
SRY-box containing gene 5	Sox5 NM_011444	2.5
cyclin G2	Ccng2 NM_007635	2.5
tachykinin receptor 3	Tacr3 NM_021382	2.5
hepatitis A virus cellular receptor 2	Havcr2 NM_134250	2.5
phosphodiesterase 3B, cGMP-inhibited	Pde3b NM_011055	2.5
engulfment and cell motility 3, ced-12 homolog (C. elegans)	Elmo3 NM_172760	2.5
RIKEN cDNA 2700097O09 gene	2700097O09Rik BC056967	2.5
aquaporin 2	Aqp2 NM_009699	2.5
GULP, engulfment adaptor PTB domain containing 1	Gulp1 NM_028450	2.5
mitogen-activated protein kinase kinase kinase 9	Map3k9 ENSMUST00000035987	2.5
protein phosphatase 1J	Ppm1j NM_027982	2.5
predicted gene 10742	Gm10742 ENSMUST00000099198	2.5
cytidine deaminase	Cda NM_028176	2.5
achaete-scute complex homolog 1 (Drosophila)	Ascl1 NM_008553	2.5
potassium inwardly-rectifying channel, subfamily J, member 10	Kcnj10 NM_001039484	2.5
immunoglobulin superfamily, member 9B	Igsf9b NM_001129787	2.5
Relatively upregulated in females ≥2-fold		
chromobox homolog 8 (Drosophila Pc class)	Cbx8 NM_013926	2.4
expressed sequence AU017193	AU017193 ENSMUST00000088076	2.4
DNA segment, Chr 1, Pasteur Institute 1	D1Pas1 NM_033077	2.4
retinol dehydrogenase 14 (all-trans and 9-cis)	Rdh14 NM_023697	2.4
phosphoprotein associated with glycosphingolipid microdomains 1	Pag1 NM_053182	2.4
expressed sequence AW822252	AW822252 AK082553	2.4
dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 3	Dyrk3 NM_145508	2.4
predicted gene 7691	Gm7691 XM_001473789	2.4
CKLF-like MARVEL transmembrane domain containing 8	Cmtm8 NM_027294	2.4
predicted gene 4977	Gm4977 XR_032517	2.4
meiosis-specific nuclear structural protein 1	Mns1 NM_008613	2.4
UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 3	B4galt3 NM_020579	2.4
general transcription factor II A, 2	Gtf2a2 NM_001039519	2.4
RIKEN cDNA 1700013D24 gene	1700013D24Rik BC120816	2.4
sorting nexin 10	Snx10 NM_028035	2.4
predicted gene 4063	Gm4063 XR_034248	2.4
slit homolog 1 (Drosophila)	Slit1 NM_015748	2.4
RIKEN cDNA 1810007M14 gene	1810007M14Rik NM_026110	2.4
retinaldehyde binding protein 1-like 1	Rlbp1l1 NM_028940	2.4

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
polymerase (DNA directed), iota	Poli NM_011972	2.4
PITPNM family member 3	Pitpnm3 NM_001024927	2.4
forkhead box G1	Foxg1 ENSMUST00000110746	2.4
neuronatin	Nnat AB004048	2.4
solute carrier family 6 (neurotransmitter transporter, dopamine), member 3	Slc6a3 NM_010020	2.4
acylphosphatase 2, muscle type	Acyp2 NM_029344	2.4
CD8 antigen, alpha chain	Cd8a NM_001081110	2.4
RIKEN cDNA E230019M04 gene	E230019M04Rik BC119078	2.4
RIKEN cDNA 2810021G02 gene	2810021G02Rik NM_001162922	2.4
tumor rejection antigen P1A	Trap1a NM_011635	2.4
chromodomain helicase DNA binding protein 1-like	Chd1l NM_026539	2.4
glycine C-acetyltransferase (2-amino-3-ketobutyrate-coenzyme A ligase)	Gcat NM_013847	2.4
G protein-coupled receptor 179	Gpr179 NM_001081220	2.4
growth differentiation factor 11	Gdf11 NM_010272	2.4
calcium channel, voltage-dependent, P/Q type, alpha 1A subunit	Cacna1a NM_007578	2.4
triggering receptor expressed on myeloid cells 1	Trem1 NM_021406	2.4
ES cell-expressed Ras	Eras NM_181548	2.4
RIKEN cDNA 5830418K08 gene	5830418K08Rik NM_176976	2.4
ATP synthase, H+ transporting, mitochondrial F0 complex, subunit s	Atp5s NM_026536	2.4
chloride channel calcium activated 5	Clca5 NM_178697	2.4
netrin G1	Ntng1 NM_030699	2.4
nuclear RNA export factor 2	Nxf2 NM_031259	2.4
RIKEN cDNA C130046B21 gene	C130046B21Rik AK048278	2.4
decay accelerating factor 2	Daf2 NM_007827	2.4
ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltransferase, transferase B, alpha 1-3-galactosyltransferase)	Abo NM_030718	2.4
transmembrane 4 L six family member 20	Tm4sf20 NM_025453	2.4
Wiskott-Aldrich syndrome homolog (human)	Was NM_009515	2.4
RIKEN cDNA 2010109I03 gene	2010109I03Rik NM_025929	2.3
ankyrin repeat and SOCS box-containing 9	Asb9 NM_027027	2.3
sciellin	Scel NM_022886	2.3
DnaJ (Hsp40) homolog, subfamily C, member 17	Dnajc17 NM_139139	2.3
ribonuclease P 14 subunit (human)	Rpp14 NM_025938	2.3
NIPA-like domain containing 4	Nipal4 NM_172524	2.3
suppressor of fused homolog (Drosophila)	Sufu NM_015752	2.3
predicted gene 5746	Gm5746 XR_034898	2.3
cDNA sequence BC031781	BC031781 BC031781	2.3
RIKEN cDNA B430212C06 gene	B430212C06Rik BC028804	2.3
TAF13 RNA polymerase II, TATA box binding protein (TBP)-associated factor	Taf13 NM_025444	2.3
integral membrane protein 2A	Itm2a NM_008409	2.3
adrenomedullin	Adm NM_009627	2.3
potassium inwardly-rectifying channel, subfamily J, member 6	Kcnj6 NM_001025584	2.3
mucin 20	Muc20 NM_001145874	2.3
endothelin converting enzyme-like 1	Ecel1 NM_021306	2.3
proprotein convertase subtilisin/kexin type 9	Pcsk9 NM_153565	2.3
spermatogenesis associated 22	Spata22 NM_001045531	2.3
sterile alpha motif domain containing 7	Samd7 NM_029489	2.3
G protein-coupled receptor kinase 4	Grk4 NM_019497	2.3

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
peptidyl-tRNA hydrolase 2	Ptrh2 NM_175004	2.3
RIKEN cDNA 4922505E12 gene	4922505E12Rik NM_001033547	2.3
GINS complex subunit 3 (Psf3 homolog)	Gins3 NM_030198	2.3
fibroblast growth factor 17	Fgf17 NM_008004	2.3
sema domain, immunoglobulin domain (Ig), TM domain, and short cytoplasmic domain	Sema4f NM_011350	2.3
predicted gene 885	Gm885 NM_001033435	2.3
family with sequence similarity 100, member B	Fam100b NM_176902	2.3
Unknown	3100002L24Rik U62393	2.3
phosphatidylinositol glycan anchor biosynthesis, class H	Pigh NM_029988	2.3
fusion, derived from t(12; 16) malignant liposarcoma (human)	Fus NM_139149	2.3
myosin, heavy polypeptide 4, skeletal muscle	Myh4 NM_010855	2.3
predicted gene 8565	Gm8565 XR_032570	2.3
mitogen-activated protein kinase kinase kinase kinase 1	Map4k1 NM_008279	2.3
SV2 related protein	Svop NM_026805	2.3
heat-responsive protein 12	Hrsp12 NM_008287	2.3
DnaJ (Hsp40) related, subfamily B, member 13	Dnajb13 NM_153527	2.3
neurensin 1	Nrsn1 NM_009513	2.3
RIKEN cDNA 9430002A10 gene	9430002A10Rik ENSMUST00000074808	2.3
predicted gene 1043	Gm1043 ENSMUST00000094840	2.3
poly(rC) binding protein 1	Pcbp1 NM_011865	2.3
solute carrier family 35, member F2	Slc35f2 NM_028060	2.3
potassium channel, subfamily U, member 1	Kcnu1 NM_008432	2.3
T-cell lymphoma invasion and metastasis 2	Tiam2 NM_011878	2.3
ataxin 7-like 2	Atxn7l2 NM_175183	2.3
solute carrier family 28 (sodium-coupled nucleoside transporter), member 3	Slc28a3 NM_022317	2.3
GATA binding protein 2	Gata2 NM_008090	2.3
hydrocephalus inducing	Hydin NM_172916	2.3
5-hydroxytryptamine (serotonin) receptor 3A	Htr3a NM_013561	2.3
ATP-binding cassette, sub-family A (ABC1), member 13	Abca13 NM_178259	2.3
integrin beta 6	Itgb6 NM_001159564	2.3
neurotrophin 5	Ntf5 NM_198190	2.3
RIKEN cDNA 4930435E12 gene	4930435E12Rik BC115688	2.3
mature T-cell proliferation 1	Mtcp1 NM_010839	2.3
cathepsin 3	Cts3 NM_026906	2.3
kit oncogene	Kit NM_001122733	2.3
ribonuclease, RNase A family, 1 (pancreatic)	Rnase1 NM_011271	2.3
tetratricopeptide repeat domain 26	Ttc26 NM_153600	2.3
ankyrin repeat domain 45	Ankrd45 BC049713	2.3
TNFAIP3 interacting protein 3	Tnip3 NM_001001495	2.3
asparagine-linked glycosylation 11 homolog (yeast, alpha-1,2-mannosyltransferase)	Alg11 NM_183142	2.3
phosducin-like	Pdcl NM_026176	2.3
RIKEN cDNA 4921507P07 gene	4921507P07Rik BC055110	2.3
RAB13, member RAS oncogene family	Rab13 NM_026677	2.3
RIKEN cDNA 2300009A05 gene	2300009A05Rik NM_027090	2.3
FIP1 like 1 (S. cerevisiae)	Fip1l1 NM_001159573	2.3
PR domain containing 6	Prdm6 NM_001033281	2.3
double C2, beta	Doc2b NM_007873	2.3
small nuclear ribonucleoprotein E	Snrpe NM_009227	2.2

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, thet	Ywhaq NM_011739	2.2
RIKEN cDNA 4932414N04 gene	4932414N04Rik NM_183113	2.2
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 19	Adamts19 NM_175506	2.2
interferon, alpha-inducible protein 27 like 1	Ifi27l1 NM_026790	2.2
sodium channel, nonvoltage-gated 1 gamma	Scnn1g NM_011326	2.2
leucine rich repeat containing 28	Lrrc28 NM_175124	2.2
Unknown	MUSG00000016609 NM_001100416	2.2
Unknown	100043387 NM_001099327	2.2
RIKEN cDNA 1700066J24 gene	1700066J24Rik ENSMUST00000038960	2.2
histidine triad nucleotide binding protein 1	Hint1 NM_008248	2.2
BUD13 homolog (yeast)	Bud13 NM_146000	2.2
a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4	Adamts4 NM_172845	2.2
mitochondrial ribosomal protein L47	Mrpl47 NM_029017	2.2
glucosamine-phosphate N-acetyltransferase 1	Gnpnat1 NM_019425	2.2
arrestin domain containing 2	Arrdc2 NM_027560	2.2
retina and anterior neural fold homeobox	Rax NM_013833	2.2
hairy and enhancer of split 1 (Drosophila)	Hes1 NM_008235	2.2
esterase 1	Es1 NM_007954	2.2
gap junction protein, beta 3	Gjb3 NM_008126	2.2
solute carrier family 17 (anion/sugar transporter), member 5	Slc17a5 NM_172773	2.2
mucin 4	Muc4 NM_080457	2.2
gamma-aminobutyric acid (GABA) A receptor, subunit theta	Gabrq NM_020488	2.2
kinesin family member 5A	Kif5a NM_008447	2.2
myosin, light polypeptide 6B	Myf6b NM_172259	2.2
complement factor H-related 1	Cfhr1 NM_015780	2.2
diacylglycerol kinase, gamma	Dgkg NM_138650	2.2
RIKEN cDNA 1700084C06 gene	1700084C06Rik AK006986	2.2
insulin-like growth factor binding protein-like 1	Igfbp1 NM_018741	2.2
RIKEN cDNA 6330416L07 gene	6330416L07Rik NM_176962	2.2
ectodysplasin-A receptor	Edar NM_010100	2.2
R-spondin homolog (Xenopus laevis)	Rspo1 NM_138683	2.2
predicted gene 5460	Gm5460 NM_001034880	2.2
T-box 1	Tbx1 NM_011532	2.2
predicted gene 5064; cold shock domain containing E1, RNA binding	Gm5064 XR_032683	2.2
acylphosphatase 1, erythrocyte (common) type	Acyp1 NM_025421	2.2
zinc finger and BTB domain containing 6	Zbtb6 NM_146253	2.2
RIKEN cDNA 4833412L08 gene	4833412L08Rik ENSMUST000000091218	2.2
coiled-coil domain containing 66	Ccdc66 NM_177111	2.2
centromere protein J	Cenpj NM_001014996	2.2
F-box protein 48	Fbxo48 NM_176982	2.2
ATPase family, AAA domain containing 4	Atad4 NM_146026	2.2
lipocalin 5	Lcn5 NM_007947	2.2
target of EGR1, member 1 (nuclear)	Toe1 NM_026654	2.2
potassium voltage-gated channel, shaker-related subfamily, beta member 1	Kcnab1 ENSMUST00000049230	2.2
kelch-like 28 (Drosophila)	Klhl28 NM_025707	2.2
predicted gene 10648	Gm10648 ENSMUST000000098619	2.2
transmembrane protease, serine 5 (spinesin)	Tmprss5 NM_030709	2.2
NIMA (never in mitosis gene a)-related expressed kinase 2	Nek2 NM_010892	2.2

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
envoplakin	Evpl NM_025276	2.2
glycosyltransferase 6 domain containing 1	Glt6d1 NM_001039095	2.2
sideroflexin 5	Sfxn5 NM_178639	2.2
ubiquitin specific peptidase 9, Y chromosome	Usp9y NM_148943	2.2
acyl-CoA synthetase medium-chain family member 1	Acsm1 NM_054094	2.2
wingless-related MMTV integration site 7A	Wnt7a NM_009527	2.2
apolipoprotein L 8	Apol8 BC129972	2.2
integrin beta 3	Itgb3 NM_016780	2.2
predicted gene 9493	Gm8560 XR_031229	2.2
coiled-coil domain containing 114	Ccdc114 ENSMUST00000117998	2.2
ATP-binding cassette, sub-family G (WHITE), member 3	Abcg3 NM_030239	2.2
predicted gene 14403	Gm14403 ENSMUST00000108947	2.2
F-box protein 16	Fbxo16 NM_015795	2.2
melanoma antigen family B, 18	Mageb18 NM_173783	2.2
outer dense fiber of sperm tails 3-like 1	Odf3l1 NM_198673	2.2
olfactory receptor 1427	Olf1427 NM_146679	2.2
pleiotropic regulator 1, PRL1 homolog (Arabidopsis)	Plrg1 NM_016784	2.2
transmembrane emp24 protein transport domain containing	Tmed11 NM_026109	2.2
zinc finger protein 113	Zfp113 NM_019747	2.2
SRY-box containing gene 17	Sox17 NM_011441	2.2
transferrin receptor 2	Trfr2 NM_015799	2.2
RCC1 domain containing 1	Rccd1 NM_173445	2.2
polyhomeotic-like 2 (Drosophila)	Phc2 ENSMUST00000106080	2.2
transmembrane protein 80	Tmem80 NM_027797	2.2
DDRKG domain containing 1	Ddrgk1 NM_029832	2.2
signal recognition particle 14	Srp14 NM_009273	2.2
ring finger and CHY zinc finger domain containing 1	Rchy1 NM_026557	2.2
phosphoserine aminotransferase 1	Psat1 NM_177420	2.1
synemin, intermediate filament protein	Synm ENSMUST00000056808	2.1
kelch-like 20 (Drosophila)	Klhl20 NM_001039482	2.1
predicted gene 6718	Gm6718 XM_905375	2.1
small nucleolar RNA, C/D box 8	Snord8 AF357382	2.1
BR serine/threonine kinase 2	Brsk2 NM_001009930	2.1
predicted gene 5893	Gm5893 ENSMUST00000073390	2.1
predicted gene 11961	Gm11961 NR_027798	2.1
asparagine-linked glycosylation 5 homolog (yeast, dolichyl-phosphate beta-glucosyltransferase)	Alg5 NM_025442	2.1
apolipoprotein B mRNA editing enzyme, catalytic polypeptide 1	Apobec1 NM_031159	2.1
chaperonin containing Tcp1, subunit 6b (zeta)	Cct6b NM_009839	2.1
deleted in azoospermia-like	Dazl NM_010021	2.1
solute carrier family 16 (monocarboxylic acid transporters), member 6	Slc16a6 NM_001029842	2.1
dynein, axonemal, light chain 1	Dnalc1 NM_028821	2.1
Rh blood group, D antigen	Rhd NM_011270	2.1
predicted gene 5210	Gm5210 XR_031132	2.1
RIKEN cDNA E430018J23 gene	E430018J23Rik BC010442	2.1
vestigial like 1 homolog (Drosophila)	Vgll1 NM_133251	2.1
sorting nexin 26	Snx26 NM_178252	2.1
cDNA sequence BC003267	BC003267 NM_145591	2.1
synaptogyrin 3	Syng3 NM_011522	2.1
phosphopantothienoylcysteine decarboxylase	Ppcdc NM_176831	2.1

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
fumarylacetoacetate hydrolase domain containing 1	Fahd1 NM_023480	2.1
protein tyrosine phosphatase, receptor type, F	Ptprf NM_011213	2.1
suprabasin	Sbsn NM_172205	2.1
SEC14-like 3 (S. cerevisiae)	Sec14l3 NM_001029937	2.1
protein C	Proc NM_001042767	2.1
angiotensin II receptor, type 1b	Agtr1b NM_175086	2.1
NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2	Ndufc2 NM_024220	2.1
apoptosis-inducing factor, mitochondrion-associated 3	Aifm3 NM_175178	2.1
predicted gene 5294	Gm5294 XM_001000706	2.1
ferredoxin-fold anticodon binding domain containing 1	Fdxacb1 NM_198675	2.1
transmembrane protein 167	Tmem167 NM_025335	2.1
SEC16 homolog B (S. cerevisiae)	Sec16b NR_027641	2.1
tweety homolog 1 (Drosophila)	Ttyh1 NM_021324	2.1
megakaryocyte-associated tyrosine kinase	Matk NM_010768	2.1
RIKEN cDNA 2010016l18 gene	2010016l18Rik AK140363	2.1
NFU1 iron-sulfur cluster scaffold homolog (S. cerevisiae)	Nfu1 NM_020045	2.1
signal recognition particle 9	Srp9 NM_012058	2.1
YTH domain family 3	Ythdf3 NR_027375	2.1
von Willebrand factor C and EGF domains	Vwce NM_027913	2.1
NFKB activating protein-like	Nkapl NM_025719	2.1
fucokinase	Fuk NM_172283	2.1
mutS homolog 4 (E. coli)	Msh4 NM_031870	2.1
predicted gene 14127	1110005A03Rik NM_028865	2.1
RIKEN cDNA 4930432O21 gene	4930432O21Rik NM_001025373	2.1
SCO-spondin	Sspo AJ491857	2.1
tyrosine kinase, non-receptor, 1	Tnk1 NM_031880	2.1
pappalysin 2	Pappa2 NM_001085376	2.1
RIKEN cDNA 2810055G20 gene	2810055G20Rik AK148800	2.1
RIKEN cDNA A830010M20 gene	A830010M20Rik AK122444	2.1
heterogeneous nuclear ribonucleoprotein M	Hnrnpm NM_029804	2.1
rhomboid domain containing 3	Rhbdd3 NM_177370	2.1
predicted gene 6983	Gm6983 XR_033422	2.1
DEAD (Asp-Glu-Ala-Asp) box polypeptide 4	Ddx4 NM_001145885	2.1
expressed sequence AI597479	AI597479 BC006931	2.1
a disintegrin and metallopeptidase domain 28	Adam28 NM_010082	2.1
RIKEN cDNA A430078G23 gene	A430078G23Rik NM_001033378	2.1
predicted gene 11733	Gm11733 ENSMUST00000092394	2.1
RASD family, member 2	Rasd2 NM_029182	2.1
DAZ interacting protein 1	Dzip1 NM_025943	2.1
pancreatic polypeptide	Ppy NM_008918	2.1
C-type lectin domain family 4, member f	Clec4f NM_016751	2.1
sialic acid binding Ig-like lectin G	Siglecg NM_172900	2.1
interleukin 19	Il19 NM_001009940	2.1
RIKEN cDNA 5730409K12 gene	5730409K12Rik AK134852	2.1
Unknown	2210418O10Rik BC080301	2.1
calpain 12	Capn12 NM_001110807	2.1
cDNA sequence BC022687	BC022687 BC090976	2.1
UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 4	B3gnt4 NM_198611	2.1
zinc finger protein 128	Zfp128 NM_153802	2.1
sulfotransferase family 1A, phenol-preferring, member 1	Sult1a1 NM_133670	2.1

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
regulator of G-protein signaling 3	Rgs3 NM_019492	2.1
small nuclear ribonucleoprotein 48 (U11/U12)	Snrnp48 NM_026382	2.1
G protein-coupled receptor 111	Gpr111 NM_001033493	2.1
RIKEN cDNA 8430419L09 gene	8430419L09Rik BC137674	2.1
gene trap ROSA b-geo 22	Gtrgeo22 NM_148934	2.1
similar to CDCrel-1A1; septin 5	LOC100044138 XM_001480793	2.1
advillin	Avil NM_009635	2.1
RIKEN cDNA 4922505G16 gene	4922505G16Rik NM_001039557	2.1
cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	Cdkn2c NM_007671	2.1
zinc finger, CCHC domain containing 13	Zcchc13 NM_029158	2.1
protein kinase, cGMP-dependent, type II	Prkg2 L12460	2.1
solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2	Slc13a2 NM_022411	2.1
coiled-coil domain containing 60	Ccdc60 ENSMUST00000086483	2.1
elastase 2, neutrophil	Ela2 NM_015779	2.1
coagulation factor II	F2 NM_010168	2.1
fibroblast growth factor 11	Fgf11 ENSMUST00000108637	2.1
coiled-coil domain containing 51	Ccdc51 NM_025689	2.0
discs, large homolog 4 (Drosophila)	Dlg4 NM_007864	2.0
serum/glucocorticoid regulated kinase 2	Sgk2 NM_013731	2.0
ubiquitin-conjugating enzyme E2C binding protein	Ube2cbp NM_027394	2.0
RIKEN cDNA 1810032O08 gene	1810032O08Rik NR_027821	2.0
predicted gene 447	Gm447 BC025881	2.0
tetratricopeptide repeat domain 32	Ttc32 NM_029321	2.0
predicted gene 9804	Gm9804 ENSMUST00000056234	2.0
prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)	P4htm NM_028944	2.0
tetratricopeptide repeat domain 14	Ttc14 NM_025978	2.0
biogenesis of lysosome-related organelles complex-1, subunit 2	Bloc1s2 BC065806	2.0
RIKEN cDNA 4831426I19 gene	4831426I19Rik NM_001042699	2.0
RIKEN cDNA 1700022A21 gene	1700022A21Rik NR_003953	2.0
zinc finger, CCHC domain containing 9	Zcchc9 NM_145453	2.0
FCH and double SH3 domains 1	Fchsd1 NM_175684	2.0
gamma-glutamyl cyclotransferase	Ggct NM_026637	2.0
CD72 antigen	Cd72 NM_001110320	2.0
solute carrier family 26, member 6	Slc26a6 NM_134420	2.0
double homeobox	Dux NM_001081954	2.0
nuclear distribution gene C homolog (Aspergillus)	Nudc NM_010948	2.0
electron transferring flavoprotein, alpha polypeptide	Etfa NM_145615	2.0
queuine tRNA-ribosyltransferase domain containing 1	Qtrtd1 NM_029128	2.0
coiled-coil-helix-coiled-coil-helix domain containing 5	Chchd5 NM_025395	2.0
transmembrane and tetratricopeptide repeat containing 4	Tmtc4 NM_028651	2.0
Ras homolog enriched in brain	Rheb NM_053075	2.0
cold inducible RNA binding protein	Cirbp NM_007705	2.0
phosphodiesterase 11A	Pde11a NM_001081033	2.0
lipoma HMGIC fusion partner-like 1	Lhfp1 NM_178358	2.0
PHD finger protein 5A	Phf5a NM_026737	2.0
CASP2 and RIPK1 domain containing adaptor with death domain	Cradd ENSMUST00000099332	2.0
cytochrome b5 domain containing 2	Cyb5d2 NM_001024926	2.0
additional sex combs like 3 (Drosophila)	Asxl3 ENSMUST00000062608	2.0
acetylcholinesterase	Ache NM_009599	2.0

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
ADP-ribosyltransferase 3	Art3 NM_181728	2.0
membrane-spanning 4-domains, subfamily A, member 15	Ms4a15 NM_001034898	2.0
DENN/MADD domain containing 2D	Dennd2d NM_028110	2.0
galectin-related inter-fiber protein	Grifin NM_030022	2.0
kelch-like 4 (Drosophila)	Klhl4 NM_172781	2.0
RRS1 ribosome biogenesis regulator homolog (S. cerevisiae)	Rrs1 NM_021511	2.0
crystallin, beta B1	Crybb1 NM_023695	2.0
solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 26	Slc25a26 NM_026255	2.0
IMP1 inner mitochondrial membrane peptidase-like (S. cerevisiae)	Imp1l NM_028260	2.0
ectodysplasin A2 isoform receptor	Eda2r NM_001161432	2.0
blocked early in transport 1 homolog (S. cerevisiae)-like	Bet1l NM_018742	2.0
carboxylesterase 1	Ces1 NM_021456	2.0
RAB9, member RAS oncogene family	Rab9 NM_019773	2.0
E2F transcription factor 8	E2f8 ENSMUST00000119223	2.0
PIF1 5'-to-3' DNA helicase homolog (S. cerevisiae)	Pif1 NM_172453	2.0
predicted gene 609	Gm609 BC054854	2.0
phosphodiesterase 6C, cGMP specific, cone, alpha prime	Pde6c NM_033614	2.0
predicted gene 1070	Gm1070 BC147402	2.0
olfactory receptor 558	Olfr558 NM_147093	2.0
predicted gene 879	Shisa6 NM_001034874	2.0
RIKEN cDNA 1700084E18 gene	1700084E18Rik BC062268	2.0
upper zone of growth plate and cartilage matrix associated	Ucma NM_026754	2.0
Unknown	Gm7520 XR_032099	2.0
predicted gene 10762	Gm10762 ENSMUST00000099385	2.0
RIKEN cDNA 9430031J16 gene	9430031J16Rik BC082310	2.0
coiled-coil domain containing 38	Ccdc38 NM_175488	2.0
RIKEN cDNA 1190007I07 gene	1190007I07Rik NM_001135567	2.0
naked cuticle 2 homolog (Drosophila)	Nkd2 NM_028186	2.0
dedicator of cyto-kinesis 2	Dock2 NM_033374	2.0
clusterin associated protein 1	Cluap1 NM_029738	2.0
arylacetamide deacetylase (esterase)	Aadac NM_023383	2.0
caspase 6	Casp6 NM_009811	2.0
growth factor receptor bound protein 2	Grb2 NM_008163	2.0
zona pellucida like domain containing 1	Zpld1 NM_178720	2.0
RIKEN cDNA B230104I21 gene	B230104I21Rik AK140029	2.0
LSM8 homolog, U6 small nuclear RNA associated (S. cerevisiae)	Lsm8 NM_133939	2.0
PWP1 homolog (S. cerevisiae)	Pwp1 NM_133993	2.0
calcium-binding tyrosine-(Y)-phosphorylation regulated (fibrousheathin 2)	Cabyr NM_027687	2.0
MAM domain containing 2	Mamdc2 NM_174857	2.0
RAB34, member of RAS oncogene family	Rab34 NM_033475	2.0
predicted gene 2173	Gm2173 XM_001472530	2.0
glycerol kinase	Gyk NM_008194	2.0
paired related homeobox protein-like 1	Prrxl1 EU670677	2.0
RIKEN cDNA A930039A15 gene; zinc finger and BTB domain containing 6	A930039A15Rik AK080751	2.0
olfactory receptor 1033	Olfr1033 NM_146578	2.0
WD repeat and FYVE domain containing 2	Wdfy2 NM_175546	2.0
cDNA sequence BC030867	BC030867 ENSMUST00000036548	2.0
diacylglycerol kinase, iota	Dgki NM_001081206	2.0
RIKEN cDNA 1700013F07 gene	1700013F07Rik BC116223	2.0

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
ATPase, Na ⁺ /K ⁺ transporting, alpha 3 polypeptide	Atp1a3 NM_144921	2.0
inhibitor of DNA binding 3	Id3 NM_008321	2.0
pleckstrin homology domain containing, family M, member 3	Plekhm3 NM_001039493	2.0
programmed cell death 5	Pdcd5 NM_019746	2.0
adaptor protein complex AP-1, gamma 2 subunit	Ap1g2 NM_007455	2.0
histamine receptor H1	Hrh1 NM_008285	2.0
missing oocyte, meiosis regulator, homolog (Drosophila)	Mios NM_145374	2.0
sclerostin	Sost NM_024449	2.0
relaxin/insulin-like family peptide receptor 1	Rxfp1 NM_212452	2.0
tRNA-histidine guanylyltransferase 1-like (S. cerevisiae)	Thg1l NM_001080969	2.0
carbonic anhydrase 5b, mitochondrial	Car5b NM_181315	2.0
predicted gene 12696	Gm12696 XR_004941	2.0
prenylcysteine oxidase 1 like	Pcyox1l NM_172832	2.0
echinoderm microtubule associated protein like 5	Eml5 NM_001081191	2.0
Unknown	2310051M13Rik BC147423	2.0
coiled-coil domain containing 138	Ccdc138 NM_001162956	2.0
paired-like homeodomain transcription factor 2	Pitx2 NM_001042502	2.0
Relatively upregulated in females ≥1.5-fold		
EF hand calcium binding domain 1	Efcab1 ENSMUST00000090277	1.9
ATP/GTP binding protein-like 1	Agbl1 DQ867033	1.9
RIKEN cDNA 2510048L02 gene	2510048L02Rik NM_025977	1.9
CD63 antigen	Cd63 NM_001042580	1.9
collagen, type VIII, alpha 2	Col8a2 NM_199473	1.9
methylenetetrahydrofolate dehydrogenase (NADP ⁺ dependent) 2-like	Mthfd2l NM_026788	1.9
C-type lectin domain family 4, member b2	Clec4b2 NM_001004159	1.9
RIKEN cDNA 6530409C15 gene	6530409C15Rik ENSMUST00000060288	1.9
RIKEN cDNA 4933413N12 gene	4933413N12Rik NM_001162901	1.9
transmembrane protein 191C	Tmem191c NM_177473	1.9
RIKEN cDNA 2510049J12 gene	2510049J12Rik NM_001101431	1.9
hydroxysteroid (17-beta) dehydrogenase 12	Hsd17b12 NM_019657	1.9
protein disulfide isomerase associated 5	Pdia5 NM_028295	1.9
insulin-like growth factor binding protein 3	Igfbp3 NM_008343	1.9
SRY-box containing gene 2	Sox2 NM_011443	1.9
hematological and neurological expressed sequence 1	Hn1 NM_008258	1.9
lysophosphatidylcholine acyltransferase 4	Lpcat4 NM_207206	1.9
RIKEN cDNA 0610007C21 gene	0610007C21Rik NM_027855	1.9
RNA terminal phosphate cyclase domain 1	Rtcd1 NM_025517	1.9
phenylalanyl-tRNA synthetase, alpha subunit	Farsa NM_025648	1.9
signal peptidase complex subunit 2 homolog (S. cerevisiae)	Spcs2 NM_025668	1.9
cyclin T2	Ccnt2 NM_028399	1.9
ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1	St6galnac1 NM_011371	1.9
glucosamine-6-phosphate deaminase 2	Gnpda2 NM_001038015	1.9
uroporphyrinogen decarboxylase	Urod NM_009478	1.9
guanine nucleotide binding protein, alpha 15	Gna15 NM_010304	1.9
cholinergic receptor, nicotinic, alpha polypeptide 3	Chrna3 NM_145129	1.9
nudix (nucleoside diphosphate linked moiety X)-type motif 15	Nudt15 NM_172527	1.9
adaptor-related protein complex AP-4, mu 1	Ap4m1 NM_021392	1.9
bol, boule-like (Drosophila)	Boll NM_029267	1.9
phosphoglycerate mutase 1	Pgam1 NM_023418	1.9

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
zinc finger protein 872	Zfp872 NM_001033813	1.9
interleukin 17 receptor A	Il17ra NM_008359	1.9
RIKEN cDNA 4933413J09 gene	4933413J09Rik ENSMUST00000059648	1.9
ChacC, cation transport regulator homolog 2 (E. coli)	Chac2 NM_026527	1.9
calcium/calmodulin-dependent protein kinase II, beta	Camk2b BC080273	1.9
transmembrane protein 126B	Tmem126b NM_026734	1.9
proprotein convertase subtilisin/kexin type 1	Pcsk1 NM_013628	1.9
predicted gene 14964	Gm14964 ENSMUST00000063955	1.9
COX11 homolog, cytochrome c oxidase assembly protein (yeast)	Cox11 NM_199008	1.9
olfactory receptor 555	Olfr555 NM_147103	1.9
unc-50 homolog (C. elegans)	Unc50 NM_026123	1.9
sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5B	Sema5b BC052397	1.9
synaptojanin 2 binding protein	Cox16 ENSMUST00000002757	1.9
hypocretin (orexin) receptor 1	Hcrtr1 NM_198959	1.9
FERM domain containing 8	Frmd8 NM_026169	1.9
RAS guanyl releasing protein 1	Rasgrp1 NM_011246	1.9
predicted gene 14325	Gm14325 ENSMUST00000108939	1.9
phospholipase A2, group XV	Pla2g15 NM_133792	1.9
metallothionein 2	Mt2 NM_008630	1.9
tripartite motif-containing 62	Trim62 NM_178110	1.9
olfactory receptor 586	Olfr586 NM_147111	1.9
aggrecan	Acan NM_007424	1.9
apoptotic peptidase activating factor 1	Apaf1 NM_001042558	1.9
predicted gene 6322	Gm6322 XR_031468	1.9
PR domain containing 11	Prdm11 ENSMUST00000111274	1.9
C1D nuclear receptor co-repressor	C1d NM_020558	1.9
reproductive homeobox 3B	Rhox1 NM_001025084	1.9
churchill domain containing 1	Churc1 NM_206534	1.9
family with sequence similarity 174, member A	Fam174a NM_026321	1.9
aldehyde dehydrogenase family 1, subfamily A3	Aldh1a3 NM_053080	1.9
RNA polymerase II associated protein 3	Rpap3 NM_028003	1.9
matrix metalloproteinase 16	Mmp16 NM_019724	1.9
predicted pseudogene 10072	Gm10072 ENSMUST00000076473	1.9
coiled-coil domain containing 117	Ccdc117 NM_134033	1.9
FERM and PDZ domain containing 1	Frmpd1 NM_001081172	1.9
tubulin tyrosine ligase-like family, member 10	Ttll10 NM_029264	1.9
transcription factor 19	Tcf19 NM_025674	1.9
RIKEN cDNA 1110058L19 gene	1110058L19Rik NM_026503	1.9
heat shock protein family B (small), member 11	Hspb11 ENSMUST00000106749	1.9
retinitis pigmentosa 1 (human)	Rp1 NM_011283	1.9
prion protein dublet	Prnd NM_023043	1.9
dynactin 3	Dctn3 NM_016890	1.9
zinc finger protein 52	Zfp52 NM_144515	1.9
RIKEN cDNA 6030429G01 gene	6030429G01Rik BC150983	1.9
RIKEN cDNA 4930539E08 gene	4930539E08Rik BC117930	1.9
RIKEN cDNA C030002C11 gene	C030002C11Rik BC058715	1.9
proprotein convertase subtilisin/kexin type 4	Pcsk4 NM_008793	1.9
ATP-binding cassette, sub-family D (ALD), member 4	Abcd4 NM_008992	1.9

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
ras homolog gene family, member J	Rhoj NM_023275	1.9
Eph receptor A3	Epha3 NM_010140	1.9
RIKEN cDNA 1700021F07 gene	1700021F07Rik BC050790	1.9
carboxylesterase 7	Ces7 NM_001003951	1.9
selectin, platelet	Selp NM_011347	1.9
lymphocyte antigen 6 complex, locus C2	Ly6c2 D86232	1.9
zinc finger protein 367	Zfp367 NM_175494	1.9
KISS-1 metastasis-suppressor	Kiss1 NM_178260	1.9
phospholipase A2 receptor 1	Pla2r1 NM_008867	1.9
ring finger protein 5	Rnf5 NM_019403	1.9
CD3 antigen, epsilon polypeptide	Cd3e NM_007648	1.9
mitochondrial ribosomal protein S14	Mrps14 NM_025474	1.9
dipeptidylpeptidase 6	Dpp6 NM_001136060	1.9
Src-like-adaptor 2	Sla2 NM_029983	1.9
RIKEN cDNA 2010003O02 gene	2010003O02Rik ENSMUST00000030114	1.9
eukaryotic translation initiation factor 1B	Eif1b NM_026892	1.9
glutathione S-transferase, theta 1	Gstt1 NM_008185	1.9
PQ loop repeat containing 1	Pqlc1 NM_025861	1.9
keratin associated protein 1-4	Krtap1-4 NM_001039502	1.9
cyclin-dependent kinase 5, regulatory subunit 1 (p35)	Cdk5r1 NM_009871	1.9
COX assembly mitochondrial protein homolog (S. cerevisiae)	Cmc1 NM_026442	1.9
Unknown	9130227C08Rik BC116260	1.9
predicted gene 9866	Gm9866 ENSMUST00000063754	1.9
homeodomain interacting protein kinase 4	Hipk4 NM_001033315	1.9
THO complex 6 homolog (Drosophila)	Thoc6 NM_001008425	1.9
hyaluronan and proteoglycan link protein 2	Hapln2 NM_022031	1.9
zinc finger, BED domain containing 3	Zbed3 NM_028106	1.9
purinergic receptor P2X, ligand-gated ion channel, 6	P2rx6 NM_011028	1.9
RIKEN cDNA 4930438A08 gene	4930438A08Rik ENSMUST00000108834	1.9
cysteine conjugate-beta lyase 2	Ccbl2 NM_173763	1.9
profilin 2	Pfn2 NM_019410	1.9
H2A histone family, member Y3	H2afy3 NR_003523	1.9
polymerase (DNA directed), alpha 1	Pola1 NM_008892	1.9
solute carrier family 45, member 2	Slc45a2 NM_053077	1.9
family with sequence similarity 96, member A	Fam96a NM_026635	1.9
tripartite motif-containing 13	Trim13 NM_023233	1.9
RNA binding motif protein 3	Rbm3 NM_016809	1.9
motile sperm domain containing 2	Mospd2 NM_029730	1.9
SV2 related protein homolog (rat)-like	Svopl NM_177200	1.9
cathepsin O	Ctso NM_177662	1.9
ATPase, Cu++ transporting, beta polypeptide	Atp7b NM_007511	1.9
sarcospan	Sspn NM_010656	1.9
protocadherin 9	Pcdh9 NM_001081377	1.9
myotubularin related protein 6	Mtmr6 NM_144843	1.9
RIKEN cDNA 2310039D24 gene	2310039D24Rik ENSMUST00000098499	1.9
Unknown	H2-Q1 NM_010390	1.9
glutaredoxin 2 (thioltransferase)	Glr2 NM_001038592	1.9
proteasome (prosome, macropain) subunit, alpha type 3	Psm3 NM_011184	1.9
homeo box C5	Hoxc5 NM_175730	1.9
proline-rich protein MP5	Prpmp5 NM_001024705	1.9

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
NADH dehydrogenase (ubiquinone) flavoprotein 3	Ndufv3 NM_030087	1.9
cDNA sequence BC016201	BC016201 BC016201	1.9
melanocyte proliferating gene 1	Myg1 NM_021713	1.9
LysM, putative peptidoglycan-binding, domain containing 4	Lysmd4 NM_175215	1.9
RIKEN cDNA 9930038B18 gene	9930038B18Rik ENSMUST00000062469	1.9
DEAH (Asp-Glu-Ala-His) box polypeptide 36	Dhx36 NM_028136	1.9
stannin	Snn NM_009223	1.9
RIKEN cDNA 2310005E10 gene	Akr1b10 NM_172398	1.9
solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 6	Slc17a6 NM_080853	1.9
similar to Unknown (protein for IMAGE:4910858)	ND6 ENSMUST00000082419	1.9
chemokine (C-X-C motif) receptor 7	Cxcr7 NM_007722	1.9
cathepsin G	Ctsg NM_007800	1.9
keratinocyte associated protein 2	Krtcap2 NM_025327	1.9
rabaptin, RAB GTPase binding effector protein 2	Rabep2 NM_030566	1.9
RIKEN cDNA 2610018G03 gene	2610018G03Rik NM_133729	1.9
slowmo homolog 1 (Drosophila)	Slmo1 NM_144867	1.8
transmembrane 4 superfamily member 5	Tm4sf5 NM_029360	1.8
pol polyprotein	LOC280487 X16670	1.8
predicted gene 4638	Gm4638 XM_001480931	1.8
Unknown	Dnaja1 NM_008298	1.8
protease, serine, 16 (thymus)	Prss16 NM_019429	1.8
receptor accessory protein 4	Reep4 NM_180588	1.8
pyrophosphatase (inorganic) 1	Ppa1 NM_026438	1.8
RIKEN cDNA 4930538K18 gene	4930538K18Rik BC048569	1.8
zinc finger protein of the cerebellum 1	Zic1 NM_009573	1.8
SH3/ankyrin domain gene 2	Shank2 ENSMUST00000105902	1.8
polymerase (RNA) II (DNA directed) polypeptide F	Polr2f NM_027231	1.8
transmembrane protein 72	Tmem72 NM_178768	1.8
transcription elongation factor A (SII)-like 8	Tceal8 NM_025703	1.8
RIKEN cDNA 1810074P20 gene	1810074P20Rik NM_026194	1.8
aldehyde dehydrogenase family 3, subfamily A2	Aldh3a2 NM_007437	1.8
progesterone and adipoQ receptor family member VII	Paqr7 NM_027995	1.8
RIKEN cDNA 6530418L21 gene	6530418L21Rik BC052371	1.8
adenylosuccinate synthetase, non muscle	Adss NM_007422	1.8
PRP31 pre-mRNA processing factor 31 homolog (yeast)	Prpf31 NM_027328	1.8
RAB27A, member RAS oncogene family	Rab27a NM_023635	1.8
Unknown	Gm15542 XM_001480612	1.8
interleukin 18 receptor accessory protein	Il18rap NM_010553	1.8
HtrA serine peptidase 2	Htra2 NM_019752	1.8
activin A receptor, type IC	Acvr1c NM_001111030	1.8
leucine rich repeat and fibronectin type III domain containing 3	Lrfr3 NM_175478	1.8
protease, serine, 22	Prss22 NM_133731	1.8
fibroblast growth factor 14	Fgf14 NM_010201	1.8
neuroglobin	Ngb NM_022414	1.8
bruno-like 5, RNA binding protein (Drosophila)	Bruno15 NM_176954	1.8
acidic (leucine-rich) nuclear phosphoprotein 32 family, member E	Anp32e NM_023210	1.8
phosducin	Pdc NM_001159730	1.8
gamma-aminobutyric acid (GABA) A receptor, subunit alpha 4	Gabra4 NM_010251	1.8
phosphoribosyl pyrophosphate synthetase 1	Gm5081 ENSMUST00000021358	1.8

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
mediator of RNA polymerase II transcription, subunit 31 homolog (yeast)	Med31 NM_026068	1.8
wingless related MMTV integration site 2b	Wnt2b NM_009520	1.8
nuclear transcription factor-Y beta	Nfyb NM_010914	1.8
akirin 1	Akirin1 NM_023423	1.8
methyltransferase like 14	Mettl14 NM_201638	1.8
hypothetical protein LOC100233175	LOC100233175 NM_001142938	1.8
gasdermin C2	Gsdmc2 BC113153	1.8
aldehyde oxidase 4	Aox4 NM_023631	1.8
leucine rich repeat containing 26	Lrrc26 NM_146117	1.8
fibroblast growth factor 18	Fgf18 NM_008005	1.8
ubiquitin-like domain containing CTD phosphatase 1	Ublcp1 ENSMUST00000102795	1.8
predicted gene 8357	Gm8357 XR_033155	1.8
SH2 domain containing 4A	Sh2d4a NM_028182	1.8
RIKEN cDNA 1700086O06 gene	1700086O06Rik NR_027904	1.8
selenoprotein K pseudogene	LOC100134990 NR_004857	1.8
HECT, C2 and WW domain containing E3 ubiquitin protein ligase 1	Hecw1 NM_001081348	1.8
RIKEN cDNA 4932425I24 gene	4932425I24Rik NM_001081025	1.8
mitochondrial ribosomal protein L24	Mrpl24 NM_026591	1.8
4lysine (K)-specific demethylase 6A	Kdm6a NM_009483	1.8
predicted gene 498	Gm498 ENSMUST00000033411	1.8
eukaryotic translation initiation factor 3, subunit J	Eif3j NM_144545	1.8
olfactory receptor 646	Olfr646 NM_147056	1.8
transmembrane protease, serine 3	Tmprss3 NM_080727	1.8
Unknown	Gm6155 XM_884867	1.8
Shc SH2-domain binding protein 1	Shcbp1 NM_011369	1.8
zinc finger protein 640	Zfp640 ENSMUST00000071320	1.8
angiopoietin-like 3	Angptl3 NM_013913	1.8
RIKEN cDNA 1700001C19 gene	1700001C19Rik BC028263	1.8
RIKEN cDNA 2310007B03 gene	2310007B03Rik NM_172411	1.8
translocase of inner mitochondrial membrane 9 homolog (yeast)	Timm9 NM_013896	1.8
hairless	Hr NM_021877	1.8
forkhead box C1	Foxc1 NM_008592	1.8
WW domain-containing oxidoreductase	Wwox NM_019573	1.8
YKT6 homolog (S. Cerevisiae)	Ykt6 NM_019661	1.8
jagunal homolog 1 (Drosophila)	Jagn1 NM_026365	1.8
isocitrate dehydrogenase 1 (NADP+), soluble	Idh1 NM_001111320	1.8
transmembrane protein 164	Tmem164 ENSMUST00000054263	1.8
major facilitator superfamily domain containing 9	Mfsd9 NM_172499	1.8
predicted gene 9108	Gm9108 XR_034404	1.8
tetratricopeptide repeat domain 39A	Ttc39a NM_001145948	1.8
zinc finger protein	Zfp229 ENSMUST00000065871	1.8
zinc finger protein 819	Zfp819 NM_028913	1.8
expressed sequence AU018778	AU018778 BC013479	1.8
family with sequence similarity 82, member B	Fam82b NM_025476	1.8
microspherule protein 1	Mcrs1 NM_016766	1.8
ATPase, Ca++ transporting, plasma membrane 2	Atp2b2 NM_009723	1.8
nudix (nucleoside diphosphate linked moiety X)-type motif 12	Nudt12 NM_026497	1.8
G protein-coupled receptor 85	Gpr85 NM_145066	1.8
mitochondrial carrier homolog 2 (C. elegans)	Mtch2 NM_019758	1.8
coatamer protein complex, subunit zeta 1	Copz1 NM_019817	1.8

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
solute carrier family 30 (zinc transporter), member 3	Slc30a3 NM_011773	1.8
cytochrome c oxidase, subunit VIIa 2	Cox7a2 NM_009945	1.8
CD302 antigen	Cd302 NM_025422	1.8
acid phosphatase 1, soluble	Acp1 NM_001110239	1.8
glyceraldehyde-3-phosphate dehydrogenase, spermatogenic	Gapdhs NM_008085	1.8
tissue factor pathway inhibitor	Tfpi NM_011576	1.8
guanine nucleotide binding protein (G protein), gamma 5	Gng5 NM_010318	1.8
baculoviral IAP repeat-containing 5	Birc5 NM_009689	1.8
THO complex 7 homolog (Drosophila)	Thoc7 NM_025435	1.8
LYR motif containing 1	Lym1 NM_029610	1.8
RIKEN cDNA 1110003E01 gene	1110003E01Rik BC009097	1.8
copine VI	Cpne6 NM_001136057	1.8
zinc binding alcohol dehydrogenase, domain containing 2	Zadh2 NM_146090	1.8
RIKEN cDNA 1700104A03 gene	1700104A03Rik ENSMUST00000098759	1.8
family with sequence similarity 57, member A	Fam57a NM_027773	1.8
predicted gene 13242	Gm13242 NM_001103158	1.8
gasdermin A3	Gsdma3 NM_001007461	1.8
NLR family, apoptosis inhibitory protein 1	Naip1 NM_008670	1.8
RIKEN cDNA 4933436C20 gene	4933436C20Rik ENSMUST00000034183	1.8
expressed sequence AI132487	AI132487 NM_001012310	1.8
serine peptidase inhibitor, Kazal type 2	Spink2 NM_183284	1.8
ZW10 interactor	Zwint ENSMUST00000020081	1.8
predicted gene 13937	Gm13937 XR_034534	1.8
RIKEN cDNA 1700012B15 gene	1700012B15Rik BC060685	1.8
basonuclein 1	Bnc1 NM_007562	1.8
deafness, autosomal recessive 59 (human)	Dfnb59 NM_001080711	1.8
protease, serine, 36	Prss36 NM_001081374	1.8
expressed sequence AI462493	AI462493 NM_001160356	1.8
sterile alpha motif domain containing 3	Samd3 NM_001115154	1.8
V-set and transmembrane domain containing 2B	Vstm2b NM_021387	1.8
KTI12 homolog, chromatin associated (S. cerevisiae)	Kti12 NM_029571	1.8
small nuclear ribonucleoprotein polypeptide F	Snrpf BC100499	1.8
limb region 1	Lmbr1 NM_020295	1.8
calcium channel, voltage-dependent, L type, alpha 1D subunit	Cacna1d NM_028981	1.8
calmodulin binding transcription activator 1	Camta1 NM_001081557	1.8
cannabinoid receptor interacting protein 1	Cnrip1 NM_029861	1.8
GRB10 interacting GYF protein 1	Gigyf1 NM_031408	1.8
kinesin family member 21B	Kif21b NM_001039472	1.8
cDNA sequence BC048355	BC048355 NM_207161	1.8
predicted gene 501	Gm501 XM_146277	1.8
proteasome (prosome, macropain) 26S subunit, non-ATPase, 7	Psmc7 NM_010817	1.8
neuropilin (NRP) and tolloid (TLL)-like 1	Neto1 NM_144946	1.8
endothelin converting enzyme 2	Ece2 NM_025462	1.8
progesterone and adipoQ receptor family member VIII	Paqr8 AK006107	1.8
RAD21 homolog (S. pombe)	Rad21 NM_009009	1.8
TNF receptor-associated factor 1	Traf1 NM_009421	1.8
zinc finger protein 820	Zfp820 NM_029281	1.8
heat shock protein 1 (chaperonin)	Hspd1 NM_010477	1.8
expressed sequence AW146154	AW146154 NM_001033530	1.8
RIKEN cDNA 9030607L17 gene	9030607L17Rik BC057953	1.8

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
harbinger transposase derived 1	Harbi1 NM_178724	1.8
AU RNA binding protein/enoyl-coenzyme A hydratase	Auh NM_016709	1.8
predicted gene 4968	Gm4968 XM_145024	1.8
transmembrane protein 68	Tmem68 NM_028097	1.8
RIKEN cDNA 2810026P18 gene	2810026P18Rik BC032970	1.8
similar to crooked legs CG14938-PB	4930522L14Rik BC065392	1.8
predicted gene 14134	Gm14134 NM_001085521	1.8
magnesium transporter 1	Magt1 NM_025952	1.8
methyltransferase like 4, pseudogene 1	Mettl4-ps1 ENSMUST00000024852	1.8
RIKEN cDNA 4933434M16 gene	4933434M16Rik ENSMUST00000020950	1.8
ubiquitin-conjugating enzyme E2A, RAD6 homolog (S. cerevisiae)	Ube2a NM_019668	1.8
Wilms tumor 1 homolog	Wt1 NM_144783	1.8
peroxisomal biogenesis factor 5	Pex5 NM_008995	1.8
solute carrier family 22 (organic anion/cation transporter), member 12	Slc22a12 NM_009203	1.8
ring finger protein 34	Rnf34 NM_030564	1.8
predicted gene 9264	Gm9264 XR_034445	1.8
collagen, type XII, alpha 1	Col12a1 NM_007730	1.8
solute carrier family 9 (sodium/hydrogen exchanger), member 5	Slc9a5 NM_001081332	1.8
proteasome (prosome, macropain) subunit, alpha type, 8	Psm8 ENSMUST00000040860	1.8
RIKEN cDNA 2610001J05 gene	2610001J05Rik NR_024619	1.8
gap junction protein, gamma 2	Gjc2 NM_080454	1.8
chromatin assembly factor 1, subunit A (p150)	Chaf1a NM_013733	1.8
syndecan binding protein	Sdcbp NM_001098227	1.8
transmembrane and coiled-coil domains 3	Tmco3 NM_172282	1.8
mago-nashi homolog, proliferation-associated (Drosophila)	Magoh NM_010760	1.8
sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4B	Sema4b NM_013659	1.8
sedoheptulokinase	Shpk NM_029031	1.8
DNA segment, human D4S114	D0H4S114 NM_053078	1.8
fibroblast growth factor 22	Fgf22 NM_023304	1.8
solute carrier family 2 (facilitated glucose transporter), member 2	Slc2a2 NM_031197	1.8
RIKEN cDNA 2400001E08 gene	2400001E08Rik NM_025605	1.8
nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 2	Nfkbil2 NM_183091	1.8
F-box and leucine-rich repeat protein 15	Fbxl15 NM_133694	1.8
DNA segment, Chr 4, Wayne State University 53, expressed	D4Wsu53e BC043057	1.8
inosine 5'-phosphate dehydrogenase 2	Impdh2 NM_011830	1.8
FK506 binding protein 14	Fkbp14 NM_153573	1.8
transmembrane protein 184b	Tmem184b NM_172608	1.8
nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4	Nfatc4 NM_023699	1.8
RIKEN cDNA 2310015B20 gene	2310015B20Rik ENSMUST00000020090	1.8
uromodulin	Umod NM_009470	1.8
RIKEN cDNA 1810037I17 gene	1810037I17Rik NM_024461	1.8
proline dehydrogenase	Prodh NM_011172	1.8
sterile alpha and HEAT/Armadillo motif containing 1	Sarm1 ENSMUST00000108287	1.8
defensin related sequence cryptdin peptide (paneth cells)	AY761184 AY761184	1.8
Sfi1 homolog, spindle assembly associated (yeast)	Sfi1 NM_030207	1.8
RIKEN cDNA 4631416L12 gene	4631416L12Rik NM_001081295	1.7
defensin, alpha, 21	Defa21 NM_183253	1.7
eukaryotic translation initiation factor 1A, Y-linked	Eif1ay NM_025437	1.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
high mobility group nucleosomal binding domain 1	Hmgn1 NM_008251	1.7
RAD51 homolog c (S. cerevisiae)	Rad51c NM_053269	1.7
neutrophil cytosolic factor 1	Ncf1 NM_010876	1.7
cytochrome b-5	Cyb5 NM_025797	1.7
G protein-coupled receptor 133	Gpr133 NM_001081342	1.7
cAMP responsive element modulator	Crem NM_001110854	1.7
geranylgeranyl diphosphate synthase 1	Ggps1 NM_010282	1.7
hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit	Hadhb NM_145558	1.7
RIKEN cDNA 1500011H22 gene	1500011H22Rik BC019498	1.7
zinc finger, FYVE domain containing 1	Zfyve1 NM_183154	1.7
cDNA sequence BC037703	BC037703 BC037703	1.7
non-SMC element 2 homolog (MMS21, S. cerevisiae)	Nsmce2 NM_026746	1.7
DEAD (Asp-Glu-Ala-Asp) box polypeptide 47	Ddx47 NM_026360	1.7
transient receptor potential cation channel, subfamily M, member 1	Trpm1 NM_018752	1.7
expressed sequence AI314976	AI314976 BC022574	1.7
proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	Psmc6 NM_025550	1.7
arginine vasopressin receptor 1A	Avpr1a NM_016847	1.7
asparagine synthetase domain containing 1	Asnsd1 NM_133728	1.7
LYR motif containing 2	Lym2 NM_175364	1.7
short coiled-coil protein	Scoc NM_001039137	1.7
regulatory factor X, 5 (influences HLA class II expression)	Rfx5 NM_017395	1.7
RIKEN cDNA 4833422F24 gene	4833422F24Rik BC020160	1.7
glutamate receptor, ionotropic, NMDA2C (epsilon 3)	Grin2c NM_010350	1.7
RIKEN cDNA 5430419D17 gene	5430419D17Rik NM_175166	1.7
enoyl Coenzyme A hydratase domain containing 2	Echdc2 NM_026728	1.7
general transcription factor II H, polypeptide 4	Gtf2h4 NM_010364	1.7
myosin XV	Myo15 NM_010862	1.7
zinc finger and BTB domain containing 48	Zbtb48 NM_133879	1.7
5-hydroxytryptamine (serotonin) receptor 1D	Htr1d NM_008309	1.7
Unknown	Gm8779 XR_032228	1.7
armadillo repeat containing 6	Armc6 NM_133972	1.7
serine/threonine kinase 32A	Stk32a BC055002	1.7
PTC7 protein phosphatase homolog (S. cerevisiae)	Pptc7 NM_177242	1.7
solute carrier family 7 (cationic amino acid transporter, y+ system), member 2	Slc7a2 NM_007514	1.7
predicted gene 4894	Gm4894 NM_177701	1.7
seryl-aminoacyl-tRNA synthetase	Sars NM_011319	1.7
spermatogenesis associated 20	Spata20 NM_144827	1.7
myelin-associated oligodendrocytic basic protein	Mobp NM_008614	1.7
RIKEN cDNA 2900010J23 gene	2900010J23Rik BC021748	1.7
G protein-coupled receptor 22	Gpr22 NM_175191	1.7
D-aspartate oxidase	Ddo NM_027442	1.7
zona pellucida glycoprotein 2	Zp2 NM_011775	1.7
Unknown	Rpl10 NM_052835	1.7
sorting nexin 11	Snx11 NM_028965	1.7
protein phosphatase 1, regulatory (inhibitor) subunit 8	Ppp1r8 NM_146154	1.7
sulfatase modifying factor 1	Sumf1 NM_145937	1.7
syntaxin 5A	Stx5a NM_019829	1.7
phosphoglycerate kinase 2	Pgk2 NM_031190	1.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
splicing factor, arginine/serine-rich 3 (SRp20)	Sfrs3 NM_013663	1.7
matrix metalloproteinase 19	Mmp19 NM_021412	1.7
small Cajal body-specific RNA 17	Scarna17 AF357342	1.7
RIB43A domain with coiled-coils 2	Ribc2 NM_026357	1.7
tektin 1	Tekt1 NM_011569	1.7
peroxisomal biogenesis factor 5-like	Pex5l NM_021483	1.7
coagulation factor XI	F11 NM_028066	1.7
ubiquitin-fold modifier conjugating enzyme 1	Ufc1 NM_025388	1.7
cDNA sequence BC011426	BC011426 NM_145490	1.7
trafficking protein particle complex 2	Trappc2 NM_025432	1.7
family with sequence similarity 3, member C	Fam3c NM_138587	1.7
RIKEN cDNA 1810030O07 gene	1810030O07Rik BC137660	1.7
predicted gene 6653	Gm6653 AK132809	1.7
zinc finger SCAN domains 29	Zscan29 NM_178889	1.7
RIKEN cDNA 2210406O10 gene	2210406O10Rik ENSMUST00000044964	1.7
predicted gene 10605	Gm10605 ENSMUST00000098265	1.7
phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	Pla2g7 NM_013737	1.7
phosphoribosyl pyrophosphate synthetase-associated protein 1	Prpsap1 BC029621	1.7
ubiquitin-associated protein 1	Ubap1 NM_023305	1.7
predicted gene 4976	Gm4976 NM_001013764	1.7
Ellis van Creveld syndrome 2 homolog (human)	Evc2 NM_145920	1.7
olfactory receptor 750	Olfr750 NM_207558	1.7
ATPase, H ⁺ transporting, lysosomal V1 subunit G1	Atp6v1g1 NM_024173	1.7
heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1	Hs3st3b1 NM_018805	1.7
TM2 domain containing 2	Tm2d2 NM_027194	1.7
RIKEN cDNA 5730469M10 gene	5730469M10Rik BC056635	1.7
zinc finger protein 780B	Zfp780b NM_001081021	1.7
telomerase reverse transcriptase	Tert NM_009354	1.7
phosphomannomutase 1	Pmm1 NM_013872	1.7
predicted gene 10158	Gm10158 ENSMUST00000084967	1.7
cytochrome b5 domain containing 1	Cyb5d1 NM_001045525	1.7
GTP binding protein 3	Gtpbp3 NM_032544	1.7
cytotoxic and regulatory T cell molecule	Crtam NM_019465	1.7
family with sequence similarity 46, member B	Fam46b NM_175307	1.7
RIKEN cDNA 2610002J02 gene	2610002J02Rik BC117034	1.7
annexin A3	Anxa3 NM_013470	1.7
interferon induced transmembrane protein 7	Ifitm7 NM_028968	1.7
nebulin	Neb NM_010889	1.7
ADP-ribosylation factor-like 13B	Arl13b NM_026577	1.7
delta-like 2 homolog (Drosophila)	Dlk2 NM_207666	1.7
eukaryotic translation initiation factor 2, subunit 3, structural gene X-linked	Eif2s3x NM_012010	1.7
G1 to S phase transition 2	Gspt2 NM_008179	1.7
MOB1, Mps One Binder kinase activator-like 3 (yeast)	Mobkl3 NM_025283	1.7
defender against cell death 1	Dad1 NM_001113358	1.7
gem (nuclear organelle) associated protein 6	Gemin6 NM_026053	1.7
proliferating cell nuclear antigen	Pcna NM_011045	1.7
predicted gene 13152	Gm13152 NM_001039209	1.7
unc-93 homolog A (C. elegans)	Unc93a NM_199252	1.7
cadherin 10	Cdh10 NM_009865	1.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
PHD and ring finger domains 1	Phrf1 NM_001081118	1.7
alpha-methylacyl-CoA racemase	Amacr NM_008537	1.7
tumor necrosis factor receptor superfamily, member 9	Tnfrsf9 NM_011612	1.7
arachidonate 12-lipoxygenase, 12R type	Alox12b NM_009659	1.7
bombesin-like receptor 3	Brs3 NM_009766	1.7
McKusick-Kaufman syndrome protein	Mkks NM_021527	1.7
predicted gene 14391	Gm14391 NM_001099308	1.7
Unknown	Gm14434 NM_001101804	1.7
GTP-binding protein 8 (putative)	Gtpbp8 NM_025332	1.7
RIKEN cDNA 2900064A13 gene	2900064A13Rik BC115477	1.7
RIKEN cDNA 4933402N03 gene	4933402N03Rik BC115646	1.7
StAR-related lipid transfer (START) domain containing 5	Stard5 NM_023377	1.7
H3 histone, family 3B	H3f3b NM_008211	1.7
contactin 5	Cntn5 NM_001033359	1.7
luteinizing hormone/choriogonadotropin receptor	Lhcgr NM_013582	1.7
protein tyrosine phosphatase-like (proline instead of catalytic arginine), member 1	Ptplb NM_023587	1.7
zinc finger protein 346	Zfp346 NM_012017	1.7
zinc finger and BTB domain containing 33	Zbtb33 NM_020256	1.7
biliverdin reductase A	Blvra NM_026678	1.7
tetratricopeptide repeat domain 9C	Ttc9c NM_027412	1.7
PFTAIRE protein kinase 2	Pftk2 NM_001033373	1.7
heat shock protein 1 (chaperonin 10), related sequence 1	Hspe1 NM_008303	1.7
RIKEN cDNA 2010300C02 gene	2010300C02Rik BC072639	1.7
inhibitor of DNA binding 2	Id2 NM_010496	1.7
heme binding protein 1	Hebp1 NM_013546	1.7
zinc finger protein 13	Zfp13 NM_011747	1.7
guanylate cyclase 2c	Gucy2c NM_001127318	1.7
nei endonuclease VIII-like 1 (E. coli)	Neil1 NM_028347	1.7
cytochrome P450, family 2, subfamily d, polypeptide 26	Cyp2d26 NM_029562	1.7
ATPase, class V, type 10A	Atp10a NM_009728	1.7
hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 7	Hsd3b7 NM_133943	1.7
RIKEN cDNA 1700034I23 gene	1700034I23Rik BC117739	1.7
troponin I, skeletal, fast 2	Tnni2 NM_009405	1.7
EP300 interacting inhibitor of differentiation 1	Eid1 NM_025613	1.7
NLR family, CARD domain containing 5	Nlrc5 FJ889356	1.7
zinc finger protein 826	Zfp826 BC086681	1.7
glutamyl aminopeptidase	Enpep NM_007934	1.7
RNA binding motif protein 17	Rbm17 NM_152824	1.7
zinc finger protein 426	Zfp426 NM_146221	1.7
interleukin 11 receptor, alpha chain 1	Il11ra1 NM_010549	1.7
RIKEN cDNA 1700037C18 gene	1700037C18Rik ENSMUST00000006139	1.7
FUN14 domain containing 2	Fundc2 NM_026126	1.7
RIKEN cDNA 1700116B05 gene	1700116B05Rik ENSMUST00000023314	1.7
predicted gene 12298	Gm12298 ENSMUST00000101039	1.7
predicted gene 11472	Gm11472 XM_001005073	1.7
HECT domain and ankyrin repeat containing, E3 ubiquitin protein ligase 1	Hace1 NM_172473	1.7
coiled-coil-helix-coiled-coil-helix domain containing 2	Chchd2 NM_024166	1.7
ring finger protein 114	Rnf114 NM_030743	1.7
intraflagellar transport 57 homolog (Chlamydomonas)	Ift57 NM_028680	1.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
asparagine-linked glycosylation 6 homolog (yeast, alpha-1,3,-glucosyltransferase)	Alg6 NM_001081264	1.7
predicted gene 11349	Gm11349 XR_033316	1.7
tRNA nucleotidyl transferase, CCA-adding, 1	Trnt1 NM_027296	1.7
predicted gene 9132	Gm9132 XR_002170	1.7
G protein-coupled receptor 150	Gpr150 NM_175495	1.7
SAC1 (suppressor of actin mutations 1, homolog)-like (S. cerevisiae)	Sacm1l NM_030692	1.7
acyl-Coenzyme A binding domain containing 5	Acbd5 NM_001102437	1.7
N-acetylated alpha-linked acidic dipeptidase 2	Naalad2 NM_028279	1.7
Bardet-Biedl syndrome 9 (human)	Bbs9 NM_178415	1.7
pleckstrin and Sec7 domain containing	Psd NM_028627	1.7
CKLF-like MARVEL transmembrane domain containing 6	Cmtm6 NM_026036	1.7
proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	Psmd14 NM_021526	1.7
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19b	Ddx19b NM_172284	1.7
transcription elongation factor A (SII)-like 1	Tceal1 NM_146236	1.7
solute carrier family 30 (zinc transporter), member 5	Slc30a5 NM_022885	1.7
scaffold attachment factor B2	Safb2 NM_001029979	1.7
expressed sequence AU019823	AU019823 NM_001134902	1.7
transmembrane protein 38B	Tmem38b NM_028053	1.7
myosin, heavy chain 15	Myh15 XM_001002743	1.7
mortality factor 4 like 2	Gm5521 XR_034247	1.7
ladinin	Lad1 NM_133664	1.7
predicted gene 4961	Gm4961 XR_001540	1.7
DIRAS family, GTP-binding RAS-like 1	Diras1 NM_145217	1.7
MORN repeat containing 4	Morn4 NM_198108	1.7
budding uninhibited by benzimidazoles 1 homolog, beta (S. cerevisiae)	Bub1b NM_009773	1.7
BAI1-associated protein 2-like 1	Baiap2l1 NM_025833	1.7
transient receptor potential cation channel, subfamily V, member 5	Trpv5 NM_001007572	1.7
malignant T cell amplified sequence 1	Mcts1 NM_026902	1.7
integrin beta 8	Itgb8 NM_177290	1.7
predicted gene 2736	Gm2736 XR_031811	1.7
RIKEN cDNA E130309F12 gene	E130309F12Rik NM_178756	1.7
Ras and Rab interactor-like	Rinl NM_177158	1.7
general transcription factor II H, polypeptide 2	Gtf2h2 NM_022011	1.7
predicted gene 11536	Gm11536 ENSMUST00000100525	1.7
RIKEN cDNA 2310016M24 gene	2310016M24Rik NM_183256	1.7
ankyrin repeat and SOCS box-containing 11	Asb11 NM_026853	1.7
serine/threonine kinase 36 (fused homolog, Drosophila)	Stk36 NM_175031	1.7
zinc finger protein 207	Zfp207 NM_001130169	1.7
TIP41, TOR signalling pathway regulator-like (S. cerevisiae)	Tipr1 NM_145513	1.7
spermine synthase	Gm7270 XR_030809	1.7
Ngfi-A binding protein 1	Nab1 NM_008667	1.7
PRP6 pre-mRNA splicing factor 6 homolog (yeast)	Prpf6 NM_133701	1.7
RIKEN cDNA 4930449I04 gene	4930449I04Rik AK015432	1.7
family with sequence similarity 105, member B	Fam105b NM_001013792	1.7
basic helix-loop-helix domain containing, class B9	Bhlhb9 NM_198161	1.7
ATPase inhibitory factor 1	Atpif1 NM_007512	1.7
RIKEN cDNA 4833442J19 gene	4833442J19Rik BC046911	1.7
carboxylesterase 8 (putative)	Ces8 NM_146213	1.7
zinc finger protein 326	Zfp326 NM_018759	1.7

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
RIKEN cDNA 2210021J22 gene	2210021J22Rik BC025858	1.7
keratin associated protein 5-3	Krtap5-3 ENSMUST00000084414	1.7
RIKEN cDNA 2410004B18 gene	2410004B18Rik NM_025555	1.7
family with sequence similarity 108, member B	Fam108b NM_146096	1.7
TATA box binding protein (Tbp)-associated factor, RNA polymerase I, C	Taf1c NM_021441	1.7
LIM homeobox protein 6	Lhx6 NM_008500	1.7
RIKEN cDNA 1810022C23 gene	1810022C23Rik BC014724	1.7
eukaryotic translation initiation factor 3, subunit M	Eif3m NM_145380	1.7
Ras-related GTP binding C	Rragc NM_017475	1.7
kielin/chordin-like protein	Kcp NM_001029985	1.7
zinc finger protein 90	Zfp90 NM_011764	1.7
RIKEN cDNA 9330129D05 gene	9330129D05Rik ENSMUST00000041252	1.7
minichromosome maintenance deficient 10 (S. cerevisiae)	Mcm10 NM_027290	1.7
autophagy-related 10 (yeast)	Atg10 NM_025770	1.7
nucleolar protein 7	Nol7 NM_023554	1.7
nuclear fragile X mental retardation protein interacting protein 1	Nufip1 NM_013745	1.6
Unknown	LOC626711 XR_004836	1.6
LYR motif containing 5	Lym5 NM_133688	1.6
Unknown	LOC100047042 XM_001477268	1.6
glutaryl-Coenzyme A dehydrogenase	Gcdh NM_008097	1.6
mutS homolog 2 (E. coli)	Msh2 NM_008628	1.6
similar to Ornithine decarboxylase (ODC)	LOC677259 XR_033749	1.6
protease, serine, 2	Prss2 NM_009430	1.6
sphingomyelin phosphodiesterase 3, neutral	Smpd3 NM_021491	1.6
Unknown	Bag5 NM_027404	1.6
RIKEN cDNA 4931408A02 gene	4931408A02Rik ENSMUST00000099548	1.6
mediator complex subunit 21	Med21 NM_025315	1.6
TSC22 domain family, member 1	Tsc22d1 NM_207652	1.6
RIKEN cDNA 1600014C10 gene	1600014C10Rik NM_001085385	1.6
predicted gene 13688	Gm13688 XR_033267	1.6
predicted gene 5502	Gm5502 XR_032770	1.6
golgi autoantigen, golgin subfamily a, 7	Golga7 NM_020585	1.6
coiled-coil domain containing 102A	Ccdc102a NM_001033533	1.6
stimulated by retinoic acid gene 8	Stra8 NM_009292	1.6
ribosomal protein L5	Rpl5 NM_016980	1.6
SRY-box containing gene 10	Sox10 NM_011437	1.6
general transcription factor IIB	Gtf2b NM_145546	1.6
monoamine oxidase B	Maob NM_172778	1.6
RIKEN cDNA 2410002O22 gene	2410002O22Rik NM_025879	1.6
vav 3 oncogene	Vav3 NM_020505	1.6
BCL2-like 11 (apoptosis facilitator)	Bcl2l11 NM_207680	1.6
solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transporter), member 3	Slc35a3 NM_144902	1.6
ring finger protein 220	Rnf220 NM_025739	1.6
RIKEN cDNA 2010107E04 gene	2010107E04Rik NM_027360	1.6
family with sequence similarity 119, member A	Fam119a BC026952	1.6
parathyroid hormone 1 receptor	Pth1r NM_011199	1.6
RIKEN cDNA C030006K11 gene	C030006K11Rik NM_145472	1.6
activating transcription factor 1	Gm1862 XM_001478226	1.6
hydrolethalus syndrome 1	Hyls1 NM_029762	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
mediator complex subunit 20	Med20 NM_020048	1.6
WD repeat domain containing 82	Wdr82 NM_029896	1.6
RIKEN cDNA 4921513I03 gene	4921513I03Rik ENSMUST00000056994	1.6
poly(rC) binding protein 3	Pcbp3 NM_021568	1.6
X-ray repair complementing defective repair in Chinese hamster cells 2	Xrcc2 NM_020570	1.6
mercaptopyruvate sulfurtransferase	Mpst NM_138670	1.6
transferrin receptor	Tfrc NM_011638	1.6
transcription factor 15	Tcf15 ENSMUST00000089112	1.6
exportin 1, CRM1 homolog (yeast)	Xpo1 NM_134014	1.6
serine (or cysteine) peptidase inhibitor, clade C (antithrombin), member 1	Serpinc1 NM_080844	1.6
RIKEN cDNA 5730522E02 gene	5730522E02Rik NR_027973	1.6
zinc finger protein 97	Zfp97 NM_011765	1.6
RIKEN cDNA 4930583K01 gene	4930583K01Rik NR_027879	1.6
small nuclear ribonucleoprotein 27 (U4/U6.U5)	Snrnp27 NM_025665	1.6
Yip1 domain family, member 7	Yipf7 NM_023784	1.6
predicted gene 3771	Gm3771 XR_033804	1.6
transmembrane protein 213	Tmem213 BC104374	1.6
regulating synaptic membrane exocytosis 4	Rims4 NM_183023	1.6
Rho GTPase activating protein 8	Arhgap8 NM_028455	1.6
cadherin-like 24	Cdh24 NM_199470	1.6
Unknown	Gm13777 XM_205095	1.6
major facilitator superfamily domain containing 8	Mfsd8 NM_028140	1.6
NOP56 ribonucleoprotein homolog (yeast)	Nop56 NM_024193	1.6
AIG2-like domain 1	A2ld1 NM_145466	1.6
intraflagellar transport 122 homolog (Chlamydomonas)	Ift122 NM_031177	1.6
family with sequence similarity 26, member E	Fam26e NM_178908	1.6
ficolin A	Fcna NM_007995	1.6
3-hydroxybutyrate dehydrogenase, type 1	Bdh1 NM_175177	1.6
mevalonate kinase	Mvk NM_023556	1.6
coiled-coil domain containing 125	Ccdc125 NM_183115	1.6
MTOR associated protein, LST8 homolog (S. cerevisiae)	Mlst8 NM_019988	1.6
brachyury 2	T2 NM_001161832	1.6
unc-119 homolog B (C. elegans)	Unc119b NM_175352	1.6
splicing factor, arginine/serine-rich 7	Sfrs7 NM_146083	1.6
expressed sequence AI597468	AI597468 NM_001013028	1.6
RIKEN cDNA 6330409N04 gene	6330409N04Rik NM_025697	1.6
leucine-rich repeats and immunoglobulin-like domains 2	Lrig2 NM_001025067	1.6
predicted gene 5779	Gm5779 BC082775	1.6
RIKEN cDNA A630089N07 gene	A630089N07Rik ENSMUST00000099483	1.6
serine dehydratase	Sds NM_145565	1.6
leucine rich repeat and Ig domain containing 4	Lingo4 NM_177250	1.6
Ras-related GTP binding B	Rragb NM_001004154	1.6
RIKEN cDNA A930001N09 gene	A930001N09Rik BC113191	1.6
transformed mouse 3T3 cell double minute 4	Mdm4 NM_008575	1.6
golgi transport 1 homolog B (S. cerevisiae)	Golt1b NM_025872	1.6
cyclin-dependent kinase inhibitor 2A	Cdkn2a NM_009877	1.6
RIKEN cDNA 3632451O06 gene	3632451O06Rik BC023359	1.6
uridine phosphorylase 2	Upp2 ENSMUST00000071543	1.6
succinate dehydrogenase complex, subunit B, iron sulfur (lp)	Sdhb NM_023374	1.6
lymphocyte antigen 6 complex, locus F	Ly6f NM_008530	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
claudin 5	Cldn5 NM_013805	1.6
RIKEN cDNA 2410129H14 gene	2410129H14Rik BC117005	1.6
chloride channel 4-2	Clcn4-2 NM_011334	1.6
family with sequence similarity 114, member A2	Fam114a2 BC019518	1.6
armadillo repeat containing, X-linked 5	Armxc5 NM_001009575	1.6
RIKEN cDNA 4933430I17 gene	4933430I17Rik BC116650	1.6
zinc finger protein 191	Zfp191 NM_021559	1.6
purinergic receptor P2X, ligand-gated ion channel, 1	P2rx1 NM_008771	1.6
leucine rich repeat containing 29	Lrrc29 BC034290	1.6
shugoshin-like 1 (S. pombe)	Sgol1 NM_028232	1.6
protein phosphatase 1D magnesium-dependent, delta isoform	Ppm1d NM_016910	1.6
RIKEN cDNA 6720456H20 gene	6720456H20Rik NM_172600	1.6
TBK1 binding protein 1	Tbkbp1 NM_198100	1.6
vacuolar protein sorting 37C (yeast)	Vps37c NM_181403	1.6
polymerase (RNA) II (DNA directed) polypeptide D	Polr2d NM_027002	1.6
Unknown	LOC433770 XR_031848	1.6
microtubule-associated protein 2	Mtap2 NM_001039934	1.6
NADH-ubiquinone oxidoreductase chain 3	ND3 ENSMUST00000082411	1.6
zinc finger protein 781	Zfp781 NM_199062	1.6
sarcoglycan, gamma (dystrophin-associated glycoprotein)	Sgcg NM_011892	1.6
FERM and PDZ domain containing 3	Frrmpd3 ENSMUST00000050767	1.6
transmembrane protein 168	Tmem168 NM_028990	1.6
carboxymethylenebutenolidase-like (Pseudomonas)	Cmb1 NM_181588	1.6
motor neuron and pancreas homeobox 1	Mnx1 ENSMUST00000001608	1.6
ADP-ribosylation factor-like 1	Arl1 NM_025859	1.6
NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2	Ndufb2 NM_026612	1.6
vasoactive intestinal peptide receptor 1	Vipr1 NM_011703	1.6
cytochrome P450, family 46, subfamily a, polypeptide 1	Cyp46a1 NM_010010	1.6
protein-L-isoaspartate (D-aspartate) O-methyltransferase 1	Pcmt1 NM_008786	1.6
endosulfine alpha	Ensa NM_001026212	1.6
predicted gene 5972	Gm5972 NR_003650	1.6
nicolin 1	Nicn1 NM_025449	1.6
phosphatidylserine decarboxylase	Pisd NM_177298	1.6
forkhead box O3	Foxo3 ENSMUST00000105502	1.6
mitochondrial ribosomal protein L32	Mrpl32 NM_029271	1.6
stratifin	Sfn NM_018754	1.6
claspin homolog (Xenopus laevis)	Clspn NM_175554	1.6
aspartyl-tRNA synthetase 2 (mitochondrial)	Dars2 NM_172644	1.6
multiple EGF-like-domains 10	Megf10 NM_001001979	1.6
esterase 22	Es22 NM_133660	1.6
mitochondrial ribosomal protein L42	Gm6419 XM_887794	1.6
ER degradation enhancer, mannosidase alpha-like 1	Edem1 NM_138677	1.6
leucine rich repeat and sterile alpha motif containing 1	Lrsam1 NM_199302	1.6
chloride channel, nucleotide-sensitive, 1A	Clns1a NM_023671	1.6
Kruppel-like factor 4 (gut)	Klf4 NM_010637	1.6
glutathione S-transferase, mu 4	Gstm4 NM_026764	1.6
Kruppel-like factor 14	Klf14 NM_001135093	1.6
solute carrier family 2 (facilitated glucose transporter), member 1	Slc2a1 NM_011400	1.6
kelch domain containing 7A	Klhdc7a NM_173427	1.6
peroxisomal biogenesis factor 7	Pex7 NM_008822	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
EMI domain containing 2	Emid2 NM_024474	1.6
RIKEN cDNA 6330407J23 gene	6330407J23Rik NM_026138	1.6
DNA segment, Chr 2, ERATO Doi 750, expressed	D2Ertd750e NM_026412	1.6
GPI anchor attachment protein 1	Gpaa1 NM_010331	1.6
Tctex1 domain containing 4	Tctex1d4 NM_175030	1.6
EF-hand calcium binding domain 7	Efcab7 ENSMUST00000097959	1.6
Unknown	Hist1h4d NM_175654	1.6
UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	B3gnt2 NM_016888	1.6
arginine vasopressin	Avp NM_009732	1.6
zinc finger, matrin type 2	Zmat2 NM_025594	1.6
zinc finger protein 92	Zfp92 NM_009566	1.6
protein kinase C substrate 80K-H	Prkcsh NM_008925	1.6
RIKEN cDNA 1810010K12 gene	1810010K12Rik ENSMUST00000070378	1.6
apolipoprotein D	Apod NM_007470	1.6
APOBEC1 complementation factor	A1cf NM_001081074	1.6
RAB20, member RAS oncogene family	Rab20 NM_011227	1.6
SEH1-like (S. cerevisiae)	Seh1l NM_001039088	1.6
anoctamin 10	Ano10 NM_133979	1.6
RIKEN cDNA 8030411F24 gene	8030411F24Rik NM_030135	1.6
Ts translation elongation factor, mitochondrial	Tsfm NM_025537	1.6
lymphoid enhancer binding factor 1	Lef1 NM_010703	1.6
WD repeat domain 23	Dcaf11 NM_133734	1.6
formin 1	Fmn1 NM_010230	1.6
protein phosphatase 2, regulatory subunit B", gamma	Ppp2r3c NM_021529	1.6
galactosidase, beta 1	Glb1 NM_009752	1.6
similar to odorant response abnormal 4	BC003331 NM_145511	1.6
timeless interacting protein	Tipin NM_025372	1.6
GC-rich promoter binding protein 1	Gbp1 NM_001122963	1.6
autophagy-related 3 (yeast)	Atg3 NM_026402	1.6
interleukin 5 receptor, alpha	Il5ra NM_008370	1.6
AT rich interactive domain 5A (MRF1-like)	Arid5a NM_145996	1.6
fibronectin type III and SPRY domain containing 1-like	Fsd1l NM_176966	1.6
predicted gene 14115	Gm14115 XR_002266	1.6
PRELI domain containing 2	Prelid2 NM_029942	1.6
yippee-like 1 (Drosophila)	Ypel1 NM_023249	1.6
cytotoxic T lymphocyte-associated protein 2 beta	Ctla2b NM_007797	1.6
zinc finger and BTB domain containing 43	Zbtb43 NM_027947	1.6
mitochondrial ribosomal protein S33	Mrps33 NM_010270	1.6
glutamine repeat protein 1	Glrp1 NM_008132	1.6
progesterone receptor membrane component 2	Pgrmc2 NM_027558	1.6
RIKEN cDNA 4921501E09 gene	4921501E09Rik NM_001009544	1.6
eosinophil peroxidase	Epx NM_007946	1.6
mediator complex subunit 30	Med30 NM_027212	1.6
ASF1 anti-silencing function 1 homolog A (S. cerevisiae)	Asf1a NM_025541	1.6
eukaryotic translation initiation factor 4H	Eif4h NM_033561	1.6
tryptophan hydroxylase 1	Tph1 NM_009414	1.6
osteoclast stimulating factor 1	Ostf1 NM_017375	1.6
NOL1/NOP2/Sun domain family, member 4	Nsun4 NM_028142	1.6
cleavage and polyadenylation factor subunit homolog (S. cerevisiae)	Pcf11 NM_029078	1.6
ATPase, H+ transporting, lysosomal V1 subunit C1	Atp6v1c1 NM_025494	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
ATPase, H+ transporting, lysosomal V0 subunit E2	Atp6v0e2 NM_133764	1.6
keratin 15	Krt15 NM_008469	1.6
zinc ribbon domain containing, 1	Znrd1 NM_023162	1.6
predicted gene 9876	Gm9876 ENSMUST00000064248	1.6
Unknown	Gm11263 XR_031917	1.6
mitochondrial ribosomal protein S27	Mrps27 NM_173757	1.6
ubiquitin-conjugating enzyme E2B, RAD6 homology (S. cerevisiae)	Ube2b NM_009458	1.6
ProSAPiP1 protein	RP23-100C5.8 NM_197945	1.6
TNF receptor-associated factor 6	Traf6 NM_009424	1.6
3-phosphoglycerate dehydrogenase	Phgdh NM_016966	1.6
mannosidase 2, alpha B1	Man2b1 NM_010764	1.6
mitochondrial ribosomal protein L50	Mrpl50 NM_178603	1.6
sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A	Sema3a NM_009152	1.6
protein phosphatase 1B, magnesium dependent, beta isoform	Ppm1b NM_001159496	1.6
PC4 and SFRS1 interacting protein 1	Psip1 NM_133948	1.6
RIKEN cDNA 1110013L07 gene	Fam189b BC088990	1.6
UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5	B3gnt5 NM_001159407	1.6
DNA segment, Chr 6, Wayne State University 163, expressed	D6Wsu163e BC016429	1.6
sterol carrier protein 2, liver	Scp2 NM_011327	1.6
alanyl-tRNA synthetase domain containing 1	1700113I22Rik NM_026865	1.6
dihydrouridine synthase 4-like (S. cerevisiae)	Dus4l NM_028002	1.6
aryl-hydrocarbon receptor	Ahr NM_013464	1.6
phosphatidic acid phosphatase type 2A	Ppap2a NM_008247	1.6
RIKEN cDNA 5430411K18 gene	5430411K18Rik AK122536	1.6
mitogen-activated protein kinase kinase 3	Map2k3 NM_008928	1.6
complement component (3b/4b) receptor 1-like	Cr1l NM_013499	1.6
neuropeptide FF-amide peptide precursor	Npff NM_018787	1.6
histone aminotransferase 1	Hat1 NM_026115	1.6
C1q and tumor necrosis factor related protein 2	C1qtnf2 NM_026979	1.6
N-acetylneuraminic acid phosphatase	Nanp NM_026086	1.6
T cell receptor alpha variable 13D-4	Trav13d-4 ENSMUST00000103607	1.6
RIKEN cDNA C030048H21 gene	C030048H21Rik XM_923021	1.6
D-2-hydroxyglutarate dehydrogenase	D2hgdh NM_178882	1.6
serine/arginine repetitive matrix 1	Srrm1 NM_016799	1.6
myosin VIIA and Rab interacting protein	Myrip NM_144557	1.6
signal transducer and activator of transcription 2	Stat2 NM_019963	1.6
armadillo repeat containing, X-linked 4	Armxc4 ENSMUST00000055842	1.6
tectorin alpha	Tecta NM_009347	1.6
cardiotrophin 1	Ctf1 NM_007795	1.6
dual oxidase 2	Duox2 NM_177610	1.6
Bardet-Biedl syndrome 2 (human)	Bbs2 NM_026116	1.6
synaptosomal-associated protein, 47	Snap47 NM_144521	1.6
ArfGAP with FG repeats 2	Agfg2 NM_145566	1.6
keratin 77	Krt77 NM_001003667	1.6
cDNA sequence BC050254	BC050254 BC050254	1.6
predicted gene 7290	Gm7290 XM_976302	1.6
RIKEN cDNA 5730419I09 gene	5730419I09Rik NM_029081	1.6
ADP-ribosylation factor 2	Arf2 NM_007477	1.6
heat shock protein 70 family, member 13	Hspa13 NR_027492	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
SAR1 gene homolog A (S. cerevisiae)	Sar1a NM_009120	1.6
coiled-coil domain containing 61	Ccdc61 NM_001033314	1.6
CCAAT/enhancer binding protein (C/EBP), epsilon	Cebpe NM_207131	1.6
mitochondrial ribosomal protein L30	Mrpl30 NM_027098	1.6
DEK oncogene (DNA binding)	Dek NM_025900	1.6
fibroblast growth factor binding protein 3	Fgfbp3 NM_028263	1.6
family with sequence similarity 122, member B	Fam122b NM_030167	1.6
sterile alpha motif domain containing 9-like	Samd9l NM_010156	1.6
spermatogenesis associated 5	Spata5 NM_021343	1.6
activity regulated cytoskeletal-associated protein	Arc NM_018790	1.6
mannoside acetylglucosaminyltransferase 5, isoenzyme B	Mgat5b NM_172948	1.6
transmembrane protein 91	Tmem91 NM_177102	1.6
apolipoprotein O	Apoo NM_026673	1.6
homeo box D10	Hoxd10 NM_013554	1.6
CCR4-NOT transcription complex, subunit 2	Cnot2 NR_024327	1.6
predicted gene 6534	Gm6534 NM_001037923	1.6
tetratricopeptide repeat domain 37	Ttc37 NM_001081352	1.6
dihydrouridine synthase 3-like (S. cerevisiae)	Dus3l NM_144858	1.6
cDNA sequence BC005764	BC005764 NM_181681	1.6
SKI-like	Skil NM_011386	1.6
poly (ADP-ribose) polymerase family, member 11	Parp11 NM_181402	1.6
interferon-induced protein with tetratricopeptide repeats 1	Ifit1 NM_008331	1.6
suppressor of variegation 4-20 homolog 2 (Drosophila)	Suv420h2 NM_146177	1.6
RIKEN cDNA 2410017P07 gene	2410017P07Rik NM_029132	1.6
SERTA domain containing 4	Sertad4 NM_198247	1.6
ring finger protein, transmembrane 1	Rnft1 NM_029788	1.6
RIKEN cDNA E130203B14 gene	E130203B14Rik NM_178791	1.6
muted	Muted NM_139063	1.6
predicted gene 9955	Gm9955 ENSMUST00000067987	1.6
speckle-type POZ protein	Spop NM_025287	1.6
bromodomain containing 9	Brd9 NM_001024508	1.6
mesenchyme homeobox 2	Meox2 NM_008584	1.6
DNA segment, Chr 10, Wayne State University 102, expressed	D10Wsu102e NM_026579	1.6
apolipoprotein O-like	Apool NM_026565	1.6
G protein-coupled receptor 135	Gpr135 NM_181752	1.6
gremlin 1	Grem1 NM_011824	1.6
apolipoprotein L domain containing 1	Apold1 NM_001109914	1.6
ATP/GTP binding protein-like 5	Agbl5 NM_001048192	1.6
methionine aminopeptidase 2	Metap2 NM_019648	1.6
RIKEN cDNA 9330182L06 gene	9330182L06Rik BC132290	1.6
zinc finger protein 422, related sequence 1	Zfp422-rs1 NM_029952	1.6
zinc finger protein 94	Zfp94 NM_009568	1.6
Der1-like domain family, member 3	Derl3 NM_024440	1.6
predicted gene 9028	Gm9028 XR_034415	1.6
inhibitor of growth family, member 5	Ing5 NM_025454	1.6
prefoldin 4	Pfdn4 NM_001110152	1.6
von Willebrand factor A domain containing 5B2	Vwa5b2 NM_001144953	1.6
cation channel, sperm associated 2	Catsper2 NM_153075	1.6
RIKEN cDNA 4921511C04 gene	Vwa3b BC050813	1.6
hydroxypyruvate isomerase homolog (E. coli)	Hyi NR_003946	1.6

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
pleckstrin homology domain containing, family F (with FYVE domain) member 1	Plekhf1 NM_024413	1.6
adenosine kinase	Adk NM_134079	1.6
mitochondrial ribosomal protein L1	Mrpl1 NM_053158	1.6
TAF9B RNA polymerase II, TATA box binding protein (TBP)-associated factor	Taf9b NM_001001176	1.6
EST AA881470	AA881470 NM_172724	1.6
myc target 1	Myct1 NM_026793	1.6
potassium channel, subfamily K, member 15	Kcnk15 BC147256	1.6
transmembrane protein 222	Tmem222 NM_025667	1.6
major facilitator superfamily domain containing 7A	Mfsd7a NM_172883	1.6
calcium channel, voltage-dependent, L type, alpha 1S subunit	Cacna1s NM_014193	1.6
ferredoxin 1	Fdx1 NM_007996	1.6
brain protein 44	Brp44 NM_027430	1.6
vesicle-associated membrane protein 3	Vamp3 NM_009498	1.6
EBNA1 binding protein 2	Ebna1bp2 NM_026932	1.6
predicted gene 15653	Gm15653 XR_034092	1.6
tryptophan rich basic protein	Wrb NM_207301	1.6
mbt domain containing 1	Mbtd1 BC064014	1.6
transient receptor potential cation channel, subfamily C, member 4	Trpc4 NM_016984	1.6
TYRO3 protein tyrosine kinase 3	Tyro3 NM_019392	1.5
dysbindin (dystrobrevin binding protein 1) domain containing 1	Dbn1 NM_028146	1.5
serine/threonine kinase 19	Stk19 NM_019442	1.5
RAB1, member RAS oncogene family	Rab1 NM_008996	1.5
tripartite motif-containing 21	Trim21 NM_009277	1.5
RIKEN cDNA 2810021B07 gene	2810021B07Rik NM_025479	1.5
galactosylceramidase	Galc NM_008079	1.5
Unknown	Gm4607 XR_034166	1.5
cytoplasmic polyadenylation element binding protein 3	Cpeb3 NM_198300	1.5
par-6 partitioning defective 6 homolog gamma (C. elegans)	Pard6g NM_053117	1.5
phosphopantothenoylcysteine synthetase	Ppcs NM_026494	1.5
nudix (nucleoside diphosphate linked moiety X)-type motif 17	Nudt17 NM_030094	1.5
caveolin 1, caveolae protein	Cav1 NM_007616	1.5
thromboxane A synthase 1, platelet	Tbxas1 NM_011539	1.5
5-methyltetrahydrofolate-homocysteine methyltransferase	Mtr NM_001081128	1.5
RIKEN cDNA 2810410L24 gene	2810410L24Rik ENSMUST00000100157	1.5
cellular nucleic acid binding protein	Cnbp NM_013493	1.5
tetratricopeptide repeat domain 23	Ttc23 NM_025905	1.5
RIKEN cDNA 6330408A02 gene	6330408A02Rik NM_177312	1.5
synapsin I	Syn1 NM_013680	1.5
Unknown	Gm8174 XR_001896	1.5
cytochrome P450, family 4, subfamily a, polypeptide 10	Cyp4a10 NM_010011	1.5
interferon regulatory factor 6	Irf6 NM_016851	1.5
phosphodiesterase 6H, cGMP-specific, cone, gamma	Pde6h NM_023898	1.5
RIKEN cDNA C920025E04 gene	C920025E04Rik ENSMUST00000079918	1.5
RNA binding motif protein 12B	Rbm12b NM_028226	1.5
vestigial like 4 (Drosophila)	Vgll4 NM_177683	1.5
inhibitor of growth family, member 1	Ing1 NM_011919	1.5
alpha 1 microglobulin/bikunin	Ambp NM_007443	1.5
N-acetylglutamate synthase	Nags NM_145829	1.5
enoyl Coenzyme A hydratase domain containing 1	Echdc1 NM_025855	1.5
Unknown	Rpl15 NM_025586	1.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
chordin-like 2	Chrdl2 NM_133709	1.5
embryonic ectoderm development	Eed NM_021876	1.5
neurturin	Nrtn NM_008738	1.5
fibronectin type III domain containing 4	Fndc4 NM_022424	1.5
exoribonuclease 1	Eri1 NM_026067	1.5
ADP-ribosylation factor-like 6 interacting protein 1	Arl6ip1 NM_019419	1.5
glutaredoxin 3	Glr3 NM_023140	1.5
zinc finger and BTB domain containing 34	Zbtb34 NM_001085507	1.5
Bmi1 polycomb ring finger oncogene	Bmi1 NM_007552	1.5
selenium binding protein 2	Selenbp2 NM_019414	1.5
nicotinamide nucleotide adenyltransferase 1	Nmnat1 NM_133435	1.5
cholinergic receptor, nicotinic, delta polypeptide	Chrnd NM_021600	1.5
RIKEN cDNA 2610044O15 gene	2610044O15Rik NM_153780	1.5
RIKEN cDNA 2010107G23 gene	2010107G23Rik BC024943	1.5
UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1	B3gnt1 NM_175383	1.5
aldo-keto reductase family 1, member C20	Akr1c20 NM_054080	1.5
neugrin, neurite outgrowth associated	Ngrn NM_031375	1.5
aspartate dehydrogenase domain containing	Aspdh NM_026690	1.5
RIKEN cDNA 1110001A16 gene	1110001A16Rik ENSMUST00000063817	1.5
transmembrane protein 47	Tmem47 NM_175771	1.5
enhancer of mRNA decapping 4	Edc4 NM_181594	1.5
integrin beta 1 binding protein 1	Itgb1bp1 NM_008403	1.5
leucine-rich repeat LGI family, member 3	Lgi3 NM_145219	1.5
CDC like kinase 4	Clk4 NM_007714	1.5
RIKEN cDNA 3110007F17 gene	3110007F17Rik BC027572	1.5
arginyltransferase 1	Ate1 NM_013799	1.5
GPN-loop GTPase 3	Gpn3 NM_024216	1.5
N-acetyltransferase 12	Nat12 NM_001081430	1.5
axin 1	Axin1 NM_001159598	1.5
FAD-dependent oxidoreductase domain containing 1	Foxred1 NM_172291	1.5
acyl-CoA thioesterase 1	Acot1 NM_012006	1.5
steroid 5 alpha-reductase 2-like 2	Tecr1 NM_153801	1.5
even skipped homeotic gene 1 homolog	Evx1 NM_007966	1.5
F-box and leucine-rich repeat protein 5	Fbxl5 NM_001159963	1.5
RIKEN cDNA I830127L07 gene	I830127L07Rik XM_909906	1.5
predicted gene 9104	Gm9104 NM_001111313	1.5
predicted gene 6614	Gm6614 NM_001081318	1.5
transmembrane emp24 protein transport domain containing 5	Tmed5 NM_028876	1.5
solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12	Slc6a12 NM_133661	1.5
lymphocyte antigen 6 complex, locus G6F	Ly6g6f ENSMUST00000038507	1.5
NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 1	Ndufc1 NM_025523	1.5
zinc finger, AN1 type domain 2B	Zfand2b NM_026846	1.5
MIS12 homolog (yeast)	Mis12 NM_025993	1.5
NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2	Ndufa2 NM_010885	1.5
prolyl endopeptidase-like	Prepl NM_145984	1.5
Unknown	Gm10713 XM_001474680	1.5
SPRY domain containing 4	Spryd4 NM_025716	1.5
hypothetical protein LOC100048632	Gm1604b BC147041	1.5
Unknown	1110020C03Rik BC062805	1.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1	Chordc1 NM_025844	1.5
potassium channel tetramerisation domain containing 12b	Kctd12b NM_175429	1.5
C-type lectin domain family 14, member a	Clec14a NM_025809	1.5
phospholipase C, beta 2	Plcb2 NM_177568	1.5
peptidase (mitochondrial processing) alpha	Pmpca NM_173180	1.5
neurexin II	Nrxn2 NM_020253	1.5
platelet endothelial aggregation receptor 1	Pear1 NM_028460	1.5
cell division cycle 20 homolog B (S. cerevisiae)	Cdc20b ENSMUST00000109244	1.5
EPM2A (laforin) interacting protein 1	Epm2aip1 NM_175266	1.5
ankyrin repeat domain 6	Ankrd6 NM_001012450	1.5
runt related transcription factor 2	Runx2 NM_001146038	1.5
solute carrier family 19 (sodium/hydrogen exchanger), member 1	Slc19a1 NM_031196	1.5
phosphatidylinositol glycan anchor biosynthesis, class K	Pigk NM_025662	1.5
mastermind like 3 (Drosophila)	Maml3 NM_001004176	1.5
kelch-like 22 (Drosophila)	Klhl22 NM_145479	1.5
origin recognition complex, subunit 5-like (S. cerevisiae)	Orc5l NM_011959	1.5
hematopoietic SH2 domain containing	Hsh2d NM_197944	1.5
synaptotagmin XIII	Syt13 NM_030725	1.5
destrin	Dstn NM_019771	1.5
RIKEN cDNA F630043A04 gene	F630043A04Rik NM_198605	1.5
solute carrier family 31, member 1	Slc31a1 NM_175090	1.5
mitochondrial ribosomal protein S30	Mrps30 NM_021556	1.5
dopey family member 1	Dopey1 NM_177208	1.5
RIKEN cDNA 2210010B09 gene	Zfp846 NM_172919	1.5
RIKEN cDNA 4922502D21 gene	4922502D21Rik BC089479	1.5
alpha 1,4-galactosyltransferase	A4galt NM_001004150	1.5
protein tyrosine phosphatase, receptor type, R	Ptprr NM_011217	1.5
asteroid homolog 1 (Drosophila)	Aste1 NM_025651	1.5
IQ motif containing E	Iqce NM_028833	1.5
HNF1 homeobox B	Hnf1b BC025189	1.5
RB-associated KRAB repressor	Rbak NM_021326	1.5
mitochondrial ribosomal protein L35	Mrpl35 NM_025430	1.5
adenomatosis polyposis coli 2	Apc2 NM_011789	1.5
regulatory factor X-associated protein	Rfxap NM_133231	1.5
alcohol dehydrogenase 5 (class III), chi polypeptide	Adh5 NM_007410	1.5
small VCP/p97-interacting protein	Svip NM_001160345	1.5
BTB (POZ) domain containing 17	Btbd17 NM_028055	1.5
poly(A) polymerase gamma	Papolg NM_172555	1.5
WD repeat domain 67	Wdr67 NM_001081396	1.5
a disintegrin-like and metallopeptidase (repolysin type) with thrombospondin type 1 motif, 7	Adamts7 NM_001003911	1.5
small nuclear ribonucleoprotein D3	Snrpd3 NM_026095	1.5
predicted gene 9372	Gm9372 XM_980593	1.5
general transcription factor IIH, polypeptide 5	Gtf2h5 NM_181392	1.5
receptor (calcitonin) activity modifying protein 1	Ramp1 NM_016894	1.5
WAP four-disulfide core domain 5	Wfdc5 NM_145369	1.5
kelch domain containing 4	Klhdc4 ENSMUST00000045884	1.5
ring finger protein 113A2	Rnf113a2 NM_025525	1.5
cancer susceptibility candidate 1	Casc1 NM_177222	1.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
RecQ protein-like	Recql NM_023042	1.5
Unknown	Mpv17 NM_008622	1.5
WSC domain containing 2	Wscd2 NM_177292	1.5
mediator of RNA polymerase II transcription, subunit 12 homolog (yeast)	Med12 NM_021521	1.5
Unknown	LOC633944 XR_032386	1.5
ARP10 actin-related protein 10 homolog (S. cerevisiae)	Actr10 NM_019785	1.5
zinc finger protein 788	Zfp788 NM_023363	1.5
macrophage receptor with collagenous structure	Marco NM_010766	1.5
RIKEN cDNA 1500041N16 gene	1500041N16Rik NM_026399	1.5
mitochondrial ribosomal protein S28	Mrps28 NM_025434	1.5
zinc finger protein 322A	Zfp322a NM_001111107	1.5
Bardet-Biedl syndrome 7 (human)	Bbs7 NM_027810	1.5
RIKEN cDNA C330018D20 gene	C330018D20Rik ENSMUST00000025488	1.5
bone morphogenetic protein 4	Bmp4 NM_007554	1.5
spermatid perinuclear RNA binding protein	Strbp NM_009261	1.5
FUN14 domain containing 1	Fundc1 NM_028058	1.5
family with sequence similarity 126, member B	Fam126b NM_172513	1.5
RUN and SH3 domain containing 1	Rusc1 NM_028188	1.5
blocked early in transport 1 homolog (S. cerevisiae)	Bet1 NM_009748	1.5
FERM, RhoGEF and pleckstrin domain protein 2	Farp2 NM_145519	1.5
predicted gene 10786	Gm10786 ENSMUST00000099550	1.5
Luc7 homolog (S. cerevisiae)-like	Luc7l BC055875	1.5
cyclin M1	Cnm1 NM_031396	1.5
aldehyde dehydrogenase family 3, subfamily A1	Aldh3a1 NM_007436	1.5
predicted gene 5039	Gm5039 NR_003647	1.5
ankyrin repeat and SOCS box-containing 13	Asb13 NM_178283	1.5
prostaglandin D2 synthase (brain)	Ptgds NM_008963	1.5
inositol polyphosphate-5-phosphatase F	Inpp5f NM_178641	1.5
polymerase (DNA directed), delta 1, catalytic subunit	Pold1 NM_011131	1.5
slowmo homolog 2 (Drosophila)	Slmo2 NM_025531	1.5
Unknown	Gm4929 XR_031578	1.5
family with sequence similarity 43, member A	Fam43a NM_177632	1.5
AF4/FMR2 family, member 3	Aff3 NM_010678	1.5
WD repeat and SOCS box-containing 1	Wsb1 NM_019653	1.5
RIKEN cDNA 2410003K15 gene	2410003K15Rik ENSMUST00000114500	1.5
dehydrogenase/reductase (SDR family) member 7C	Dhrs7c NM_001013013	1.5
suppressor of Ty 4 homolog 1 (S. cerevisiae)	Supt4h1 NM_009296	1.5
tectonic family member 2	Tctn2 NM_026486	1.5
a disintegrin and metallopeptidase domain 19 (meltrin beta)	Adam19 NM_009616	1.5
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	Smarce1 NM_020618	1.5
cytochrome P450, family 2, subfamily s, polypeptide 1	Cyp2s1 NM_028775	1.5
REX2, RNA exonuclease 2 homolog (S. cerevisiae)	Rexo2 NM_024233	1.5
hect domain and RLD 4	Herc4 NM_026101	1.5
tissue factor pathway inhibitor 2	Tfpi2 NM_009364	1.5
endo-beta-N-acetylglucosaminidase	Engase NM_172573	1.5
predicted gene 7560	Gm7560 XR_032183	1.5
lysophospholipase 1	Lypla1 NM_008866	1.5
ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, C. elegans)	Ube2g1 NM_025985	1.5
methyltransferase like 8	Mettl8 NM_145524	1.5

Additional Table 2b. Genderwise differentially expressed genes (p ≤0.01) with a regulation of ≥ 1.5

DAVID GeneName	Gene Symbol RefSeq	Fold Change Female/Males
RIKEN cDNA E130009J12 gene	E130009J12Rik NM_001008973	1.5
UFM1-specific peptidase 1	Ufsp1 NM_027356	1.5
RIKEN cDNA 5830416P10 gene	5830416P10Rik ENSMUST00000025996	1.5
retinoic acid receptor, beta	Rarb NM_011243	1.5
a disintegrin and metallopeptidase domain 5	Adam5 NM_007401	1.5
leucine rich repeat containing 1	Lrrc1 NM_001146048	1.5
N-glycanase 1	Ngly1 NM_021504	1.5
cytochrome c oxidase subunit IV isoform 2	Cox4i2 NM_053091	1.5
LIM homeobox protein 8	Lhx8 NM_010713	1.5
ubiquinol-cytochrome c reductase binding protein	Uqcrb NM_026219	1.5
glycoprotein m6b	Gpm6b NM_023122	1.5
similar to eukaryotic translation elongation factor 1 gamma	LOC100047986 XR_033846	1.5
interferon-related developmental regulator 1	Ifrd1 NM_013562	1.5
Unknown	Gm5070 XR_034004	1.5
SH3-binding domain glutamic acid-rich protein	Sh3bgr NM_015825	1.5
phosphatidic acid phosphatase type 2 domain containing 1A	Ppapdc1a NM_001080963	1.5
selectin, platelet (p-selectin) ligand	Selplg NM_009151	1.5
synaptojanin 2 binding protein	Synj2bp NM_025292	1.5
uroporphyrinogen III synthase	Uros NM_009479	1.5
peroxisomal biogenesis factor 13	Pex13 NM_023651	1.5
integrin beta 4	Itgb4 NM_001005608	1.5