

Additional file 1: Activated signaling pathways involved in inflammatory response.

KEGG pathways	Ko ID	Regulation of DEGs	
		Up-regulated	Down-regulated
NLR signaling pathway	ko04621	<i>Nod2, Rip2, Ci1/2, A20, IκB, NF-κB, Casp1, Nalp3, Pyrin, Pstpip1, Ipaf, Naip5, Il1b, Ccl2, Tnfα, Il6</i>	<i>Erk</i>
TLR signaling pathway	ko04620	<i>Tlr1, Tlr2, Tlr6, Tlr4, Tlr7/8, CD14, MyD88, P13K, Rip1, p105, Tp12, IκB, NF-κB, Irf5, Irf7, AP-1, TNF, Il1b, Il6, Il12, Mip-1α, Mip-1β, CD40, CD80, CD86, IP-10, Mig, I-Tac</i>	<i>Tlr5, Mkk3/6, Erk</i>
RLR signaling pathway	ko04622	<i>RIG-I, Cylid, Rnf125, Isg15, Lgp2, Mda5, Mita, Tank, Nap1, Rip1, Ddx3x, Irf7, IκB, NF-κB, Tnfα, Il12, IP10</i>	<i>Ips1, Sntbad</i>
Cytosolic DNA-sensing pathway	ko04623	<i>RIG-I, cGas, Sting, Rip1, p202, Casp1, IκB, NF-κB, Irf7, Il1b, Il23, Il6, Ccl4, Cxcl10</i>	<i>Ips1</i>
FcγR-mediated phagocytosis	ko04666	<i>FcγR1b, CD45, FcγRi, Src, Syk, Pi3k, Vav, Dock180, Sphk, Rac, Wasp, Vasp, Marcks, cPkc, p47phox</i>	<i>Erk1/2, Pi3k</i>
Chemokine signaling pathway	ko04062	<i>Chemokine, Chemokine R, Grk, Jak2/3, Gai, Src, Pi3k, Stat, Dock2, Itk, Vav, p47phox, Wasp, IκB, NF-κB,</i>	<i>Erk1/2</i>
BCR signaling pathway	ko04662	<i>Shp1, Lyn, Vav, Syk, Bcap, Pi3k, Bam32, Rac, Bcl-10, Malt1, IκB, NF-κB, Ap1</i>	<i>Iga, Pi3k, Erk</i>
TCR signaling pathway	ko04660	<i>Pd1, CD45, CD38, Shp1, Slp-76, Vav, Itk, Pi3k, Bcl-10, Malt1, Cot, IκB, NF-κB, Ap1, Il10, Ifng, Csf2, Tnf</i>	<i>Erk, Pi3k</i>
Complement and coagulation cascades	ko04610	<i>F3, F10, F5, Plat, P13, Serpine1, Plaur, Bdkr, C2, C5r1</i>	<i>Kn9, Plg</i>
Antigen processing and presentation	ko04612	<i>Ifng, Tnf, MhcI, MhcII, Tap1/2</i>	<i>Nfy</i>
NF-κB signaling pathway	ko04064	<i>Il1b, Tnf, CD14, TLR4, CD40, Rank, Light, Syk, Lyn, My88, Rip1, RIG-I, Ciap1/2, cIAP1/2, Malt1, IκB, p50, p100, RelB, p52, c-IAP1/2, c-Flip, Traf1/2, A1/Bf1, A20, IκBα, Cox2, Mip1β, Vcam1, Elc, Icam</i>	<i>Ck2, Pidd</i>
Jak-STAT signaling pathway	ko04630	<i>INF/Il10, Il2/3, Il6, Cytokine R, Jak, Shp1, Stat, Pi3k, Socs, Pim1, c-Myc, Spred, Sprouty</i>	<i>Cytokine R, Plas, Pi3k, Spred</i>
MAPK signaling pathway	ko04010	<i>Tnf, Il1, Il1R, Fas, CD14, Gadd45, Daxx, Cdc42/Rac, Tpl2/Cot, Ask2, Tao1/2, Mkp, Mafkafk, Creb, Nur77, Gaplm, Pkc, NF-κB, c-Myc, c-fos</i>	<i>Cacn, Fgf, Fgfr, Tgfb, Lzk, Mkk6, Ptp, Erk,</i>
Phagosome	ko04145	<i>F-action, coronin, Tua, Tubb, MhcI, MhcII, Tap, Fcyr, Cr3, aMβ2, Tsp, collectins, Tlr2, Tlr4, Tlr6, CD14, Mr, Sral, Marco, Lox1, gp91, p47phox, p67phox, p40phox.</i>	<i>Tubb, vATPase, Mr</i>
TNF signaling pathway	ko04668	<i>cIAP1/2, Rip1, Tpl2, NF-κB, IκB, Mkl1, c-Flip, c/Ebpβ, Creb, Tnf/Lla, Tnfr2, Traf1, Pi3k, Rip, Ccl2, Ccl20, Cxcl1, Cxcl2, Cxcl3, Csf1, Csf2, Fas, Il1b, Il6, Il15, Lif, Tnf, Bcl3, Nfkb1a, Socs3, Tnfaip3, Traf1, Fos, Junb, Mmp9, Nod2, Icam1, Sele, Vcam1, Ptgs2.</i>	<i>Pi3k, Mkk3/6, Erk1/2, Creb</i>
Cytokine-cytokine receptor interaction	ko04060	<i>Cxcl9, Cxcl10, Cxcl11, Cxcl13, Il8Rb, Il8Ra, CxcR7; Ccl20, Ccl19, Ccl2, Ccl4, Ccl3, Ccl7, Ccl8, Ccl11, Ccr9, Ccr7, Ccr1, Ccr3; Il6, Csm, Osmr, Lif, Csf3, Csf3r; Il4r, Il13ra1; Il12, Il12rb2, Il23a; Csf2, Csf2rb; Il7, Il7r; Il15, Il15ra, Tslp; Csf1; Ifng; Il10, Il10Ra, Il22; Tnfsf15, Sf11b, Sf11a, Sf12a, Tnf, Sf1b, Tnfsf14, Fas, CD40, Tnfsf8, Sf8, Tnfsf9, Sf9, SF19L; Il17a, Il17r; Il1a, Il1b, Il1rap, Il1r2, Il18rap</i>	<i>Cx3cr1; Epor; Kdr; Sf19; Tgfb3, Acvr2b, Amhr2, Bmpr1b, Bmp7</i>