

Human Notch Signaling Pathway PCR Array

Notch Signaling Pathway:

Notch Ligands: NOTCH1, NOTCH2, NOTCH2NL, NOTCH3, NOTCH4.

Notch Binding: DLL1, DLL3, DLL4, DTX1, JAG1, JAG2, LFNG, MFNG, NUMB, RFNG.

Notch Receptor Processing: ADAM10, ADAM17 (CD156B), NCSTN, PSEN1, PSEN2, PSENEN (PEN2).

Transcription Factors & Cofactors: EP300, HDAC1, MAML1, MAML2, NCOR2, RBPJL, SNW1 (SKIIP).

Notch Target Genes:

Apoptosis: CDKN1A (p21CIP1/WAF1), CFLAR (CASPER), FOSL1 (FRA1), ID1, IL2RA (CD25), NFKB1, PTCRA.

Cell Cycle: CCND1, CDKN1A (p21CIP1/WAF1).

Cell Adhesion: CD44, ERBB2 (HER2).

Cell Differentiation & Development: DTX1, HES1, HES5, HEY1, HEY2, HEYL, JAG1, KRT1, LFNG, LOR, NOTCH1, PPARG.

Neurogenesis: ERBB2 (HER2), FOS, HES1, HEY1, NR4A2 (NUR77).

Immune Response: CHUK (IKK α), IFNG, IL17B, IL2RA (CD25), NFKB1, NFKB2, STAT6.

Transcription Factors: FOS, FOSL1 (FRA1), HES1, HES5, HEY1, HEY2, HEYL, ID1, NFKB1, NFKB2, NR4A2 (NUR77), PPARG, STAT6.

Other Genes Involved in the Notch Signaling Pathway:

Apoptosis: AXIN1, CTNNB1.

Cell Cycle: AXIN1, CCNE1, FIGF (VEGFD), JAG2, NOTCH2.

Cell Proliferation: FIGF, FZD3, LRP5, STIL.

Cell Differentiation: PAX5, SHH.

Neurogenesis: NEURL, PAX5, ZIC2 (HPE5).

Transcription Factors & Cofactors: AES (Groucho), CBL, CTNNB1, GLI1, HOXB4, HR, PAX5, POFUT1, RUNX1 (AML1), SUFU, TLE1.

Other Genes: LMO2, MMP7, SEL1L, SH2D1A.

Pathways that Crosstalk with the Notch Signaling Pathway:

Hedgehog Signaling: GLI1, GSK3B, SHH, SMO, SUFU.

WNT Signaling: AES (Groucho), AXIN1, CTNNB1, FZD2, FZD3, FZD4, FZD7, GSK3B, LRP5, TLE1, WISP1

|, WNT11.