

Supplementary material

Table i. The top 15 most significantly enriched Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway of differentially expressed genes

KEGG ID	KEGG term	No. of genes	FDR	Gene list
hsa05162	Measles	19	6.53E-06	EIF2AK2,IFNA14,CCNE1,CD3G,SH2D1A,IFNG,CDKN1B,FASLG,CSNK2A2,IL13,MAVS,BBC3,CD209,IAK2,EIF2S1,IFNAR1,IFIH1,TLR7,IRF3
hsa04080	Neuroactive ligand-receptor interaction	26	5.08E-05	GABRQ,GABRB1,HCRTR2,ADRB1,MC2R,CYSLTR1,NPY1R,PTGER1,NMUR1,HRH1,EDNRA,OPRK1,MAS1,GLRA2,AGTR1,GABRP,NR3C1,ADRA1B,P2RX4,ADORA3,GHR,LTB4R2,FSHR,CCKAR,P2RY13,SSTR2
hsa04010	Mitogen-activated protein kinase (MAPK) signalling pathway	25	5.78E-05	NTRK2,NLK,MAPK3,FGF22,MAPK8IP2,DDIT3,CACNG4,CACNA1H,CACNB1,TGFB3,RPS6KA6,RAPGEF2,MAP2K5,ARRB2,FASLG,MAP3K11,SRF,MAP2K2,RASGRP2,ATF2,FGF7,RPS6KA3,MAP4K1,ELK1,PRKACB
hsa04020	Calcium signalling pathway	20	5.83E-05	GNAL,ADRB1,CAMK2B,ATP2B4,CYSLTR1,PTGER1,CACNA1H,PLCD1,PHKA2,HRH1,EDNRA,AGTR1,ADRA1B,P2RX4,LTB4R2,PHKG2,PDE1C,CCKAR,PDE1A,PRKACB
hsa04520	Adherens junction	12	1.06E-04	PVRL1,NLK,MAPK3,ACTG1,SMAD2,CSNK2A2,SRC,PTPN6,SNAI2,BAIAP2,PVRL3,ACTN4
hsa04146	Peroxisome	12	1.59E-04	CAT,HAO2,SCP2,MPV17,MLYCD,ACSL5,PEX3,ACSL3,ACSL4,ACOX2,PEX13,XDH
hsa04540	Gap junction	13	1.59E-04	ADRB1,MAPK3,GJD2,TUBB2B,TUBAL3,MAP2K5,GUCY1A2,GNAI3,SRC,TUBA1B,MAP2K2,PRKACB,TUBA1C
hsa05020	Prion diseases	8	2.76E-04	MAPK3,C6,NCAM1,MAP2K2,C7,ELK1,C1QB,PRKACB
hsa04350	Transforming growth factor (TGF)- β signalling pathway	12	2.78E-04	BMP7,MAPK3,COMP,AMH,IFNG,TGFB3,SMAD2,GDF5,PPP2CA,THBS4,FST,SMAD1
hsa05146	Amoebiasis	13	4.98E-04	SERPINB9,GNAL,LAMB2,COL5A3,IFNG,TGFB3,SERPINB10,SERPINB1,CD1D,LAMB3,LAMC2,ACTN4,PRKACB
hsa03320	Peroxisome proliferator-activated receptors (PPAR) signalling pathway	5	5.10E-04	SCP2,ACSL5,ACSL3,ACSL4,ACOX2
hsa04060	Cytokine-cytokine receptor interaction	22	5.51E-04	BMP7,IL15RA,IL12RB2,IFNA14,IL15,IL17B,AMH,IFNG,TGFB3,IL20RA,EDA,CCL1,FASLG,IL13,GDF5,CCL13,CSF3,CCR5,GHR,IL5RA,TNFRSF9,IFNAR1
hsa05200	Pathways in cancer	25	6.85E-04	PPAR, CYCS, WNT11, MAPK3, ITGA6, FGF22, LAMB2, BIRC5, WNT7A, CCDC6, CCNE1, TGFB3, SMAD2, CDKN1B, PIAS3, FASLG, LAMB3, SKP2, MAP2K2, LAMC2, GLI1, FGF7, APPL1, TRAF3, RXRA
hsa04724	Glutamatergic synapse	8	7.21E-04	MAPK3,GNB3,GNAI3,GNG7,GNGT1,GNB2,GNG4,PRKACB
hsa04114	Oocyte meiosis	13	7.50E-04	ANAPC10,YWHAH,MAPK3,CAMK2B,CCNE1,PPP2R5A,RPS6KA6,PPP2CA,SLK,PKMYT1,RPS6KA3,PRKACB,PPP1CB