

Supplemental Table 8: List of KEGG pathways enriched among PAC-coexpressed genes. Term, which pathway; Overlap, number of genes that overlap and total genes; P-value, enrichment p-value; Adjusted P-value, Q-value; Odds Ratio, enrichment; Combined Score, approximation of overall association (-log10(P) * log(Odds)). Genes, genes in the pathway which are co-expressed with COBLL1.

Term	Overlap	P-value	Adjusted P-value	Old P-value	Old Adjusted P-value	Odds Ratio	Combined Score	Genes
Regulation of lipolysis in adipocytes	6/55	5.97E-06	0.001051127782	0	0	15.23758183	183.2833576	PIK3CA;PTGER3;NPY1R;IRS2;PLIN1;GNAI1
Regulation of actin cytoskeleton	8/214	4.11E-04	0.03620471319	0	0	4.855358358	37.85190174	ITGAM;PIK3CA;ROCK2;ITGA1;ARHGEF7;CRK;FGFR2;ARHGEF6
Rap1 signaling pathway	6/206	0.007341186255	0.3184968891	0	0	3.704716981	18.20592333	ITGAM;PIK3CA;ANGPT1;CRK;FGFR2;GNAI1
Phagosome	5/152	0.00861165175	0.3184968891	0	0	4.18537415	19.89994374	STX12;DYNC1LI2;ITGAM;STX7;THBS4
Wnt signaling pathway	5/158	0.01007575097	0.3184968891	0	0	4.02001634	18.48252214	TCF7L2;ROCK2;CTNBP1;SIAH1;LRP5
Leukocyte transendothelial migration	4/112	0.01393340241	0.3184968891	0	0	4.538072234	19.39329862	ITGAM;PIK3CA;ROCK2;GNAI1
Sphingolipid signaling pathway	4/119	0.01704819155	0.3184968891	0	0	4.260329463	17.34683097	FCER1G;PIK3CA;ROCK2;GNAI1
Acute myeloid leukemia	3/66	0.01726623386	0.3184968891	0	0	5.811875367	23.59041656	TCF7L2;ITGAM;PIK3CA
AMPK signaling pathway	4/120	0.01752578004	0.3184968891	0	0	4.223388306	17.07973005	PIK3CA;CAB39L;LEP;IRS2
Platelet activation	4/124	0.0195193035	0.3184968891	0	0	4.081780538	16.06732245	FCER1G;PIK3CA;ROCK2;GNAI1
Adherens junction	3/72	0.02171569698	0.3184968891	0	0	5.304884595	20.31622219	TJP1;TCF7L2;PTPRM
Arrhythmogenic right ventricular cardiomyopathy (ARVC)	3/72	0.02171569698	0.3184968891	0	0	5.304884595	20.31622219	TCF7L2;ITGA1;DSG2
Focal adhesion	5/199	0.02480488911	0.3358200372	0	0	3.163820876	11.69574252	PIK3CA;ROCK2;ITGA1;CRK;THBS4
Signaling pathways regulating pluripotency of stem cells	4/139	0.02821148919	0.3431865307	0	0	3.625488843	12.93583833	PIK3CA;ID4;ACVR1B;FGFR2
cAMP signaling pathway	5/212	0.03139843544	0.3431865307	0	0	2.963164251	10.25550322	PIK3CA;ROCK2;PTGER3;NPY1R;GNAI1
Pathways in cancer	9/530	0.03201528827	0.3431865307	0	0	2.138712535	7.360468442	TCF7L2;PIK3CA;ROCK2;DAPK2;PTGER3;LRP5;CRK;FGFR2;GNAI1
Salmonella infection	3/86	0.03430245953	0.3431865307	0	0	4.406961178	14.86264501	TJP1;DYNC1LI2;ROCK2
Gastric cancer	4/149	0.0351031392	0.3431865307	0	0	3.373741701	11.30022879	TCF7L2;PIK3CA;LRP5;FGFR2
TGF-beta signaling pathway	3/90	0.03846010217	0.3431865307	0	0	4.203490847	13.69553595	ZFYVE16;ID4;ACVR1B
Human cytomegalovirus infection	5/225	0.03899846939	0.3431865307	0	0	2.786221591	9.039151696	PIK3CA;ROCK2;PTGER3;CRK;GNAI1
Hippo signaling pathway	4/160	0.04371676499	0.3544716249	0	0	3.134097786	9.890800074	TCF7L2;DLG1;LATS2;TEAD1
Hematopoietic cell lineage	3/97	0.04632299643	0.3544716249	0	0	3.889085894	11.94772595	ITGAM;ITGA1;CD37
Prostate cancer	3/97	0.04632299643	0.3544716249	0	0	3.889085894	11.94772595	TCF7L2;PIK3CA;FGFR2
Hepatocellular carcinoma	4/168	0.05066285914	0.3695208091	0	0	2.98000303	8.888044387	TCF7L2;PBRM1;PIK3CA;LRP5
Tight junction	4/170	0.0524887513	0.3695208091	0	0	2.943800045	8.675839123	TJP1;EPB41L4B;DLG1;ROCK2
Type II diabetes mellitus	2/46	0.05528205448	0.3742169842	0	0	5.518962632	15.97909079	PIK3CA;IRS2
Chemokine signaling pathway	4/190	0.07268413666	0.4737928908	0	0	2.62459093	6.880711887	PIK3CA;ROCK2;CRK;GNAI1
Legionellosis	2/55	0.07564068724	0.4754557483	0	0	4.579696724	11.82368216	BCL2L13;ITGAM
Endometrial cancer	2/58	0.08288187427	0.481848918	0	0	4.33369851	10.79237792	TCF7L2;PIK3CA
Autophagy	3/128	0.08953068266	0.481848918	0	0	2.92	7.046467757	PIK3CA;DAPK2;IRS2
MAPK signaling pathway	5/295	0.09781411319	0.481848918	0	0	2.106142241	4.896120237	PPM1A;ANGPT1;CRK;FGFR2;MAP4K3
Central carbon metabolism in cancer	2/65	0.1005407368	0.481848918	0	0	3.850813127	8.846058235	PIK3CA;FGFR2
Shigellosis	2/65	0.1005407368	0.481848918	0	0	3.850813127	8.846058235	ROCK2;CRK
Ubiquitin mediated proteolysis	3/137	0.1043802331	0.481848918	0	0	2.722636816	6.152383143	SIAH1;TRIP12;RHOBTB1
Insulin signaling pathway	3/137	0.1043802331	0.481848918	0	0	2.722636816	6.152383143	PIK3CA;IRS2;CRK
Fc epsilon RI signaling pathway	2/68	0.1084025396	0.481848918	0	0	3.675218442	8.165981683	FCER1G;PIK3CA
Adipocytokine signaling pathway	2/69	0.1110587352	0.481848918	0	0	3.620181302	7.956058228	LEP;IRS2
Renal cell carcinoma	2/69	0.1110587352	0.481848918	0	0	3.620181302	7.956058228	PIK3CA;CRK
Breast cancer	3/147	0.1219291616	0.481848918	0	0	2.532278807	5.328712393	TCF7L2;PIK3CA;LRP5
Bacterial invasion of epithelial cells	2/74	0.1245859547	0.481848918	0	0	3.367927744	7.014583174	PIK3CA;CRK
Inositol phosphate metabolism	2/74	0.1245859547	0.481848918	0	0	3.367927744	7.014583174	PIK3CA;ITPK1
Non-alcoholic fatty liver disease (NAFLD)	3/149	0.125561971	0.481848918	0	0	2.497336377	5.181862725	PIK3CA;LEP;IRS2
Pancreatic cancer	2/75	0.1273375342	0.481848918	0	0	3.21623666	6.84558061	PIK3CA;ARHGEF6
Chronic myeloid leukemia	2/76	0.1301034834	0.481848918	0	0	3.27657105	6.682321303	PIK3CA;CRK
Pertussis	2/76	0.1301034834	0.481848918	0	0	3.27657105	6.682321303	ITGAM;GNAI1
mTOR signaling pathway	3/152	0.1310837519	0.481848918	0	0	2.446681581	4.971458382	PIK3CA;CAB39L;LRP5
Nitrogen metabolism	1/17	0.1314133413	0.481848918	0	0	7.552972561	15.32806027	CA4
Phenylalanine metabolism	1/17	0.1314133413	0.481848918	0	0	7.552972561	15.32806027	GLYAT
Human papillomavirus infection	5/330	0.1380428311	0.4958273117	0	0	1.875961538	3.714762664	TCF7L2;DLG1;PIK3CA;ITGA1;THBS4
ECM-receptor interaction	2/82	0.1469778053	0.5091430656	0	0	3.029907975	5.80976882	ITGA1;THBS4

Neuroactive ligand-receptor interaction	5/338	0.1481362497	0.5091430656	0	0	1.830142643	3.494882159	VIPR1;LEP;PTGER3;NPY1R;SCTR
ErbB signaling pathway	2/85	0.1555762012	0.5091430656	0	0	2.919949738	5.432915793	PIK3CA;CRK
cGMP-PKG signaling pathway	3/166	0.1579159012	0.5091430656	0	0	2.234946603	4.125024538	ROCK2;IRS2;GNAI1
Colorectal cancer	2/86	0.1584636726	0.5091430656	0	0	2.885042361	5.314911319	TCF7L2;PIK3CA
Gap junction	2/88	0.1642684293	0.5091430656	0	0	2.817663005	5.089413453	TJP1;GNAI1
Other types of O-glycan biosynthesis	1/22	0.1666891242	0.5091430656	0	0	5.753193961	10.30756459	EOGT
PI3K-Akt signaling pathway	5/354	0.1692266814	0.5091430656	0	0	1.74480659	3.099677091	PIK3CA;ANGPT1;ITGA1;FGFR2;THBS4
Fc gamma R-mediated phagocytosis	2/91	0.1730447867	0.5091430656	0	0	2.722272007	4.775422718	PIK3CA;CRK
Proximal tubule bicarbonate reclamation	1/23	0.1735714996	0.5091430656	0	0	5.491407982	9.616365099	CA4
Renin-angiotensin system	1/23	0.1735714996	0.5091430656	0	0	5.491407982	9.616365099	LNPEP
Vitamin digestion and absorption	1/24	0.1803973747	0.5098735651	0	0	5.252386002	8.995200678	SLC19A3
Amoebiasis	2/96	0.1878339566	0.5098735651	0	0	2.576817648	4.308946524	ITGAM;PIK3CA
Axon guidance	3/181	0.1883403869	0.5098735651	0	0	2.045047857	3.414216364	PIK3CA;ROCK2;GNAI1
Choline metabolism in cancer	2/99	0.1967903293	0.5098735651	0	0	2.496742774	4.058746088	PIK3CA;SLC44A2
Phosphatidylinositol signaling system	2/99	0.1967903293	0.5098735651	0	0	2.496742774	4.058746088	PIK3CA;ITPK1
Progesterone-mediated oocyte maturation	2/99	0.1967903293	0.5098735651	0	0	2.496742774	4.058746088	PIK3CA;GNAI1
HIF-1 signaling pathway	2/100	0.1997877373	0.5098735651	0	0	2.471140603	3.979771422	PIK3CA;ANGPT1
T cell receptor signaling pathway	2/101	0.2027906225	0.5098735651	0	0	2.446055649	3.902880526	DLG1;PIK3CA
Melanogenesis	2/101	0.2027906225	0.5098735651	0	0	2.446055649	3.902880526	TCF7L2;GNAI1
Ribosome biogenesis in eukaryotes	2/101	0.2027906225	0.5098735651	0	0	2.446055649	3.902880526	RBM28;SBDS
Longevity regulating pathway	2/102	0.2057986929	0.5101488726	0	0	2.421472393	3.828001115	PIK3CA;IRS2
Chagas disease (American trypanosomiasis)	2/103	0.2088116608	0.5104285041	0	0	2.397375934	3.755064053	PIK3CA;GNAI1
C-type lectin receptor signaling pathway	2/104	0.2118292428	0.5107115999	0	0	2.373751955	3.684003185	FCER1G;PIK3CA
Parathyroid hormone synthesis, secretion and action	2/106	0.2178771372	0.5180222835	0	0	2.327866918	3.547259399	LRP5;GNAI1
Insulin resistance	2/108	0.2239401942	0.5180222835	0	0	2.283713393	3.417294489	PIK3CA;IRS2
Asthma	1/31	0.226634749	0.5180222835	0	0	4.025406504	5.975376181	FCER1G
Galactose metabolism	1/31	0.226634749	0.5180222835	0	0	4.025406504	5.975376181	UGP2
Cholinergic synapse	2/112	0.2361033976	0.532746128	0	0	2.20022309	3.175990004	PIK3CA;GNAI1
Pentose and glucuronate interconversions	1/34	0.2456482042	0.5404260492	0	0	3.658906135	5.136573052	UGP2
SNARE interactions in vesicular transport	1/34	0.2456482042	0.5404260492	0	0	3.658906135	5.136573052	STX7
Alanine, aspartate and glutamate metabolism	1/35	0.2518821951	0.5406821715	0	0	3.551111908	4.896251013	RIMKLB
Human immunodeficiency virus 1 infection	3/212	0.2551119415	0.5406821715	0	0	1.738968634	2.375523048	PIK3CA;CRK;GNAI1
Neurotrophin signaling pathway	2/119	0.2574666873	0.5406821715	0	0	2.067851712	2.805795483	PIK3CA;CRK
Starch and sucrose metabolism	1/36	0.2580649778	0.5406821715	0	0	3.449477352	4.672468415	UGP2
Aldosterone-regulated sodium reabsorption	1/37	0.2641969702	0.5406821715	0	0	3.35348916	4.463696472	PIK3CA
Thyroid cancer	1/37	0.2641969702	0.5406821715	0	0	3.35348916	4.463696472	TCF7L2
Ferroptosis	1/40	0.2822923363	0.566410991	0	0	3.095059412	3.914668568	GCLC
Bladder cancer	1/41	0.2882252814	0.566410991	0	0	3.017530488	3.753846786	DAPK2
Relaxin signaling pathway	2/130	0.2910737439	0.566410991	0	0	1.889091258	2.331476057	PIK3CA;GNAI1
Natural killer cell mediated cytotoxicity	2/131	0.2941233251	0.566410991	0	0	1.874352024	2.293749772	FCER1G;PIK3CA
Vascular smooth muscle contraction	2/132	0.2971711543	0.566410991	0	0	1.859839547	2.256816773	PPP1R14A;ROCK2
FoxO signaling pathway	2/132	0.2971711543	0.566410991	0	0	1.859839547	2.256816773	PIK3CA;IRS2
Ras signaling pathway	3/232	0.2998089497	0.566410991	0	0	1.585476306	1.909880362	PIK3CA;ANGPT1;FGFR2
Vasopressin-regulated water reabsorption	1/44	0.3057332054	0.566410991	0	0	2.806579694	3.325916035	DYNC1LI2
Carbohydrate digestion and absorption	1/44	0.3057332054	0.566410991	0	0	2.806579694	3.325916035	PIK3CA
Apelin signaling pathway	2/137	0.3123779022	0.566788771	0	0	1.790502159	2.083323745	PLIN1;GNAI1
Estrogen signaling pathway	2/137	0.3123779022	0.566788771	0	0	1.790502159	2.083323745	PIK3CA;GNAI1
Cysteine and methionine metabolism	1/47	0.3228130225	0.5744963885	0	0	2.623144221	2.965941956	GCLC
Endocytosis	3/244	0.3268590527	0.5744963885	0	0	1.505609344	1.683611864	ZFYVE16;FGFR2;RNF41
Amino sugar and nucleotide sugar metabolism	1/48	0.3284129659	0.5744963885	0	0	2.567202906	2.858537872	UGP2
Cocaine addiction	1/49	0.3339668792	0.5744963885	0	0	2.51359248	2.756690693	GNAI1
Malaria	1/49	0.3339668792	0.5744963885	0	0	2.51359248	2.756690693	THBS4
Cell adhesion molecules (CAMs)	2/145	0.3365566207	0.5744963885	0	0	1.689647776	1.840007639	ITGAM;PTPRM
Vibrio cholerae infection	1/50	0.3394751386	0.5744963885	0	0	2.462170234	2.68001685	TJP1

Phospholipase D signaling pathway	2/148	0.345562004	0.57922774	0	0	1.654676864	1.758231821	FCER1G;PIK3CA
Glycosaminoglycan biosynthesis	1/53	0.3557297082	0.5862640824	0	0	2.319770169	2.397677523	CHST3
Oxytocin signaling pathway	2/153	0.3604815199	0.5862640824	0	0	1.59947995	1.631972723	ROCK2;GNAI1
Fanconi anemia pathway	1/54	0.3610590517	0.5862640824	0	0	2.275885872	2.318476245	POLI
Pathogenic Escherichia coli infection	1/55	0.3663445763	0.5862640824	0	0	2.23362692	2.242965542	ROCK2
Cushing syndrome	2/155	0.3664150515	0.5862640824	0	0	1.578411324	1.584706924	TCF7L2;GNAI1
Glutathione metabolism	1/56	0.3715866401	0.5891824203	0	0	2.192904656	2.170916895	GCLC
Cellular senescence	2/160	0.3811549128	0.597559529	0	0	1.528073309	1.47390218	PIK3CA;HIPK3
JAK-STAT signaling pathway	2/162	0.3870109506	0.597559529	0	0	1.508819018	1.43232535	PIK3CA;LEP
VEGF signaling pathway	1/59	0.387055604	0.597559529	0	0	2.079163162	1.973514471	PIK3CA
Long-term depression	1/60	0.3921273477	0.6001253321	0	0	2.04381976	1.913359935	GNAI1
Basal cell carcinoma	1/63	0.4070936593	0.6086236357	0	0	1.944630212	1.747662505	TCF7L2
Mitophagy	1/65	0.41168671431	0.6086236357	0	0	1.88366997	1.648188073	BCL2L13
Non-small cell lung cancer	1/66	0.421693666	0.6086236357	0	0	1.854596623	1.60139993	PIK3CA
Retinol metabolism	1/67	0.4264804804	0.6086236357	0	0	1.826404287	1.556441058	RDH10
Staphylococcus aureus infection	1/68	0.4312279109	0.6086236357	0	0	1.799053513	1.513217252	ITGAM
Epithelial cell signaling in Helicobacter pylori infection	1/68	0.4312279109	0.6086236357	0	0	1.799053513	1.513217252	TJP1
Tuberculosis	2/179	0.435741226	0.6086236357	0	0	1.362725729	1.132025434	ITGAM;FCER1G
Renin secretion	1/69	0.4359362798	0.6086236357	0	0	1.772507174	1.471640377	GNAI1
Prolactin signaling pathway	1/70	0.4406059062	0.6086236357	0	0	1.746730293	1.431627903	PIK3CA
B cell receptor signaling pathway	1/71	0.4452371073	0.6086236357	0	0	1.721689895	1.393102475	PIK3CA
MicroRNAs in cancer	3/299	0.449022173	0.6086236357	0	0	1.22240991	0.9787628455	PIK3CA;IRS2;CRK
Bile secretion	1/72	0.4498301972	0.6086236357	0	0	1.697354861	1.35599152	SCTR
p53 signaling pathway	1/72	0.4498301972	0.6086236357	0	0	1.697354861	1.35599152	SIAH1
Melanoma	1/72	0.4498301972	0.6086236357	0	0	1.697354861	1.35599152	PIK3CA
Transcriptional misregulation in cancer	2/186	0.4552026471	0.6086236357	0	0	1.310416111	1.031313965	ITGAM;SIX1
Leishmaniasis	1/74	0.4589032878	0.6086236357	0	0	1.650684932	1.285744562	ITGAM
PPAR signaling pathway	1/74	0.4589032878	0.6086236357	0	0	1.650684932	1.285744562	PLIN1
Gastric acid secretion	1/75	0.4633839044	0.6086236357	0	0	1.628295979	1.252484292	GNAI1
Glioma	1/75	0.4633839044	0.6086236357	0	0	1.628295979	1.252484292	PIK3CA
Complement and coagulation cascades	1/79	0.4809405821	0.6270040181	0	0	1.544480926	1.130577871	ITGAM
Viral carcinogenesis	2/201	0.4955797359	0.6366571789	0	0	1.210716157	0.8499554539	DLG1;PIK3CA
Proteoglycans in cancer	2/201	0.4955797359	0.6366571789	0	0	1.210716157	0.8499554539	PIK3CA;ROCK2
Hypertrophic cardiomyopathy (HCM)	1/85	0.5062106872	0.6456020358	0	0	1.433725319	0.9760835216	ITGA1
GABAergic synapse	1/89	0.5223741921	0.6572207146	0	0	1.368278825	0.888520732	GNAI1
Dilated cardiomyopathy (DCM)	1/91	0.530257622	0.6572207146	0	0	1.337737127	0.848650148	ITGA1
Morphine addiction	1/91	0.530257622	0.6572207146	0	0	1.337737127	0.848650148	GNAI1
Rheumatoid arthritis	1/91	0.530257622	0.6572207146	0	0	1.337737127	0.848650148	ANGPT1
Small cell lung cancer	1/93	0.5380117076	0.6617952599	0	0	1.30852333	0.811120838	PIK3CA
Human T-cell leukemia virus 1 infection	2/219	0.541468849	0.6617952599	0	0	1.109270306	0.6805037679	DLG1;PIK3CA
Circadian entrainment	1/97	0.5531402491	0.6663933689	0	0	1.253747459	0.7423986527	GNAI1
Glycerophospholipid metabolism	1/97	0.5531402491	0.6663933689	0	0	1.253747459	0.7423986527	LPGAT1
Pancreatic secretion	1/98	0.556844799	0.6663933689	0	0	1.240759366	0.7264257922	SCTR
AGE-RAGE signaling pathway in diabetic complications	1/100	0.564162568	0.6663933689	0	0	1.215570338	0.6958080543	PIK3CA
Inflammatory mediator regulation of TRP channels	1/100	0.564162568	0.6663933689	0	0	1.215570338	0.6958080543	PIK3CA
Toll-like receptor signaling pathway	1/104	0.5784397132	0.6787025968	0	0	1.168126924	0.6394571505	PIK3CA
Drug metabolism	1/108	0.5922519084	0.6903068602	0	0	1.124230682	0.5888981284	FMO3
TNF signaling pathway	1/110	0.5989883727	0.6935654841	0	0	1.103490714	0.5655534381	PIK3CA
Toxoplasmosis	1/113	0.6088862012	0.6950651202	0	0	1.073769599	0.5327227511	GNAI1
Serotonergic synapse	1/113	0.6088862012	0.6950651202	0	0	1.073769599	0.5327227511	GNAI1
Glutamatergic synapse	1/114	0.6121312138	0.6950651202	0	0	1.064213253	0.5223250357	GNAI1
Thyroid hormone signaling pathway	1/116	0.6185411733	0.6978413237	0	0	1.045599152	0.5022969656	PIK3CA
Osteoclast differentiation	1/127	0.6519591547	0.7308586702	0	0	0.9537843593	0.4080035451	PIK3CA
Dopaminergic synapse	1/131	0.6633755491	0.7389499788	0	0	0.924249531	0.3793249563	GNAI1

Measles	1/138	0.6824657016	0.7518531149	0	0	0.8767135482	0.3349422805	PIK3CA
Fluid shear stress and atherosclerosis	1/139	0.6851035493	0.7518531149	0	0	0.8703163662	0.3291408433	PIK3CA
Parkinson disease	1/142	0.6928871156	0.7518531149	0	0	0.8516692614	0.3124673899	GNAI1
Apoptosis	1/143	0.6954389031	0.7518531149	0	0	0.8456286499	0.3071425726	PIK3CA
Adrenergic signaling in cardiomyocytes	1/145	0.7004794249	0.7518531149	0	0	0.8337991192	0.2968243866	GNAI1
Cytokine-cytokine receptor interaction	2/294	0.7005904025	0.7518531149	0	0	0.8212034625	0.2922103615	LEP;ACVR1B
Retrograde endocannabinoid signaling	1/148	0.7078851489	0.7550774922	0	0	0.8166583707	0.2821337582	GNAI1
Hepatitis C	1/155	0.7244649596	0.7681074271	0	0	0.7792603738	0.2511726712	PIK3CA
Hepatitis B	1/163	0.7422707064	0.7774622274	0	0	0.7404772659	0.220692784	PIK3CA
Protein processing in endoplasmic reticulum	1/165	0.7465404342	0.7774622274	0	0	0.7313726948	0.2137842601	SEL1L
RNA transport	1/165	0.7465404342	0.7774622274	0	0	0.7313726948	0.2137842601	PAIP1
Influenza A	1/171	0.7589323174	0.7857181639	0	0	0.7053443329	0.1945640704	PIK3CA
Alcoholism	1/180	0.7763998636	0.799101614	0	0	0.6695735114	0.1694607553	GNAI1
Kaposi sarcoma-associated herpesvirus infection	1/186	0.7873399815	0.8045815851	0	0	0.647659855	0.1548523153	PIK3CA
Calcium signaling pathway	1/188	0.7908671263	0.8045815851	0	0	0.6406677971	0.1503168788	PTGER3
Epstein-Barr virus infection	1/201	0.8124179162	0.8217560532	0	0	0.5986280488	0.124359228	PIK3CA
Thermogenesis	1/231	0.8540923279	0.8589728554	0	0	0.5197507953	0.08197300541	PLIN1
Herpes simplex virus 1 infection	1/492	0.983865307	0.983865307	0	0	0.2402265163	0.003907590445	PIK3CA