

Table S10. Top 10 enriched pathways in module 2 in order of combined score by Wikipathways 2019 HUMAN database.

Index	Term	Genes	Combined score
1	Type II interferon signaling (IFNG) WP619	SOCS3;CXCL10;CXCL9;NOS2;OAS1;IFNG;STAT1;IL1B;IRF1;ISG15	3324.9
2	RIG-I-like Receptor Signaling WP3865	IFIH1;CXCL10;CXCL8;IFNG;DDX58;IRF7;ISG15;MAPK14;MAPK13	1388.0
3	IL-10 Anti-inflammatory Signaling Pathway WP4495	STAT1;STAT3;HMOX1	948.8
4	Toll-like receptor signaling pathway	CXCL10;CXCL11;CXCL9;CXCL8;STAT1;IL1B;IRF7;PIK3R1;MAPK14;MAPK13	860.1
5	Non-genomic actions of 1,25 dihydroxyvitamin D3 WP4341	CXCL8;IFNG;PRKCB;OAS2;STAT1;ISG15;MAPK14;MAPK13	844.5
6	Kit receptor signaling pathway WP304	SOCS3;IRS1;LEP;STAT3	796.4
7	Leptin signaling pathway WP2034	SOCS3;STAT1;IL1B;LEP;STAT3;PIK3R1;MAPK14;ACACB	770.3
8	Prolactin Signaling Pathway WP2037	SOCS3;NOS2;STAT1;IRF1;STAT3;PIK3R1;CBL;MAPK14	770.3
9	IL-4 Signaling Pathway WP395	SOCS3;IRS1;STAT1;STAT3;PIK3R1;CBL;MAPK14	629.8
10	Interferon type I signaling pathways WP585	SOCS3;STAT1;STAT3;PIK3R1;CBL;MAPK14	629.8