

S1 Table. The enriched 58 KEGG pathways for the yellow module.

PathwayName	# Gene	Statistics
Metabolic pathways	86	C=1130;O=86;E=44.62;R=1.93;rawP=6.66e-09;adjP=1.15e-06
Pathways in cancer	34	C=326;O=34;E=12.87;R=2.64;rawP=3.13e-07;adjP=2.20e-05
Focal adhesion	25	C=200;O=25;E=7.90;R=3.17;rawP=4.03e-07;adjP=2.20e-05
Wnt signaling pathway	21	C=150;O=21;E=5.92;R=3.55;rawP=5.12e-07;adjP=2.20e-05
ECM-receptor interaction	14	C=85;O=14;E=3.36;R=4.17;rawP=5.84e-06;adjP=0.0001
Hypertrophic cardiomyopathy (HCM)	14	C=83;O=14;E=3.28;R=4.27;rawP=4.37e-06;adjP=0.0001
Axon guidance	18	C=129;O=18;E=5.09;R=3.53;rawP=3.42e-06;adjP=0.0001
Phagosome	19	C=153;O=19;E=6.04;R=3.14;rawP=1.05e-05;adjP=0.0002
Regulation of actin cytoskeleton	23	C=213;O=23;E=8.41;R=2.73;rawP=1.38e-05;adjP=0.0003
Cell adhesion molecules (CAMs)	17	C=133;O=17;E=5.25;R=3.24;rawP=2.06e-05;adjP=0.0004
Insulin signaling pathway	17	C=138;O=17;E=5.45;R=3.12;rawP=3.34e-05;adjP=0.0004
MAPK signaling pathway	26	C=268;O=26;E=10.58;R=2.46;rawP=2.62e-05;adjP=0.0004
Adherens junction	12	C=73;O=12;E=2.88;R=4.16;rawP=2.73e-05;adjP=0.0004
Protein processing in endoplasmic reticulum	19	C=165;O=19;E=6.52;R=2.92;rawP=3.08e-05;adjP=0.0004
Arrhythmogenic right ventricular cardiomyopathy (ARVC)	12	C=74;O=12;E=2.92;R=4.11;rawP=3.14e-05;adjP=0.0004
Dilated cardiomyopathy	13	C=90;O=13;E=3.55;R=3.66;rawP=5.25e-05;adjP=0.0006
Small cell lung cancer	12	C=85;O=12;E=3.36;R=3.58;rawP=0.0001;adjP=0.0010
Neurotrophin signaling pathway	15	C=127;O=15;E=5.01;R=2.99;rawP=0.0002;adjP=0.0019

Endocytosis	19	C=201;O=19;E=7.94;R=2.39;rawP=0.0004;adjP=0.0034
Viral myocarditis	10	C=70;O=10;E=2.76;R=3.62;rawP=0.0004;adjP=0.0034
TGF-beta signaling pathway	11	C=84;O=11;E=3.32;R=3.32;rawP=0.0005;adjP=0.0041
ErbB signaling pathway	11	C=87;O=11;E=3.44;R=3.20;rawP=0.0006;adjP=0.0045
N-Glycan biosynthesis	8	C=49;O=8;E=1.93;R=4.13;rawP=0.0006;adjP=0.0045
Circadian rhythm - mammal	5	C=22;O=5;E=0.87;R=5.76;rawP=0.0014;adjP=0.0100
Pathogenic Escherichia coli infection	8	C=56;O=8;E=2.21;R=3.62;rawP=0.0015;adjP=0.0103
Renal cell carcinoma	9	C=70;O=9;E=2.76;R=3.26;rawP=0.0017;adjP=0.0104
Vasopressin-regulated water reabsorption	7	C=44;O=7;E=1.74;R=4.03;rawP=0.0016;adjP=0.0104
Long-term potentiation	9	C=70;O=9;E=2.76;R=3.26;rawP=0.0017;adjP=0.0104
Bile secretion	9	C=71;O=9;E=2.80;R=3.21;rawP=0.0019;adjP=0.0109
Melanoma	9	C=71;O=9;E=2.80;R=3.21;rawP=0.0019;adjP=0.0109
Purine metabolism	15	C=162;O=15;E=6.40;R=2.34;rawP=0.0020;adjP=0.0111
Notch signaling pathway	7	C=47;O=7;E=1.86;R=3.77;rawP=0.0023;adjP=0.0124
Prostate cancer	10	C=89;O=10;E=3.51;R=2.85;rawP=0.0027;adjP=0.0141
Gap junction	10	C=90;O=10;E=3.55;R=2.81;rawP=0.0029;adjP=0.0147
Endometrial cancer	7	C=52;O=7;E=2.05;R=3.41;rawP=0.0042;adjP=0.0195
Glioma	8	C=65;O=8;E=2.57;R=3.12;rawP=0.0040;adjP=0.0195
mTOR signaling pathway	7	C=52;O=7;E=2.05;R=3.41;rawP=0.0042;adjP=0.0195
One carbon pool by folate	4	C=18;O=4;E=0.71;R=5.63;rawP=0.0048;adjP=0.0217
RNA polymerase	5	C=29;O=5;E=1.15;R=4.37;rawP=0.0051;adjP=0.0225
Adipocytokine	8	C=68;O=8;E=2.69;R=2.98;rawP=0.0053

signaling pathway		;adjP=0.0228
Bacterial invasion of epithelial cells	8	C=70;O=8;E=2.76;R=2.89;rawP=0.0063 ;adjP=0.0264
Melanogenesis	10	C=101;O=10;E=3.99;R=2.51;rawP=0.0067;adjP=0.0274
ABC transporters	6	C=44;O=6;E=1.74;R=3.45;rawP=0.0073 ;adjP=0.0277
Inositol phosphate metabolism	7	C=57;O=7;E=2.25;R=3.11;rawP=0.0070 ;adjP=0.0277
Ubiquitin mediated proteolysis	12	C=135;O=12;E=5.33;R=2.25;rawP=0.0074;adjP=0.0277
Leishmaniasis	8	C=72;O=8;E=2.84;R=2.81;rawP=0.0074 ;adjP=0.0277
Gastric acid secretion	8	C=74;O=8;E=2.92;R=2.74;rawP=0.0087 ;adjP=0.0318
Amoebiasis	10	C=106;O=10;E=4.19;R=2.39;rawP=0.0093;adjP=0.0333
Antigen processing and presentation	8	C=76;O=8;E=3.00;R=2.67;rawP=0.0102 ;adjP=0.0358
Ribosome	9	C=92;O=9;E=3.63;R=2.48;rawP=0.0105 ;adjP=0.0361
Intestinal immune network for IgA production	6	C=48;O=6;E=1.90;R=3.17;rawP=0.0112 ;adjP=0.0363
Calcium signaling pathway	14	C=177;O=14;E=6.99;R=2.00;rawP=0.0109;adjP=0.0363
Type II diabetes mellitus	6	C=48;O=6;E=1.90;R=3.17;rawP=0.0112 ;adjP=0.0363
Spliceosome	11	C=127;O=11;E=5.01;R=2.19;rawP=0.0121;adjP=0.0385
Glycerophospholipid metabolism	8	C=80;O=8;E=3.16;R=2.53;rawP=0.0136 ;adjP=0.0425
Butirosin and neomycin biosynthesis	2	C=5;O=2;E=0.20;R=10.13;rawP=0.0144 ;adjP=0.0442
Malaria	6	C=51;O=6;E=2.01;R=2.98;rawP=0.0148 ;adjP=0.0447
Glycosylphosphatidylinositol(GPI)-anchor biosynthesis	4	C=25;O=4;E=0.99;R=4.05;rawP=0.0158 ;adjP=0.0469
Autoimmune thyroid disease	6	C=52;O=6;E=2.05;R=2.92;rawP=0.0162 ;adjP=0.0472