

Supplementary Materials

Table S1. KEGG pathway enrichment analysis for the common upregulated DEGs of GSE6475 and GSE53795 in acne.

Term	Description	Count	<i>p</i> -Value	Genes
hsa04060	Cytokine-cytokine receptor interaction	14	3.70E-06	<i>TNFRSF6B, CXCL1, CCR1, CXCL2, CCL19, CXCL8, CXCR2, IL7R, TNFRSF1B, CXCR4, CCR2, CSF3R, IL1B, CSF2RB</i>
hsa04062	Chemokine signaling pathway	12	8.66E-06	<i>CXCL1, RAC2, LYN, CXCR4, CCR1, HCK, CCR2, CXCL2, CXCL8, CCL19, CXCR2, PIK3R2</i>
hsa05150	Staphylococcus aureus infection	11	4.03E-10	<i>ICAM1, C3AR1, C5AR1, CFB, FCGR1A, FPR1, ITGB2, FCGR2A, FPR2, FCGR3A, FCGR3B</i>
hsa05152	Tuberculosis	11	3.42E-05	<i>CR1, FCGR1A, FCER1G, IL1B, ITGB2, FCGR2A, CLEC7A, CTSS, FCGR3A, FCGR3B, CD14</i>
hsa04145	Phagosome	9	3.26E-04	<i>CTSL, FCGR1A, ITGB2, FCGR2A, CLEC7A, CTSS, FCGR3A, FCGR3B, CD14</i>
hsa05140	Leishmaniasis	8	1.61E-05	<i>CR1, FCGR1A, IL1B, ITGB2, FCGR2A, ITGA4, FCGR3A, FCGR3B</i>
hsa04064	NF-kappa B signaling pathway	8	6.10E-05	<i>ICAM1, LYN, BCL2A1, CXCL8, CCL19, IL1B, CD14, PLAU</i>
hsa05146	Amoebiasis	8	2.13E-04	<i>CXCL8, SERPINB1, IL1B, SERPINB4, ITGB2, SERPINB3, CD14, PIK3R2</i>
hsa04668	TNF signaling pathway	8	2.26E-04	<i>CXCL1, ICAM1, TNFRSF1B, CXCL2, IL1B, MMP3, SELE, PIK3R2</i>
hsa04650	Natural killer cell mediated cytotoxicity	8	5.05E-04	<i>ICAM1, RAC2, FCER1G, GZMB, ITGB2, FCGR3A, FCGR3B, PIK3R2</i>
hsa04380	Osteoclast differentiation	8	7.74E-04	<i>LILRB2, CYBB, FCGR1A, IL1B, FCGR2A, FCGR3A, FCGR3B, PIK3R2</i>
hsa04514	Cell adhesion molecules (CAMs)	8	0.001245	<i>ICAM1, PTPRC, SELL, VCAN, ITGB2, ITGA4, CDH3, SELE</i>
hsa05134	Legionellosis	7	3.39E-05	<i>CXCL1, CR1, CXCL2, CXCL8, IL1B, ITGB2, CD14</i>
hsa04610	Complement and coagulation cascades	7	1.37E-04	<i>C3AR1, CR1, C5AR1, CFB, SERPINA1, PLAU, PLAU</i>
hsa04666	Fc gamma R-mediated phagocytosis	7	4.04E-04	<i>PTPRC, RAC2, LYN, FCGR1A, HCK, FCGR2A, PIK3R2</i>
hsa04640	Hematopoietic cell lineage	7	4.89E-04	<i>CR1, FCGR1A, IL1B, CSF3R, ITGA4, IL7R, CD14</i>
hsa05323	Rheumatoid arthritis	7	5.20E-04	<i>CTSL, ICAM1, CXCL8, IL1B, ITGB2, MMP3, MMP1</i>

hsa05202	Transcriptional misregulation in cancer	7	0.012794	<i>FCGR1A, BCL2A1, CXCL8, GZMB, MMP3, CD14, PLAU</i>
hsa04978	Mineral absorption	6	1.43E-04	<i>MT1M, MT2A, MT1E, STEAP1, MT1G, MT1F</i>
hsa05144	Malaria	6	2.40E-04	<i>ICAM1, CR1, CXCL8, IL1B, ITGB2, SELE</i>
hsa04670	Leukocyte transendothelial migration	6	0.010633	<i>ICAM1, RAC2, CXCR4, ITGB2, ITGA4, PIK3R2</i>
hsa05132	Salmonella infection	5	0.015572	<i>CXCL1, CXCL2, CXCL8, IL1B, CD14</i>
hsa04620	Toll-like receptor signaling pathway	5	0.034504	<i>CXCL8, IL1B, CD14, SPP1, PIK3R2</i>
hsa04621	NOD-like receptor signaling pathway	4	0.027007	<i>CXCL1, CXCL2, CXCL8, IL1B</i>
hsa04664	Fc epsilon RI signaling pathway	4	0.044255	<i>RAC2, LYN, FCER1G, PIK3R2</i>

Notes: Count, the number of DEGs.

Abbreviations: KEGG, Kyoto Encyclopedia of Genes and Genomes; DEGs, differentially expressed genes.

Table S2: The hub genes in the PPI network (degree ≥ 10)

ID	Degree	ID	Degree	ID	Degree	ID	Degree
<i>FPR2</i>	24	<i>ICAM1</i>	16	<i>C5AR1</i>	14	<i>HCK</i>	12
<i>CXCL8</i>	23	<i>FPR1</i>	16	<i>GPR183</i>	14	<i>PIK3R2</i>	12
<i>ITGB2</i>	23	<i>CCR2</i>	16	<i>CXCR2</i>	13	<i>LYN</i>	11
<i>C3AR1</i>	21	<i>SAA1</i>	16	<i>CYBB</i>	13	<i>PLAU</i>	10
<i>CXCL1</i>	19	<i>CXCR4</i>	15	<i>CCR1</i>	13	<i>PLAUR</i>	10
<i>PTPRC</i>	17	<i>CXCL2</i>	14	<i>FCGR1A</i>	13	<i>FCGR2A</i>	10
<i>LILRB2</i>	17	<i>CCL19</i>	14	<i>TIMP1</i>	12	<i>CD47</i>	10
<i>FCER1G</i>	17	<i>CD53</i>	14	<i>IL1B</i>	12		

Note: Degree, the number of interaction between two genes in PPI network.

Abbreviations: PPI, protein–protein interaction.