

Human TGF $\beta$ Signaling Targets PCR Array
<b>Differentiation &amp; Development:</b>
<u>Regulation:</u> AGT, BDNF, CTNNB1, EPHB2, HES1, KLF10, NFKBIA (I $\kappa$ Ba/MAD3), PPARA, PTHLH, PTK2, RARA, RHOA, RUNX1 (AML1), SHH, TGFB2, TGFB2.
<u>Other Genes:</u> BRD2, CEBPB, CREB1, DNAJA1, EMP1, ENG (EVI-1), FN1, IFRD1, MAPK14 (p38 MAPK), MMP2 (Gelatinase A), MYOD1, SNAI1.
<b>Proliferation &amp; Migration:</b>
<u>Regulation:</u> ACVRL1 (ALK1), AGT, ATF3, BCL2L1 (BCL-X), BDNF, CDC6, CDKN1B (p27KIP1), CTNNB1, FURIN, HES1, HMOX1, IL10, KLF10, MSX2, MYC, NFKBIA (I $\kappa$ Ba/MAD3), PDGFA, PLG, PTGS2 (COX-2), PTHLH, PTK2B, SERPINE1 (PAI-1), SHH, SOX4, TGFB2, TGFB2, THBS1, TXNIP, VEGFA.
<u>Other Genes:</u> ACTA2 (a-SMA), ACVR1 (ALK2), AR, EMP1, FN1, FURIN, IL10, PTK2.
<b>Apoptosis:</b> ACVR1 (ALK2), AGT, AIPL1, CDKN1B (p27KIP1), CREB1, CTNNB1, FURIN, GADD45B, HERPUD1, KLF10, MAP3K7 (TAK1), MAPK8 (JNK1), MSX2, PLG, PTGS2 (COX-2), RAD21, RHOA, RHOB, RYBP, S100A8, SHH, SOX4, TGFB2, TNFSF10 (TRAIL), TXNIP.
<b>Anti-Apoptosis:</b> BCL2L1 (BCL-X), BDNF, CEBPB, CRYAB, HMOX1, IL10, NFKBIA (I $\kappa$ Ba/MAD3), PTK2B, THBS1, VEGFA.
<b>Cell Cycle:</b>
<u>Regulation:</u> ACVR1 (ALK2), RAD21.
<u>Other Genes:</u> CDC6, CDKN1B (p27KIP1), GADD45B, PTGS2 (COX-2), RHOB, TGFB2.
<b>Signal Transduction:</b>
<u>TGF<math>\beta</math> Pathway:</u> ACVR1 (ALK2), ACVRL1 (ALK1), CREBBP (CBP), E2F4, ENG (EVI-1), EP300, ID1, ID2, ID3, MSX2, RBL1, SMAD1, SMAD3, SMAD5, SMAD6, SP1, TGFB2, TGFB2, THBS1.
<u>NF<math>\kappa</math>B Pathway:</u> HMOX1, IL10, MAP3K7 (TAK1), NFKBIA (I $\kappa$ Ba/MAD3), RHOA, TNFSF10 (TRAIL).
<u>Notch Pathway:</u> HES1, HEY1, NOTCH1.
<u>Hedgehog Pathway:</u> GLI2, SHH.
<u>Wnt Pathway:</u> CTNNB1.
<b>Transcription Factors:</b>
<u>TGF<math>\beta</math> Signaling:</u> CREBBP (CBP), E2F4, EP300, ID1, ID2, ID3, RBL1, SMAD1, SMAD3, SMAD5, SMAD6, SP1.



Others: AR, ATF3, ATF4, BACH1, BHLHE40, CEBPB, CREB1, CTNNB1, FOS, GTF2I, HEY1, KLF10, MBD1, MSX2, MYC, MYOD1, NFIB, PPARA, RARA, RUNX1 (AML1), SOX4, SREBF2.