

Table S2: List of Metabolic pathways obtained from KEGG pathway enrichment of identified biomarkers

GO_id	Term	Number Of Genes	p-value	p-value_fdr	p-value_bonferroni
4060	Cytokine-cytokine receptor interaction	19	1.50E-24	4.30E-22	4.30E-22
4350	TGF-beta signaling pathway	7	3.85E-10	5.53E-08	1.11E-07
4310	Wnt signaling pathway	8	6.17E-10	5.9E-08	1.77E-07
4062	Chemokine signaling pathway	8	5.52E-09	3.96E-07	1.59E-06
4390	Hippo signaling pathway	7	3.46E-08	1.99E-06	9.93E-06
5323	Rheumatoid arthritis	5	1.32E-06	6.31E-05	0.000378
5217	Basal cell carcinoma	4	7.02E-06	0.000258	0.00201
4110	Cell cycle	5	7.52E-06	0.000258	0.00216
5210	Colorectal cancer	4	8.1E-06	0.000258	0.00232
5321	Inflammatory bowel disease (IBD)	4	1.13E-05	0.000326	0.00326
4710	Circadian rhythm	3	3.73E-05	0.000974	0.0107
5200	Pathways in cancer	6	7.73E-05	0.00185	0.0222
5144	Malaria	3	0.000151	0.00333	0.0433
5213	Endometrial cancer	3	0.000194	0.00397	0.0556
4120	Ubiquitin mediated proteolysis	4	0.000232	0.00428	0.0666
5166	HTLV-I infection	5	0.000238	0.00428	0.0684
5164	Influenza A	4	0.000523	0.00883	0.15
5168	Herpes simplex infection	4	0.000624	0.00996	0.179
4064	NF-kappa B signaling pathway	3	0.00102	0.0154	0.293
4916	Melanogenesis	3	0.00131	0.0188	0.377
4114	Oocyte meiosis	3	0.0017	0.0232	0.488
5143	African trypanosomiasis	2	0.0025	0.0326	0.717
5160	Hepatitis C	3	0.00298	0.0372	0.857
5161	Hepatitis B	3	0.00376	0.045	1

4141	Protein processing in endoplasmic reticulum	3	0.00577	0.0658	1
5202	Transcriptional misregulation in cancer	3	0.00597	0.0658	1
5152	Tuberculosis	3	0.00659	0.07	1
4623	Cytosolic DNA-sensing pathway	2	0.00832	0.0853	1
5211	Renal cell carcinoma	2	0.00913	0.0903	1
4917	Prolactin signaling pathway	2	0.0105	0.101	1
5205	Proteoglycans in cancer	3	0.0129	0.12	1
4012	ErbB signaling pathway	2	0.015	0.134	1
5215	Prostate cancer	2	0.0157	0.136	1
4620	Toll-like receptor signaling pathway	2	0.0217	0.183	1
4668	TNF signaling pathway	2	0.0237	0.195	1
4670	Leukocyte transendothelial migration	2	0.0267	0.213	1
4919	Thyroid hormone signaling pathway	2	0.0276	0.214	1
4380	Osteoclast differentiation	2	0.0312	0.236	1
5162	Measles	2	0.0341	0.251	1
4630	Jak-STAT signaling pathway	2	0.047	0.337	1