

Human Neurogenesis PCR Array

Neuronal Migration: ASCL1, CDK5R1, DCX, DRD2, NDN, NEUROG2, NRCAM, NTN1, PAFAH1B1, ROBO1, SLIT2.

Cell Differentiation:

Neuronal Differentiation: ASCL1, BDNF, BMP2, BMP4, CDK5R1, CDK5RAP2, HES1, HEYL, MEF2C, NEUROD1, NEUROG1, NEUROG2, NOG, NRCAM, OLIG2, PAFAH1B1, PAX3, POU4F1, RTN4, SOX2.

Neuronal Cell Fate Determination: ASCL1, NTF3, OLIG2, SOX2.

Other Regulators of Cell Differentiation: HDAC4, MDK, NRG1 (HGL), ODZ1, PAX5, PAX6.

Synaptic Functions:

Regulation of Synaptic Plasticity: ADORA1, APOE, BDNF, DRD2, GRIN1, NF1, S100B.

Synaptic Transmission: APOE, CHRM2, CREB1, DLG4 (PSD95), DRD2, FGF2 (BFGF), GRIN1, PAFAH1B1, SOD1, TH.

Synaptogenesis: ACHE, NRCAM, POU4F1.

Axonogenesis: APBB1, APP, DCX, DRD2, ERBB2 (HER2), MAP2, NOTCH1, NRCAM, PARD3, POU4F1, S100A6, S100B.

Growth Factors & Cytokines:

Growth Factors: ARTN, BDNF, EGF, FGF2 (BFGF), GDNF, GPI, MDK, NDP, NRG1 (HGL), PTN, S100A6, VEGFA.

Cytokines: BMP2, BMP4, BMP8B, CXCL1, GPI, IL3, MDK, PTN, TGFB1.

Apoptosis: ADORA1, ADORA2A, ALK, APOE, BCL2, EP300, GDNF, NOTCH2, NTN1, PAX3, RTN4, S100B, VEGFA.

Cell Adhesion: DLL1, EFNB1, NRCAM, NRP1, NRP2, RAC1, ROBO1, SLIT2, TNR.

Cell Cycle: APBB1, EP300, HDAC4, MDK, MLL, NDN, PARD3, PTN.

Signal Transduction:

Notch Signaling: APP, ASCL1, DLL1, HES1, HEY1, HEY2, HEYL, NOTCH1, NOTCH2, NRG1 (HGL).

WNT Signaling: DVL3, NDP, SHH.

TGF β Signaling: BMP2, BMP4, BMP8B, TGFB1.

G-Protein Coupled Receptor Signaling: ADORA1, ADORA2A, CHRM2, CXCL1, DRD2.

Transcription Factors & Cofactors: APBB1, ASCL1, CREB1, EP300, FLNA, HES1, HEY1, HEY2, HEYL, MEF2C, MLL, NDN, NEUROD1, NEUROG1, NEUROG2, NR2E3, PAX3, PAX5, PAX6, POU3F3, POU4F1, SOX2, SOX8, STAT3.