

Pathway name	Corresponding targets
AGE-RAGE signaling pathway in diabetic complications	HRAS, ICAM1, IL1B, IL6, CXCL8, MMP2, NOS3, NRAS, CCL2, TGFB1, TNF, VEGFA, FAS, IL2, IL10, NOS2, TLR4, TNFRSF1A, EGFR, IL4, IL13, IL17A, HSP90AA1, MMP9, PTGS2, CALM1, CYP2E1, PTGS1, RAF1, TP53, ALOX5, AKT2, BAX, BCL2, CASP3, CDK4, MAPK14, F3, JUN, SMAD3, NFKB1, SERPINE1, PLCG1, PRKCA, PRKCD, PRKCE, RELA, SELE, VCAM1, HMOX1, IKBKB, NFE2L2, MAP3K7, IKBKG
AMPK signaling pathway	AKT2, CPT1A, CREB1, FASN, HMGCR, PPARG, SLC2A4, SREBF1, MAP3K7, ADIPOQ, PPARGC1A, PPARA, PRKCA
Antifolate resistance	ABCC2, IL1B, IL6, ABCC1, TNF, ABCG2, ABCC4, ABCB1, ABCB11, UGT2B4
Apelin signaling pathway	AKT2, HRAS, SMAD3, NOS2, NOS3, NRAS, SERPINE1, PIK3CG, PRKCA, PRKCE, RAF1, PPARGC1A, ACHE, BCL2, CREB1, ADRB2, MAPK14, SCN5A, ADORA3, FGB, PTGS1, PTGS2, GSK3B
Calcium signaling pathway	ADRA1B, ADRA1A, CALM1, CHRM1, CHRM2, CHRM3, EGFR, HTR2A, NOS2, NOS3, ADRA2A, RAF1
cAMP signaling pathway	CALM1, CHRM1, CHRM2, RAF1, ABCC4
Chagas disease	AKT2, FAS, CASP8, MAPK14, FASN, IKBKB, IL1B, IL2, IL6, CXCL8, IL10, JUN, SMAD3, NFKB1, NFKBIA, NOS2, SERPINE1, RELA, CCL2, CCL3, TGFB1, TLR4, TNF, TNFRSF1A, IKBKG, CASP3, GSK3B, HSP90AA1, IL4, IL5, IL13, IL17A, MMP9, PTGS2, MAP3K7, CREB1, ICAM1, SELE, VCAM1, CDK4, HRAS, NRAS, PLCG1, PTPRC, RAF1, CASP1, CASP9, IL18, PRKCA, ALOX5, BCL2, PIK3CG, CSNK2A1, PLA2, CXCL12, PRKCD, BAX, HIF1A, ABCC2, ABCC1, ABCG2, ABCC4, CDK2, TP53, PPARG, AKR1C1, EGFR
Colorectal cancer	AKT2, BAX, BCL2, CASP3, CASP9, GSK3B, JUN, SMAD3, MYC, RAF1, TGFB1, TP53, CDK2, CDK4, CDKN1A, PCNA, CSNK2A1, PRKCA, MAP3K7, FGF1, SERPINE1, TNF
Drug metabolism	CYP1A2, CYP2C8, CYP2C9, CYP2D6, CYP2E1, MAOA, MAOB, MPO, SLC6A2, UGT2B4, UGT2B7, UGT1A1, CYP1A1, CYP1B1, CYP17A1, CYP19A1, SRD5A2, PTGS2, ALDH3A2, AKR1B1
Fc epsilon RI signaling pathway	ALOX5, HRAS, IL4, IL13, NRAS, RAF1, TNF, IL2, IL10, FAS, IL6
Fluid shear stress and atherosclerosis	CALM1, HSP90AA1, ICAM1, IL1B, MMP2, MMP9, NOS3, CCL2, TNF, TNFRSF1A, TP53, VEGFA
HIF-1 signaling pathway	AKT2, BCL2, CDKN1A, EGFR, F3, HIF1A, HMOX1, IL6, NFKB1, NOS2, NOS3, SERPINE1, PLCG1, PRKCA, RELA, TIMP1, TLR4, VEGFA
HTLV-I infection	HRAS, ICAM1, IL2, IL6, NRAS, TERT, TGFB1, TNF, TNFRSF1A, TP53, IL1B, PPARG, NOS3
Inflammatory bowel disease	IL1B, IL2, IL4, IL5, IL6, IL10, IL13, IL17A, IL18, JUN, SMAD3, NFKB1, RELA, TGFB1, TLR4, TNF, ICAM1, CXCL8, CCL2, SELE, SELP, VCAM1, FAS, EGFR, PDGFRA, CCL3, CXCL12, TNFRSF1A, VEGFA, FASN, PRKCA
Jak-STAT signaling pathway	AKT2, BCL2, CDKN1A, HRAS, IL2, IL4, IL5, IL6, IL10, IL13, MYC, RAF1, CXCL12, TGFB1, FAS, TNF
Non-alcoholic fatty liver disease	AKT2, FAS, BAX, CASP3, CASP8, CEBPA, CYP2E1, FASN, GSK3B, IKBKB, IL1B, IL6, CXCL8, JUN, NFKB1, PPARA, PTGS1, PTGS2, RELA, SREBF1, TGFB1, TNF, TNFRSF1A, ADIPOQ, NR1H3, CPT1A, CREB1, NFKBIA, NOS3, PRKCD, PRKCE, PTPN1, SLC2A4, NR1H2, PPARGC1A, IKBKG
Ovarian steroidogenesis	ALOX5, CYP1A1, CYP1B1, CYP17A1, CYP19A1, PTGS2

Pathway name	Corresponding targets
p53 signaling pathway	FAS, BAX, CASP3, CASP8, CASP9, CDK2, CDK4, CDKN1A, SERPINE1, TP53, AKT2, BCL2, ABCC2, CASP1, MAPK14, TNF, TNFRSF1A, GSK3B, IL1B, LPL, CREB1, PPARG, PPARGC1A, ICAM1
Pathways in cancer	FAS, AR, EGFR, HRAS, HSP90AA1, IL6, CXCL8, MMP2, MMP9, NOS2, NRAS, PPARG, PTGS2, RAF1, SHH, TGFB1, TP53, VEGFA, ESR1, TLR4, TNF, CYP2D6, ABCB11, CALM1, NOS3, SRD5A2, CYP1B1, ABCC1, ABCB1, TNFRSF1A, IL1B, IL10, EPHA2, CYP17A1, ICAM1, CHRM1, CHRM2, CHRM3, HTR2A, TYR, CRYAB, CCL2, AKT2, BAX, BCL2, CASP3, CASP8, CASP9, CDK2, CDK4, CDKN1A, CEBPA, FGF1, FGF2, GSK3B, HIF1A, IKBKB, JUN, SMAD3, MYC, NFKB1, NFKBIA, PDGFRA, PLCG1, PRKCA, RELA, CXCL12, IKBKG, CREB1, MAPK14, FASN, PCNA, MAP3K7, PPARA, NR1H3, CSNK2A1, IL2, IL4, IL13, PIK3CG, TIMP1, TERT, VCAM1, ADORA3, PRKCE, PRKCD, CCL3, ADIPOQ, PPARGC1A
PI3K-Akt signaling pathway	CHRM1, CHRM2, EGFR, EPHA2, HRAS, HSP90AA1, IL2, IL4, IL6, NOS3, NRAS, RAF1, TLR4, TP53, VEGFA, NOS2
Platinum drug resistance	FAS, ABCC2, TOP2A, TP53
Proteoglycans in cancer	AKT2, FAS, CASP3, CDKN1A, MAPK14, EGFR, ESR1, FASN, FGF2, HIF1A, HRAS, IL6, MMP2, MMP9, MYC, NRAS, PLAU, PLCG1, PRKCA, RAF1, TGFB1, TLR4, TNF, TP53, VEGFA, BAX, BCL2, CDK4, CYP2D6, ESR2, JUN, ABCB11, CYP1B1, HMOX1, IKBKB, ABCC1, NFKB1, PDGFRA, ABCB1, PRKCE, PTGS2, CXCL8, GSK3B, CREB1, HSP90AA1, NOS3, PRKCD, FGF1, ALOX5, IL4, IL5, IL13, CASP9, CDK2, IL10, SMAD3, SLC2A4, CYP17A1, RELA, IKBKG, G6PD, PTPN1, SREBF1, PPARGC1A, HMGB1, MAP3K7, PIK3CG, ICAM1, TNFRSF1A, EPHB2, CXCL12
Serotonergic synapse	ALOX5, CYP2C8, CYP2C9, CYP2D6, HRAS, HTR2A, MAOA, MAOB, NRAS, PTGS1, PTGS2, RAF1, CYP2E1, CYP1A2, CASP3, PRKCA, LTA4H
Steroid hormone biosynthesis	CYP1A1, CYP1A2, CYP1B1, CYP2E1, CYP17A1, CYP19A1, AKR1C1, SRD5A2, UGT2B4, UGT2B7, UGT1A1, CYP2C9, CYP2D6, CYP2C8, PTGS2, MPO, CES2, DGAT1, ALDH3A2, HMOX1
Transcriptional misregulation in cancer	IL6, CXCL8, MMP9, MPO, PPARG, TP53, BAX, CDKN1A, CEBPA, ELANE, MYC, NFKB1, PLAU, RELA
Tryptophan metabolism	ALDH3A2, CYP1A1, CYP1A2, CYP1B1, MAOA, MAOB, NOS2, NOS3, CALM1, HRAS, NRAS, RAF1, SLC6A3, TYR