

S2 Table 1. KEGG Pathway analysis about mRNA

PATH_ID	Description	GeneRatio	pvalue	qvalue	geneID
hsa05332	Graft-versus-host disease	13/421	2.09E-07	4.21E-05	FASLG/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/IL6/KIRA2MDLA1BG/KIRA2MDL3/KIR3DLA1BG/KIR3DLA2M/TNF
hsa05322	Systemic lupus erythematosus	24/421	3.24E-07	4.21E-05	CA1BGQA/CTSG/ELANE/FCGR3B/H3F3A/HISTA1BGHA2MAJ/HISTA1BGHA2MAK/HISTA1BGHA2MAL/HISTA1BGHA2MBL/HISTA1BGHA2MBN/HISTA1BGHA2MBO/HISTA1BGH3A/HISTA1BGH3B/HISTA1BGH3C/HISTA1BGH4A/HISTA2MH3A/HISTA2MH3C/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/TNF
hsa04060	Cytokine-cytokine receptor interaction	36/421	8.06E-06	0.000699	ACVRA2MB/BMP6/CCL3/CCL4LA2M/CCRA2M/CCR3/CCR5/CCR7/CSFA2MRB/CX3CRA1BG/CXCLA1BG0/CXCLA2M/CXCL5/CXCRA1BG/CXCRA2M/CXCR4/EDAR/FASLG/IFNG/ILA1BGA2MA/ILA1BG8RA1BG/ILA1BG8RAP/ILA1BGRA2M/ILA1BGRAP/IL3RA/IL6/LEPR/LTB/PF4/PPBP/TNF/TNFRSFA1BG0C/TNFSF1A/TNFSFA2MA1BG/TNFSFA1BG0/TNFSF4/TNFSF8
hsa04640	Hematopoietic cell lineage	17/421	2.58E-05	0.001674	CD34/CD38/CD8B/FCERA2M/FLT3/FLT3LG/HLA-DM/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/ILA1BGRA2M/IL3RA/IL6/ITGAA1BG/M/ME/TNF
hsa04612	Antigen processing and presentation	14/421	8.77E-05	0.004468	CD8B/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/KIRA2MDLA1BG/KIRA2MDL3/KIR3DLA1BG/KIR3DLA2M/KLRCA2M/L/GMN/TNF
hsa05143	African trypanosomiasis	9/421	0.000103	0.004468	FASLG/HBAA1BG/HBAA2M/HBB/ICAMA1BG/IFNG/ILA1BGA2MA/IL6/TNF
hsa05330	Allograft rejection	9/421	0.000205	0.007598	FASLG/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/TNF
hsa05321	Inflammatory bowel	12/421	0.00024	0.00779	HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/ILA1BG8R

	disease (IBD)				A1BG/ILA1BG8RAP/IL6/TLR5/TNF
hsa04062	Chemokine signaling pathway	23/421	0.000393	0.011343	CCL3/CCL4LA2M/CCRA2M/CCR3/CCR5/CCR7/CX3 CRA1BG/CXCLA1BG0/CXCLA2M/CXCL5/CXCRA1 BG/CXCRA2M/CXCR4/GNAIA1BG/GNGA1BGA1BG /ITK/MAPK3/NCFA1BG/PARD3/PF4/PPBP/ROCKA1 BG/ROCKA2M
hsa04940	Type I diabetes mellitus	9/421	0.00055	0.0143	FASLG/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/ HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/TN F
hsa05140	Leishmania sis	12/421	0.000823	0.019445	FCGR3B/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/ HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/M APKA1BG4/MAPK3/NCFA1BG/TNF
hsa05150	Staphylococ cus aureus infection	10/421	0.00103	0.022307	CA1BGQA/CFH/FCGR3B/FPR3/HLA-DMA/HLA-DPB A1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/I CAMA1BG
hsa05144	Malaria	9/421	0.001482	0.028592	HBAA1BG/HBAA2M/HBB/HGF/ICAMA1BG/IFNG/IL A1BGA2MA/IL6/TNF
hsa05323	Rheumatoid arthritis	13/421	0.00154	0.028592	ATP6V0EA2M/CCL3/CXCL5/HLA-DMA/HLA-DPBA 1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IC AMA1BG/IFNG/IL6/LTB/TNF
hsa05145	Toxoplasm osis	15/421	0.001661	0.028794	BIRC3/CCR5/GNAIA1BG/HLA-DMA/HLA-DPBA1BG /HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/I LA1BGA2MA/LAMA5/MAPKA1BG4/MAPK3/SOCSA 1BG/TNF
hsa04657	IL-17 signaling pathway	13/421	0.002084	0.033873	CXCLA1BG0/CXCLA2M/CXCL5/IFNG/IL6/JUND/LC NA2M/MAPKA1BG4/MAPK3/MUC5B/TNF/TNFAIP3/ TRAF4
hsa05132	Salmonella infection	12/421	0.003104	0.047347	CCL3/CCL4LA2M/CXCLA2M/DYNCA1BGLIA2M/IF NG/IL6/MAPKA1BG4/MAPK3/NLRC4/ROCKA1BG/R OCKA2M/TLR5
hsa04270	Vascular smooth muscle contraction	15/421	0.003278	0.047347	ACTAA2M/AVPRA1BGA/CALCRL/CALDA1BG/GU CYA1BGA3/MAPK3/MYLK/PLAA2MGA1BGA2MA/ PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/PPPA1BG RA1BG4A/PRKGA1BG/ROCKA1BG/ROCKA2M
hsa05164	Influenza A	19/421	0.003553	0.04862	AGFGA1BG/CXCLA1BG0/DNAJBA1BG/FASLG/HLA

					-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1 BG/HLA-DRB5/ICAMA1BG/IFNG/ILA1BGA2MA/IL6 /IVNSA1BGABP/MAPKA1BG4/MAPK3/NXTA1BG/T NF/TNFSFA1BG0
hsa04620	Toll-like receptor signaling pathway	13/421	0.005593	0.070867	CCL3/CCL4LA2M/CXCLA1BG0/ILA1BGA2MA/IL6/ MAP3K8/MAPKA1BG4/MAPK3/TICAMA2M/TLRA1 BG/TLR5/TLR8/TNF
hsa04672	Intestinal immune network for IgA production	8/421	0.005724	0.070867	CXCR4/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/ HLA-DQBA1BG/HLA-DRB5/ICOSLG/IL6
hsa05310	Asthma	6/421	0.006965	0.08231	HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQ BA1BG/HLA-DRB5/TNF
hsa04350	TGF-beta signaling pathway	11/421	0.007391	0.083552	ACVRA2MB/BMP6/CDKNA2MB/ID3/IFNG/LTBPA1 BG/MAPK3/ROCKA1BG/SMAD5/TNF/ZFYVEA1BG6
hsa00564	Glycerophospholipid metabolism	12/421	0.008269	0.085951	ADPRM/AGPAT4/DGKK/ETNKA1BG/ETNKA2M/PH OSPHOA1BG/PLAA2MGA1BGA2MA/PLAA2MG4A/ PLAA2MG4B/PLAA2MG4C/PLDA1BG/PLD4
hsa00590	Arachidonic acid metabolism	9/421	0.008492	0.085951	ALOXA1BG5B/CBR3/EPHXA2M/PLAA2MGA1BGA2 MA/PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/PTGD S/PTGIS
hsa05202	Transcriptional misregulation in cancer	19/421	0.008772	0.085951	BIRC3/COMMD3-BMIA1BG/DEFA3/DUSP6/ELANE/ ETV7/FLT3/H3F3A/HISTA1BGH3A/HISTA1BGH3B/ HISTA1BGH3C/HISTA2MH3A/HISTA2MH3C/ILA1B GRA2M/IL6/JUP/MPO/PBXA1BG/POLK
hsa04668	TNF signaling pathway	13/421	0.008926	0.085951	BIRC3/CXCLA1BG0/CXCLA2M/CXCL5/ICAMA1BG/ ILA1BG8RA1BG/IL6/MAP3K8/MAPKA1BG4/MAPK3 /MLKL/TNF/TNFAIP3
hsa05133	Pertussis	10/421	0.010088	0.093671	CA1BGQA/CFLA2M/CXCL5/GNAIA1BG/ILA1BGA2 MA/IL6/MAPKA1BG4/MAPK3/TICAMA2M/TNF
hsa05134	Legionellosis	8/421	0.011507	0.101804	APAFA1BG/CXCLA2M/ILA1BGA2MA/IL6/NAIP/NL RC4/TLR5/TNF
hsa00592	alpha-Linol	5/421	0.011747	0.101804	FADSA2M/PLAA2MGA1BGA2MA/PLAA2MG4A/PL

	enic acid metabolism				AA2MG4B/PLAA2MG4C
hsa05152	Tuberculosis	18/421	0.012334	0.103447	APAF1BG/CAMP/FCGR3B/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/IL6/ITGAX/MAPKA1BG4/MAPK3/PBK3/RIPKA2M/TLRA1BG/TNF
hsa04621	NOD-like receptor signaling pathway	17/421	0.01395	0.113342	AIMA2M/BIRC3/CAMP/CARD6/CASP5/CXCLA2M/IL6/MAPKA1BG4/MAPK3/NAIP/NLRC4/NLRP6/RIPK2M/TNF/TNFAIP3/TRIP6/TXNIP
hsa00565	Ether lipid metabolism	7/421	0.015593	0.121403	PLAA2MGA1BGA2MA/PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/PLDA1BG/PLD4/UGT8
hsa04514	Cell adhesion molecules (CAMs)	15/421	0.015876	0.121403	CD34/CD58/CD8B/CNTNAPA2M/HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/ICAMA1BG/ICOSLG/ITGAV/LRRC4B/NLGNA2M/NRCAM
hsa04217	Necroptosis	16/421	0.020662	0.153487	BIRC3/FASLG/HISTA1BGHA2MAJ/HISTA1BGHA2MAK/HISTA1BGHA2MAL/IFNG/MLKL/PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/RNFA1BG03-CHMP3/SPATAA2ML/TICAMA2M/TNF/TNFAIP3/TNFSFA1BG0
hsa04611	Platelet activation	13/421	0.021357	0.154245	GNAIA1BG/GUCYA1BGA3/MAPKA1BG4/MAPK3/MYLK/PA2MRYA1BGA2M/PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/PRKCI/PRKGA1BG/ROCKA1BG/ROCKA2M
hsa05034	Alcoholism	17/421	0.025749	0.180941	GNAIA1BG/GNGA1BGA1BG/H3F3A/HISTA1BGHA2MAJ/HISTA1BGHA2MAK/HISTA1BGHA2MAL/HISTA1BGHA2MBL/HISTA1BGHA2MBN/HISTA1BGHA2MBO/HISTA1BGH3A/HISTA1BGH3B/HISTA1BGH3C/HISTA1BGH4A/HISTA2MH3A/HISTA2MH3C/MAPK3/SLCA2M9AA1BG
hsa04010	MAPK signaling pathway	25/421	0.027341	0.187068	CACNAA2MDA2M/CACNBA1BG/DUSP5/DUSP6/EGF/EPHAA2M/FASLG/FGFA2M/FGF9/FLT3/FLT3LG/HGF/ILA1BGRAP/JUND/MAP3K6/MAP3K8/MAPKA1BG4/MAPK3/PDGFB/PLAA2MG4A/PLAA2MG4B/PLA2MG4C/RELB/STK3/TNF
hsa01523	Antifolate	5/421	0.028479	0.189858	DHFRLA1BG/IL6/SLCA1BG9AA1BG/TNF/TYMS

	resistance				
hsa04610	Complement and coagulation cascades	9/421	0.033532	0.212864	A2M/CA1BGQA/CFH/FA2MRLA2M/ITGAX/PLAUR/PROSA1BG/SERPINBA2M/TFPI
hsa04650	Natural killer cell mediated cytotoxicity	13/421	0.033707	0.212864	FASLG/FCGR3B/ICAMA1BG/IFNG/KIRA2MDLA1BG/KIRA2MDL3/KIR3DLA1BG/KIR3DLA2M/KLRCA2M/MAPK3/SHA2MDA1BGA/TNF/TNFSFA1BG0
hsa04658	Th1 and Th2 cell differentiation	10/421	0.034386	0.212864	HLA-DMA/HLA-DPBA1BG/HLA-DQAA2M/HLA-DQBA1BG/HLA-DRB5/IFNG/ILA1BGA2MA/MAPKA1B4/MAPK3/RBPJ
hsa04068	FoxO signaling pathway	13/421	0.035551	0.214959	BCLA2MLA1BGA1BG/CDKNA2MB/EGF/FASLG/FBXO3A2M/IL6/KLFA2M/MAPKA1BG4/MAPK3/PLK2M/PLK3/PRKABA2M/TNFSFA1BG0
hsa04360	Axon guidance	16/421	0.038747	0.228958	CFLA2M/CXCR4/EPHA2M/EPHBA1BG/EPHB6/GNAIA1BG/MAPK3/NCKA2M/NRPA1BG/NTN4/PARD3/ROBOA1BG/ROCKA1BG/ROCKA2M/SRGAPA1BG/SRGAPA2M
hsa05410	Hypertrophic cardiomyopathy (HCM)	9/421	0.044035	0.254425	CACNAA2MDA2M/CACNBA1BG/IL6/ITGAA1BG/ITGAV/PRKABA2M/RYRA2M/TNF/TPMA1BG
hsa04921	Oxytocin signaling pathway	14/421	0.048444	0.273816	CACNAA2MDA2M/CACNBA1BG/CD38/GNAIA1BG/GUCYA1BGA3/MAPK3/MYLK/PLAA2MG4A/PLAA2MG4B/PLAA2MG4C/PRKABA2M/ROCKA1BG/ROCKA2M/RYRA2M

Table 2. KEGG Pathway analysis about circRNA

PATH_ID	Description	GeneRatio	pvalue	qvalue	geneID
hsa04068	FoxO signaling pathway	9/113	0.000167	0.01768	AKT3/PTEN/ATM/CREBBP/RBL2/SMAD2/EGF/CCNB1/PRKAG2
hsa00310	Lysine degradation	6/113	0.000251	0.01768	ASH1L/SETDB2/SETD2/KMT2C/EHMT1/TMLHE

hsa04144	Endocytosis	12/113	0.000309	0.01768	CAPZA1/RAB4A/DNAJC6/AP2A2/CBL/CCDC53/ACA P1/SMAD2/ASAP2/ASAP1/VPS37A/SH3KBP1
hsa04218	Cellular senescence	9/113	0.000695	0.029728	AKT3/MCU/PTEN/ATM/RBL2/SMAD2/NFATC2/CCN B1/PPP3CC
hsa04141	Protein processing in endoplasmi c reticulum	9/113	0.000866	0.029728	ATF6/DNAJB12/UBE2G1/SEC62/SKP1/UBE2D2/SEC6 3/MAP3K5/DNAJA1
hsa04110	Cell cycle	7/113	0.002704	0.077312	ATM/CREBBP/RBL2/SMAD2/SKP1/CCNB1/CDC14B
hsa04120	Ubiquitin mediated proteolysis	7/113	0.004703	0.11528	RFWD2/CBL/UBE2G1/UBA2/SKP1/UBE2D2/UBE3C
hsa04350	TGF-beta signaling pathway	5/113	0.008814	0.166593	CREBBP/SMAD2/LTBP1/SKP1/SMAD5
hsa04012	ErbB signaling pathway	5/113	0.009254	0.166593	AKT3/CBL/PAK2/EGF/PTK2
hsa05210	Colorectal cancer	5/113	0.009709	0.166593	AKT3/SMAD2/APPL1/LEF1/EGF
hsa05213	Endometrial cancer	4/113	0.011405	0.172926	AKT3/PTEN/LEF1/EGF
hsa04370	VEGF signaling pathway	4/113	0.012094	0.172926	AKT3/NFATC2/PTK2/PPP3CC
hsa05170	Human immunodefici ency virus 1 infection	8/113	0.0151	0.193223	AKT3/ATM/NFATC2/PAK2/SKP1/CCNB1/PTK2/PPP3 CC
hsa05215	Prostate cancer	5/113	0.015766	0.193223	AKT3/PTEN/CREBBP/LEF1/EGF
hsa04660	T cell receptor signaling pathway	5/113	0.018481	0.211392	AKT3/MALT1/NFATC2/PAK2/PPP3CC

hsa04662	B cell receptor signaling pathway	4/113	0.022495	0.224452	AKT3/MALT1/NFATC2/PPP3CC
hsa04310	Wnt signaling pathway	6/113	0.023422	0.224452	DAAM1/CREBBP/NFATC2/LEF1/SKP1/PPP3CC
hsa04115	p53 signaling pathway	4/113	0.023547	0.224452	RFWD2/PTEN/ATM/CCNB1
hsa04150	mTOR signaling pathway	6/113	0.027083	0.244576	AKT3/PTEN/EIF4B/DEPDC5/RICTOR/MAPKAP1
hsa01521	EGFR tyrosine kinase inhibitor resistance	4/113	0.031745	0.272342	AKT3/PTEN/NF1/EGF
hsa04071	Sphingolipid signaling pathway	5/113	0.033399	0.272886	AKT3/SGMS1/PTEN/ABCC1/MAP3K5
hsa00532	Glycosaminoglycan biosynthesis - chondroitin sulfate / dermatan sulfate	2/113	0.036356	0.283546	CSGALNACT2/XYLT1
hsa03013	RNA transport	6/113	0.045461	0.322656	UPF2/EIF4B/NUP107/PHAX/NUPL2/EIF3H
hsa04211	Longevity regulating pathway	4/113	0.04604	0.322656	AKT3/APPL1/PRKAG2/EHMT1
hsa03060	Protein export	2/113	0.047013	0.322656	SEC62/SEC63

Table 3. KEGG Pathway analysis about lncRNA

PATH_ID	Description	GeneRatio	pvalue	qvalue	geneID
hsa04380	Osteoclast differentiation	17/402	0.000491	0.140161	JUN/MITF/SIRPG/FCGR3A/FOSLA2M/ILA1BGA/JUND/LILRA4/MAP3K7/NOXA1BG/PLCGA2M/PPP3CB/STATA1BG/TNF/TNFRSFA1BGA1BGA/TNFRSFA1BGA1BGB/TRAFF6
hsa05140	Leishmania sis	11/402	0.001919	0.170242	JUN/CYBB/FCGR3A/HLA-DMA/ILA1BG0/ILA1BGA/MAP3K7/NOSA2M/STATA1BG/TNF/TRAFF6
hsa05132	Salmonella infection	12/402	0.002117	0.170242	JUN/LBP/APPC4/CCL3/CCL4/CCL4LA1BG/ILA1BGA/IL6/KLCA2M/NOSA2M/PKN3/RILP
hsa05133	Pertussis	11/402	0.002387	0.170242	JUN/CASP3/CXCL5/ILA1BG0/ILA1BGA/ILA2M3A/IL6/NLRP3/NOSA2M/TNF/TRAFF6
hsa04659	Th17 cell differentiation	13/402	0.004852	0.276414	JUN/PRKCQ/RUNXA1BG/AHR/HLA-DMA/ILA2M3A/IL6/IRF4/NFATC3/PPP3CB/RARA/RXRG/STATA1BG
hsa05332	Graft-versus-host disease	7/402	0.005814	0.276414	HLA-A/FAS/HLA-DMA/HLA-E/ILA1BGA/IL6/TNF
hsa05142	Chagas disease (American trypanosomiasis)	12/402	0.008608	0.314855	JUN/ADCYA1BG/CCL3/FAS/GNAA1BG4/ILA1BG0/IL6/NOSA2M/PPPA2MRA1BGA/TLR6/TNF/TRAFF6
hsa05323	Rheumatoid arthritis	11/402	0.00883	0.314855	ATP6V0EA2M/JUN/ATP6VA1BGEA2M/CCL3/CXCL5/HLA-DMA/ILA1BGA/ILA2M3A/IL6/TNF/TNFRSFA1BGA1BGA
hsa04657	IL-17 signaling pathway	11/402	0.011203	0.355094	JUN/CASP3/CXCL5/ILA1BG7RA/IL6/JUND/MAP3K7/TNF/TRAFF5/TRAFF6/USPA2M5
hsa04064	NF-kappa B signaling pathway	11/402	0.013038	0.371917	PRKCQ/LBP/CCL4/CCL4LA1BG/ERCA1BG/MAP3K7/PLCGA2M/TNF/TNFRSFA1BGA1BGA/TRAFF5/TRAFF6
hsa05330	Allograft rejection	6/402	0.01521	0.381384	HLA-A/FAS/HLA-DMA/HLA-E/ILA1BG0/TNF
hsa05152	Tuberculosis	17/402	0.016405	0.381384	NFYC/LBP/CASP3/FCGR3A/HLA-DMA/ILA1BG0/IL1A1BGA/ILA2M3A/IL6/ITGAX/NOSA2M/PPP3CB/RF

					XAP/STATA1BG/TLR6/TNF/TRA6
hsa04933	AGE-RAGE signaling pathway in diabetic complications	11/402	0.01738	0.381384	JUN/CASP3/COL4A3/CYBB/ILA1BGA/IL6/NOXA1BG/PLCD3/PLCGA2M/STATA1BG/TNF
hsa04621	NOD-like receptor signaling pathway	16/402	0.019094	0.389051	JUN/AIMA2M/CYBB/IL6/MAP3K7/MFNA1BG/NEK7/NLRP3/NLRXA1BG/PA2MRX7/SHARPIN/STATA1BG/TANK/TNF/TRA6/TRA5
hsa05321	Inflammatory bowel disease (IBD)	8/402	0.022979	0.40651	JUN/HLA-DMA/ILA1BG0/ILA1BGA/ILA2M3A/IL6/STATA1BG/TNF
hsa04620	Toll-like receptor signaling pathway	11/402	0.024226	0.40651	JUN/LBP/CCL3/CCL4/CCL4LA1BG/IL6/MAP3K7/STATA1BG/TLR6/TNF/TRA6
hsa04625	C-type lectin receptor signaling pathway	11/402	0.024226	0.40651	JUN/CLEC4D/ILA1BG0/ILA2M3A/IL6/NFATC3/NLRP3/PLCGA2M/PPP3CB/STATA1BG/TNF
hsa04940	Type I diabetes mellitus	6/402	0.026818	0.418861	HLA-A/FAS/HLA-DMA/HLA-E/ILA1BGA/TNF
hsa05222	Small cell lung cancer	10/402	0.027898	0.418861	CASP3/CCNEA2M/COL4A3/EA2MFA2M/ITGAA2M/NOSA2M/RXRG/TRA6/ZBTBA1BG7
hsa05146	Amoebiasis	10/402	0.033809	0.482225	ADCYA1BG/CASP3/COL4A3/GNAA1BG4/ILA1BG0/ILA1BGRA2M/IL6/NOSA2M/SERPINB6/TNF
hsa04724	Glutamatergic synapse	11/402	0.043462	0.590393	ADCYA1BG/ADCY9/ADRBKA2M/GRIKA2M/GRMA1BG/HOMER3/PLDA1BG/PPP3CB/SLCA1BGAA2M/SLCA1BGA3/SLCACATA1BGAA1BG
hsa04060	Cytokine-cytokine	23/402	0.046349	0.600991	CCLABAT/CCL3/CCL4/CCL4LA1BG/CXCL5/FAS/GDFA1BG0/ILA1BG0/ILA1BG7RA/ILA1BGA/ILA1BG

	receptor interaction				RA2M/ILA2M3A/IL3A1BGRA/IL34/IL37/IL6/TNF/TNFRSFA1BG0C/TNFRSFA1BGA1BGA/TNFRSFA1BGA1BGB/TNFRSFA1BG9/TNFSF8/XCLA2M
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