

Supplementary Table 1: The 24 pathways with most significant changes associated with these differentially expressed genes (KEGG pathway enrichment analysis). Pathway database: KEGG, Enrichment test *P* value <0.01, FDR *P* value <0.01. Total: the total number of genes for the pathway. Hits: the number of genes.

Name	Hits	Total	Percent	Enrichment test p value
Adherens junction	18	75	24.0%	0.0
Amino sugar and nucleotide sugar metabolism	12	44	27.27%	0.0
Apoptosis	17	88	19.32%	0.0
Cell cycle	24	128	18.75%	0.0
Chemokine signaling pathway	27	190	14.21%	0.0
Focal adhesion	41	201	20.4%	0.0
Jak-STAT signaling pathway	21	155	13.55%	0.0
MAPK signaling pathway	45	271	16.61%	0.0
Metabolic pathways	151	1118	13.51%	0.0
Nucleotide excision repair	11	44	25.0%	0.0
p53 signaling pathway	18	69	26.09%	0.0
Regulation of actin cytoskeleton	33	216	15.28%	0.0
TGF-beta signaling pathway	16	85	18.82%	0.0
Tight junction	22	134	16.42%	0.0
Wnt signaling pathway	31	151	20.53%	0.0
Base excision repair	9	34	26.47%	1.0E-4
mTOR signaling pathway	11	52	21.15%	1.0E-4
Cell adhesion molecules (CAMs)	18	134	13.43%	2.0E-4
Toll-like receptor signaling pathway	15	102	14.71%	2.0E-4
ErbB signaling pathway	13	87	14.94%	5.0E-4
VEGF signaling pathway	11	76	14.47%	0.0017
Calcium signaling pathway	18	178	10.11%	0.0032
NOD-like receptor signaling pathway	9	62	14.52%	0.0043
PPAR signaling pathway	9	69	13.04%	0.0080

Supplementary Table 2: The first 7 GO terms with most significant changes associated with these differentially expressed genes (GO term enrichment analysis). Enrichment test *P* value <0.01, FDR *P* value <0.01. Total: the total number of GoTerm entries. Hits: the number of changing genes.

GO ID	Name	Hits	Total	Enrichment test p value
GO:0007154	cell communication	665	4439	0.0
GO:0008219	cell death	282	1659	0.0
GO:0008283	cell proliferation	248	1481	0.0
GO:0051716	cellular response to stimulus	213	1199	0.0
GO:0048870	cell motility	153	850	1.0E-4
GO:0065009	regulation of molecular function	287	1774	1.0E-4
GO:0048522	positive regulation of cellular process	452	2775	1.0E-4