

Supplementary**Table S1** Primer sequences

Gene name	Forward	Reverse	Amplicon size
<i>CCL2</i>	CAGCCAGATGCAATCAATGCC	TGGAATCCTGAACCCACTTCT	190
<i>CXCL8 (IL8)</i>	TTTTGCCAAGGAGTGCTAAAGA	AACCCTCTGCACCCAGTTTTTC	194
<i>CXCL10</i>	GTGGCATTCAAGGAGTACCTC	TGATGGCCTTCGATTCTGGATT	198
<i>PTGS2</i>	CTGGCGCTCAGCCATACAG	CGCACTTATACTGGTCAAATCCC	94
<i>β-actin</i>	CTCCATCCTGGCCTCGCTGT	GCTGTCACCTTCACCGTTCC	268

Table S2 The data of GO enrichment analysis including biological process, cellular component, and molecular function

Type	ID	Description	P value	P adjust	Gene ID	Count
Biological process	GO:0032496	Response to lipopolysaccharide	5.10E-32	2.10E-28	NOS2/PTGS2/MAPK14/RELA/OPRM1/JUN/AKT1/CASP3/MAPK8/CYP1A2/CYP1A1/ICAM1/SELE/VCAM1/GSTP1/SLPI/FOS/CASP9/MAPK1/IL10/IL6/NFKBIA/CASP8/PRKCA/GJA1/IL1B/CCL2/CXCL8/NOS3/THBD/SERPINE1/MPO/CXCL11/CXCL2/PPARD/HSF1/CXCL10/CHUK	38
	GO:0002237	Response to molecule of bacterial origin	2.22E-31	4.56E-28	NOS2/PTGS2/MAPK14/RELA/OPRM1/JUN/AKT1/CASP3/MAPK8/CYP1A2/CYP1A1/ICAM1/SELE/VCAM1/GSTP1/SLPI/FOS/CASP9/MAPK1/IL10/IL6/NFKBIA/CASP8/PRKCA/GJA1/IL1B/CCL2/CXCL8/NOS3/THBD/SERPINE1/MPO/CXCL11/CXCL2/PPARD/HSF1/CXCL10/CHUK	38
	GO:0048545	Response to steroid hormone	4.27E-27	5.86E-24	PGR/AR/PTGS2/ESR2/NCOA2/RXRA/ESR1/PPARG/NCOA1/RELA/RXR/HSR3B2/HSR3B1/BCL2/CASP3/ICAM1/INR1I2/GSTP1/INR1I3/AKR1C3/EGFR/CCND1/FOS/CDKN1A/CASP9/IL10/RB1/IL6/TP63/CAV1/COL1A1/PARP1/CLDN4/PPARA/PPARD/SPP1	36
	GO:0000302	Response to reactive oxygen species	1.69E-25	1.74E-22	CCNA2/RELA/MET/JUN/AKT1/BCL2/CASP3/MAPK8/STAT1/HMOX1/CYP1B1/GSTP1/AKR1C3/MMP3/EGFR/FOS/MMP2/MMP9/MAPK1/IL10/IL6/SOD1/NOS3/COL1A1/MPO/NFE2L2/NQO1/HSF1/CHUK	29
	GO:0072593	Reactive oxygen species metabolic process	3.61E-24	2.97E-21	NOS2/PTGS2/MAPK14/AKT1/BCL2/CYP1A2/CYP1A1/ICAM1/CYP1B1/GSTP1/INR1I2/AKR1C3/MMP3/EGFR/CDKN1A/EIF6/IL10/POR/SOD1/HIF1A/CAV1/IL1B/DUOX2/NOS3/IFNG/MPO/NFE2L2/NQO1/CRP/HK2	30
	GO:1901654	Response to ketone	8.95E-24	6.14E-21	AR/NCOA2/PPARG/AKR1B1/NCOA1/F7/RELA/HSR3B2/HSR3B1/AKT1/ICAM1/AHR/AKR1C3/EGFR/CCND1/BCL2L1/FOS/CDKN1A/CASP9/ELK1/ACACA/CAV1/PARP1/CLDN4/HSF1/SPP1	26
	GO:0006979	Response to oxidative stress	1.32E-23	7.74E-21	PTGS1/PTGS2/CCNA2/RELA/MET/JUN/AKT1/BCL2/CASP3/MAPK8/STAT1/HMOX1/CYP1B1/GSTP1/AKR1C3/MMP3/EGFR/FOS/MMP2/MMP9/MAPK1/IL10/IL6/SOD1/HIF1A/DUOX2/NOS3/HSPB1/COL1A1/MPO/NFE2L2/NQO1/PARP1/HSF1/CHUK	35
	GO:0070482	Response to oxygen levels	2.60E-23	1.34E-20	NOS2/PTGS2/PPARG/CCNA2/F7/SLC6A4/AKT1/BCL2/CASP3/HMOX1/CYP1A1/ICAM1/VCAM1/PSMD3/SLC2A4/VEGFA/CDKN1A/PLAU/MMP2/RAF1/HIF1A/CAV1/MYC/CCNB1/PLAT/INFE2L2/PPARA/PPARD/HSF1/E2F1/NPEPPS/HK2	33
	GO:0031667	Response to nutrient levels	3.36E-23	1.54E-20	PTGS2/PPARG/NCOA1/F7/RELA/ADRB2/OPRM1/SLC6A4/JUN/AKT1/BCL2/MAPK8/STAT1/HMOX1/CYP1A1/ICAM1/VCAM1/GSTP1/AKR1C3/EGFR/CCND1/CDKN1A/MAPK1/POR/SOD1/IL1B/COL1A1/MPO/NFE2L2/NQO1/PPARA/PPARD/HSF1/CXCL10/SPP1/PON1	36
	GO:0046677	Response to antibiotic	2.28E-22	9.40E-20	RELA/HTR3A/OPRM1/SLC6A3/MET/JUN/BCL2/CASP3/STAT1/HMOX1/CYP1A1/ICAM1/VCAM1/CYP1B1/GSTP1/AHR/SLC2A4/CCND1/BCL2L1/CASP9/IL10/IL6/CASP8/SOD1/IL2/COL1A1/NFE2L2/NQO1/HSF1/CHUK	30
	GO:0034599	Cellular response to oxidative stress	3.38E-22	1.27E-19	CCNA2/RELA/MET/JUN/AKT1/BCL2/MAPK8/HMOX1/CYP1B1/GSTP1/AKR1C3/MMP3/EGFR/FOS/MMP2/MMP9/MAPK1/IL10/IL6/SOD1/HIF1A/NOS3/HSPB1/MPO/NFE2L2/NQO1/PARP1/HSF1/CHUK	29
	GO:0010038	Response to metal ion	3.94E-22	1.35E-19	PTGS2/SLC6A3/JUN/AKT1/BCL2/CASP3/MAPK8/HMOX1/CYP1A2/CYP1A1/ICAM1/VCAM1/PPP3CA/AKR1C3/EGFR/CCND1/FOS/CASP9/MMP9/MAPK1/CASP8/SOD1/HIF1A/CAV1/CCNB1/IL1A/NFE2L2/NQO1/PARP1/HSF1/CHUK	31
	GO:0009410	Response to xenobiotic stimulus	1.97E-21	6.22E-19	PTGS1/PPARG/CCNA2/F7/RELA/HTR3A/OPRM1/SLC6A3/CYP3A4/CYP1A2/CYP1A1/ICAM1/INR1I2/CYP1B1/GSTP1/AHR/PPP3CA/GSTM1/GSTM2/EGFR/CASP9/RB1/POR/SOD1/NQO1/CHEK2/HSF1/E2F1	28
	GO:0034614	Cellular response to reactive oxygen species	2.78E-21	8.18E-19	CCNA2/RELA/MET/JUN/AKT1/MAPK8/CYP1B1/AKR1C3/MMP3/EGFR/FOS/MMP2/MMP9/MAPK1/IL10/IL6/SOD1/NOS3/MPO/NFE2L2/NQO1/HSF1/CHUK	23
	GO:0001666	Response to hypoxia	3.42E-21	9.37E-19	NOS2/PTGS2/CCNA2/F7/SLC6A4/AKT1/BCL2/CASP3/HMOX1/CYP1A1/ICAM1/VCAM1/PSMD3/SLC2A4/VEGFA/PLAU/MMP2/RAF1/HIF1A/CAV1/MYC/CCNB1/PLAT/NFE2L2/PPARA/PPARD/HSF1/E2F1/NPEPPS/HK2	30
	GO:0036293	Response to decreased oxygen levels	8.14E-21	2.09E-18	NOS2/PTGS2/CCNA2/F7/SLC6A4/AKT1/BCL2/CASP3/HMOX1/CYP1A1/ICAM1/VCAM1/PSMD3/SLC2A4/VEGFA/PLAU/MMP2/RAF1/HIF1A/CAV1/MYC/CCNB1/PLAT/NFE2L2/PPARA/PPARD/HSF1/E2F1/NPEPPS/HK2	30
	GO:0001101	Response to acid chemical	1.21E-20	2.93E-18	PTGS2/RXRA/PPARG/AKR1B1/NCOA1/F7/RELA/SLC6A4/RXR/HSR3B2/HSR3B1/AKT1/CASP3/ICAM1/GSTP1/AKR1C3/EGFR/VEGFA/BCL2L1/MMP2/ACACA/GJA1/CCNB1/COL1A1/NQO1/COL3A1/HSF1/CHUK/E2F1/PON1	29
	GO:0048608	Reproductive structure development	5.76E-20	1.32E-17	PGR/AR/PTGS2/RXRA/ESR1/PPARG/MAPK14/NCOA1/AKT1/BCL2/BAX/CASP3/ICAM1/INR1I2/EGFR/VEGFA/CCND1/BCL2L1/MAPK1/IL10/TP63/CASP8/SOD1/HIF1A/GJA1/NOS3/PPARD/HSF1/SPP1/IGF2	31
	GO:0061458	Reproductive system development	7.05E-20	1.53E-17	PGR/AR/PTGS2/RXRA/ESR1/PPARG/MAPK14/NCOA1/AKT1/BCL2/BAX/CASP3/ICAM1/INR1I2/EGFR/VEGFA/CCND1/BCL2L1/MAPK1/IL10/TP63/CASP8/SOD1/HIF1A/GJA1/NOS3/PPARD/HSF1/SPP1/IGF2	31
	GO:0035690	Cellular response to drug	9.18E-20	1.89E-17	NOS2/PTGS2/CHRM3/CCNA2/NCOA1/RELA/OPRM1/KCNH2/KDR/MET/HMOX1/ICAM1/CYP1B1/AHR/PPP3CA/GSTM2/MMP3/EGFR/CASP9/MAPK1/IL10/IL6/SOD1/MYC/IL1B/NFE2L2/NQO1/CHEK2/HSF1	29
Cellular component	GO:0045121	Membrane raft	1.08E-16	1.74E-14	PTGS2/ADRA1B/SLC6A2/OLR1/OPRM1/ADRA1A/SLC6A3/SLC6A4/KDR/IKBKB/CASP3/HMOX1/ICAM1/SELE/HAS2/SLC2A4/INR1I2/EGFR/MAPK1/CASP8/CAV1/GJA1/NOS3/CTSD	24
	GO:0098857	Membrane microdomain	1.17E-16	1.74E-14	PTGS2/ADRA1B/SLC6A2/OLR1/OPRM1/ADRA1A/SLC6A3/SLC6A4/KDR/IKBKB/CASP3/HMOX1/ICAM1/SELE/HAS2/SLC2A4/INR1I2/EGFR/MAPK1/CASP8/CAV1/GJA1/NOS3/CTSD	24
	GO:0098589	Membrane region	2.72E-16	2.70E-14	PTGS2/ADRA1B/SLC6A2/OLR1/OPRM1/ADRA1A/SLC6A3/SLC6A4/KDR/IKBKB/CASP3/HMOX1/ICAM1/SELE/HAS2/SLC2A4/INR1I2/EGFR/MAPK1/CASP8/CAV1/GJA1/NOS3/CTSD	24
	GO:0090575	RNA polymerase II transcription factor complex	8.63E-10	5.98E-08	RXRA/PPARG/RXR/ESR1/INR1I2/INR1I3/FOS/RB1/HIF1A/PPARA/PPARD/E2F1/E2F2	13
	GO:0005901	Caveola	1.00E-09	5.98E-08	PTGS2/ADRA1B/ADRA1A/SLC6A3/HMOX1/SELE/INR1I2/MAPK1/CAV1/NOS3	10
	GO:0044853	Plasma membrane raft	1.47E-09	7.30E-08	PTGS2/ADRA1B/ADRA1A/SLC6A3/HMOX1/SELE/HAS2/INR1I2/MAPK1/CAV1/NOS3	11
	GO:0005667	Transcription factor complex	8.29E-09	3.53E-07	RXRA/PPARG/RELA/RXR/ESR1/INR1I2/AHR/INR1I3/FOS/RB1/HIF1A/PPARA/PPARD/RUNX2/E2F1/E2F2	17
	GO:0044798	Nuclear transcription factor complex	1.11E-08	4.13E-07	RXRA/PPARG/RXR/ESR1/INR1I2/INR1I3/FOS/RB1/HIF1A/PPARA/PPARD/E2F1/E2F2	13
	GO:0000790	Nuclear chromatin	4.97E-07	1.65E-05	AR/RXRA/ESR1/NCOA1/RELA/JUN/STAT1/RB1/TP63/HIF1A/MYC/PPARD/RUNX2/E2F1/IRF1	15
	GO:0031983	Vesicle lumen	7.82E-07	2.33E-05	LYZ/MAPK14/ALOX5/GSTP1/PSMD3/SLPI/EGFR/VEGFA/MAPK1/EGF/SERPINE1/MPO/CTSD/IGF2	14
	GO:0034774	Secretory granule lumen	2.44E-06	6.61E-05	LYZ/MAPK14/ALOX5/GSTP1/PSMD3/SLPI/VEGFA/MAPK1/EGF/SERPINE1/MPO/CTSD/IGF2	13
	GO:1902911	Protein kinase complex	3.14E-06	7.79E-05	CCNA2/IKBKB/INR1I2/CDKN1A/RB1/CCNB1/CHUK	8
	GO:0060205	Cytoplasmic vesicle lumen	4.29E-06	9.84E-05	LYZ/MAPK14/ALOX5/GSTP1/PSMD3/SLPI/VEGFA/MAPK1/EGF/SERPINE1/MPO/CTSD/IGF2	13
	GO:1902554	Serine/threonine protein kinase complex	7.74E-06	0.000156	CCNA2/IKBKB/CCND1/CDKN1A/RB1/CCNB1/CHUK	7
	GO:0009925	Basal plasma membrane	7.84E-06	0.000156	MET/EGFR/ERBB2/CLDN4/ERBB3	5
	GO:0000307	Cyclin-dependent protein kinase holoenzyme complex	2.27E-05	0.000423	CCNA2/CCND1/CDKN1A/RB1/CCNB1	5
	GO:0099056	Integral component of presynaptic membrane	2.93E-05	0.000497	CHRM3/HTR3A/OPRM1/ADRA1A/SLC6A3/SLC6A4	6
	GO:0062023	Collagen-containing extracellular matrix	3.00E-05	0.000497	PRSS1/F7/ACHE/ICAM1/SLPI/MMP2/MMP9/F3/SERPINE1/COL1A1/COL3A1/CTSD/PCOLCE	13
	GO:0099055	Integral component of postsynaptic membrane	4.96E-05	0.000779	CHRM3/GABRA1/HTR3A/OPRM1/ADRA1A/SLC6A3/SLC6A4	7
	GO:0098889	Intrinsic component of presynaptic membrane	5.67E-05	0.00084	CHRM3/HTR3A/OPRM1/ADRA1A/SLC6A3/SLC6A4	6
Molecular function	GO:0004879	Nuclear receptor activity	8.43E-15	2.10E-12	PGR/AR/ESR2/RXRA/ESR1/PPARG/RXR/ESR1/INR1I2/AHR/INR1I3/PPARA/PPARD	12
	GO:0098531	Transcription factor activity, direct ligand regulated sequence-specific DNA binding	8.43E-15	2.10E-12	PGR/AR/ESR2/RXRA/ESR1/PPARG/RXR/ESR1/INR1I2/AHR/INR1I3/PPARA/PPARD	12
	GO:0003707	Steroid hormone receptor activity	2.62E-12	4.35E-10	PGR/AR/ESR2/RXRA/ESR1/PPARG/RXR/ESR1/INR1I2/AHR/INR1I3/PPARA/PPARD	11
	GO:0005126	Cytokine receptor binding	1.28E-10	1.60E-08	IL4/TNFSF15/CASP3/STAT1/VEGFA/IL10/IL6/CASP8/IL1B/CCL2/CXCL8/IL2/IFNG/IL1A/CXCL11/CXCL2/CXCL10/CD40LG	18
	GO:0005125	cytokine activity	1.73E-10	1.72E-08	IL4/TNFSF15/VEGFA/IL10/IL6/IL1B/CCL2/CXCL8/IL2/IFNG/IL1A/CXCL11/CXCL2/CXCL10/SPP1/CD40LG	16
	GO:0001228	DNA-binding transcription activator activity, RNA polymerase II-specific	3.34E-09	2.77E-07	PGR/AR/ESR1/RELA/RXR/ESR1/INR1I2/INR1I3/FOS/TP63/ELK1/HIF1A/MYC/NFE2L2/PARP1/PPARA/RUNX2/E2F1/IRF1	20
	GO:0001085	RNA polymerase II transcription factor binding	1.80E-08	1.28E-06	AR/ESR1/PPARG/GSK3B/JUN/AHR/FOS/RB1/ELK1/NFE2L2/PPARA/PPARD	12
	GO:0020037	Heme binding	4.25E-08	2.65E-06	NOS2/PTGS1/PTGS2/HMOX1/CYP3A4/CYP1A2/CYP1A1/CYP1B1/DUOX2/NOS3/MPO	11
	GO:0046906	Tetrapyrrole binding	8.89E-08	4.92E-06	NOS2/PTGS1/PTGS2/HMOX1/CYP3A4/CYP1A2/CYP1A1/CYP1B1/DUOX2/NOS3/MPO	11
	GO:0019902	Phosphatase binding	1.28E-07	6.37E-06	PPARG/MAPK14/SLC6A3/MET/AKT1/BCL2/STAT1/EGFR/MAPK1/SOD1/ERBB2/PPARA	12
	GO:0044389	Ubiquitin-like protein ligase binding	1.46E-07	6.60E-06	GSK3B/RELA/KCNH2/JUN/BCL2/STAT1/EGFR/CDKN1A/RB1/NFKBIA/CASP8/HIF1A/CCNB1/CHEK2/ERBB3	15
	GO:0030374	Nuclear receptor transcription coactivator activity	1.63E-07	6.77E-06	NCOA2/PPARG/NCOA1/INR1I2/INR1I3/PRKCB/PPARA/PPARD	8
	GO:0016705	Oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	2.27E-07	8.71E-06	NOS2/PTGS1/PTGS2/HMOX1/CYP3A4/CYP1A2/CYP1A1/CYP1B1/AKR1C3/POR/NOS3	11
	GO:0048018	Receptor ligand activity	4.21E-07	1.43E-05	IL4/TNFSF15/VEGFA/IL10/EGF/IL6/IL1B/CCL2/CXCL8/IL2/IFNG/IL1A/CXCL11/CXCL2/CXCL10/SPP1/IGF2/CD40LG	18
	GO:0019207	Kinase regulator activity	4.32E-07	1.43E-05	CCNA2/CASP3/GSTP1/CCND1/CDKN1A/EGF/HSPB1/IL2/CCNB1/CXCL10/IGF2/ERBB3	12
	GO:0019903	Protein phosphatase binding	6.11E-07	1.90E-05	PPARG/MAPK14/SLC6A3/MET/AKT1/BCL2/STAT1/EGFR/SOD1/ERBB2	10
	GO:0016209	Antioxidant activity	1.15E-06	3.36E-05	PTGS1/PTGS2/GSTP1/GSTM2/SOD1/DUOX2/MPO/NQO1	8
	GO:0035257	Nuclear hormone receptor binding	1.30E-06	3.60E-05	NCOA2/RXRA/ESR1/PPARG/NCOA1/STAT1/RB1/HIF1A/PRKCB/PARP1	10
	GO:0031625	Ubiquitin protein ligase binding	2.57E-06	6.75E-05	GSK3B/RELA/KCNH2/JUN/BCL2/EGFR/CDKN1A/RB1/NFKBIA/CASP8/HIF1A/CHEK2/ERBB3	13
	GO:0005178	Integrin binding	3.33E-06	8.30E-05	KDR/ICAM1/VCAM1/EGFR/PRKCA/IL1B/COL3A1/SPP1/IGF2	9

Table S3 The data of KEGG pathway enrichment analysis

ID	Description	P value	P adjust	Gene ID	Count
hsa04933	AGE-RAGE signaling pathway in diabetic complications	1.81E-27	4.37E-25	MAPK14/RELA/JUN/AKT1/BCL2/BAX/CASP3/MAPK8/STAT1/ICAM1/SELE/VCAM1/VEGFA/CCND1/MMP2/MAPK1/IL6/PRKCA/IF3/IL1B/CCL2/CXCL8/PRKCB/NOS3/THBD/SERPINE1/COL1A1/IL1A/COL3A1	29
hsa05418	Fluid shear stress and atherosclerosis	3.18E-24	3.84E-22	MAPK14/RELA/KDR/JUN/IKKKB/AKT1/BCL2/MAPK8/HMOX1/ICAM1/SELE/VCAM1/GSTP1/GSTM1/GSTM2/VEGFA/FOS/MMP2/MMP9/CAV1/IL1B/CCL2/NOS3/PLAT/THBD/IFNG/IL1A/NFE2L2/NQO1/CHUK	30
hsa05161	Hepatitis B	3.73E-22	3.01E-20	MAPK14/CCNA2/RELA/JUN/IKKKB/AKT1/BCL2/BAX/CASP3/MAPK8/STAT1/FOS/CDKN1A/CASP9/MMP9/MAPK1/RB1/IL6/ELK1/NFKBIA/CASP8/RAF1/PRKCA/MYC/CXCL8/PRKCB/BIRC5/CHUK/E2F1/E2F2	30
hsa04657	IL-17 signaling pathway	2.36E-21	1.42E-19	PTGS2/MAPK14/GSK3B/RELA/JUN/IL4/IKKKB/CASP3/MAPK8/MMP1/MMP3/FOS/MMP9/MAPK1/IL6/NFKBIA/CASP8/IL1B/CCL2/CXCL8/IFNG/CXCL2/CXCL10/CHUK	24
hsa05167	Kaposi sarcoma-associated herpesvirus infection	3.12E-21	1.51E-19	PTGS2/MAPK14/GSK3B/RELA/JUN/IKKKB/AKT1/BAX/CASP3/MAPK8/STAT1/ICAM1/PPP3CA/VEGFA/CCND1/FOS/CDKN1A/CASP9/MAPK1/RB1/IL6/NFKBIA/CASP8/RAF1/HIF1A/MYC/CXCL8/CXCL2/CHUK/E2F1/E2F2	31
hsa05215	Prostate cancer	5.33E-21	2.15E-19	AR/GSK3B/RELA/IKKKB/AKT1/BCL2/GSTP1/MMP3/EGFR/CCND1/CDKN1A/CASP9/PLAU/MMP9/MAPK1/EGF/RB1/NFKBIA/RAF1/ERBB2/PLAT/CHUK/E2F1/E2F2	24
hsa05219	Bladder cancer	1.65E-19	5.72E-18	MMP1/EGFR/VEGFA/CCND1/CDKN1A/MMP2/MMP9/MAPK1/EGF/RB1/RAF1/ERBB2/MYC/CXCL8/RASSF1/E2F1/E2F2	17
hsa04668	TNF signaling pathway	2.10E-19	6.34E-18	PTGS2/MAPK14/RELA/JUN/IKKKB/AKT1/CASP3/MAPK8/ICAM1/SELE/VCAM1/MMP3/FOS/MMP9/MAPK1/IL6/NFKBIA/CASP8/IL1B/CCL2/CXCL2/CXCL10/CHUK/IRF1	24
hsa05163	Human cytomegalovirus infection	6.31E-19	1.70E-17	PTGS2/MAPK14/GSK3B/RELA/IKKKB/AKT1/BAX/CASP3/PPP3CA/EGFR/VEGFA/CCND1/CDKN1A/CASP9/MAPK1/RB1/IL6/ELK1/NFKBIA/CASP8/RAF1/PRKCA/MYC/IL1B/CCL2/PTGER3/CXCL8/PRKCB/CHUK/E2F1/E2F2	31
hsa05212	Pancreatic cancer	3.23E-18	7.82E-17	RELA/IKKKB/AKT1/BAX/MAPK8/STAT1/EGFR/VEGFA/CCND1/BCL2L1/CDKN1A/CASP9/MAPK1/EGF/RB1/RAF1/ERBB2/CHUK/E2F1/E2F2	20
hsa05160	Hepatitis C	3.90E-18	8.59E-17	RXRA/GSK3B/RELA/IKKKB/AKT1/BAX/CASP3/STAT1/EGFR/CCND1/CDKN1A/CASP9/MAPK1/EGF/RB1/NFKBIA/CASP8/RAF1/MYC/IFNG/CLDN4/PPARA/CXCL10/CHUK/E2F1/E2F2	26
hsa05223	Non-small cell lung cancer	8.50E-17	1.71E-15	RXRA/RXR/IKKKB/AKT1/BAX/EGFR/CCND1/CDKN1A/CASP9/MAPK1/EGF/RB1/RAF1/PRKCA/ERBB2/PRKCB/RASSF1/E2F1/E2F2	18
hsa05222	Small cell lung cancer	1.93E-16	3.59E-15	NOS2/PTGS2/RXRA/RELA/RXR/IKKKB/AKT1/BCL2/BAX/CASP3/CCND1/BCL2L1/CDKN1A/CASP9/RB1/NFKBIA/MYC/CHUK/E2F1/E2F2	20
hsa01522	Endocrine resistance	7.19E-16	1.24E-14	ESR2/ESR1/MAPK14/JUN/AKT1/BCL2/BAX/MAPK8/EGFR/CCND1/FOS/CDKN1A/MMP2/MMP9/MAPK1/RB1/RAF1/ERBB2/E2F1/E2F2	20
hsa05142	Chagas disease (American trypanosomiasis)	1.64E-15	2.65E-14	NOS2/MAPK14/RELA/JUN/IKKKB/AKT1/MAPK8/FOS/MAPK1/IL10/IL6/NFKBIA/CASP8/IL1B/CCL2/CXCL8/IL2/SERPINE1/IFNG/CHUK	20
hsa05225	Hepatocellular carcinoma	3.79E-15	5.73E-14	GSK3B/MET/AKT1/BAX/HMOX1/GSTP1/GSTM1/GSTM2/EGFR/CCND1/BCL2L1/CDKN1A/MAPK1/RB1/ELK1/RAF1/PRKCA/MYC/PRKCB/NFE2L2/NQO1/E2F1/E2F2/IGF2	24
hsa04659	Th17 cell differentiation	4.37E-15	6.22E-14	RXRA/MAPK14/RELA/RXR/JUN/IL4/IKKKB/MAPK8/STAT1/AHR/PPP3CA/FOS/MAPK1/IL6/NFKBIA/HIF1A/IL1B/IL2/IFNG/CHUK	20
hsa04066	HIF-1 signaling pathway	6.36E-15	8.55E-14	NOS2/RELA/AKT1/BCL2/HMOX1/INSR/EGFR/VEGFA/CDKN1A/MAPK1/EGF/IL6/PRKCA/HIF1A/ERBB2/PRKCB/NOS3/SERPINE1/IFNG/HK2	20
hsa05169	Epstein-Barr virus infection	2.60E-14	3.31E-13	MAPK14/CCNA2/RELA/JUN/IKKKB/AKT1/BCL2/BAX/CASP3/MAPK8/STAT1/ICAM1/PSMD3/CCND1/CDKN1A/CASP9/RB1/IL6/NFKBIA/CASP8/MYC/CXCL10/CHUK/E2F1/E2F2	25
hsa04625	C-type lectin receptor signaling pathway	3.44E-14	4.17E-13	PTGS2/MAPK14/RELA/JUN/IKKKB/AKT1/MAPK8/STAT1/PPP3CA/MAPK1/IL10/IL6/NFKBIA/CASP8/RAF1/IL1B/IL2/CHUK/IRF1	19