

Human Synaptic Plasticity PCR Array
Immediate-Early Response Genes (IEGs): ARC, BDNF, CEBPB, CEBPD, CREB1, CREM, EGR1, EGR2, EGR3, EGR4, FOS, HOMER1, JUN, JUNB, KLF10, MMP9 (Gelatinase B), NFKB1, NFKBIB (TRIP9), NGF, NPTX2, NR4A1, NTF3, PCDH8, PIM1, PLAT (tPA), RELA, RGS2, RHEB, SRF, TNF.
Late Response Genes: INHBA, SYNPO.
Long Term Potentiation (LTP): ADCY1, ADCY8, BDNF, CAMK2A, CAMK2G, CDH2 (N-cadherin), CNR1, GABRA5, GNAI1, GRIA1, GRIA2, GRIN1, GRIN2A, GRIN2B, GRIN2C, GRIN2D, MAPK1, MMP9 (Gelatinase B), NTF4, NTRK2, PLCG1, PPP1CA, PPP1CC, PPP3CA, PRKCA, PRKCG, RAB3A, YWHAQ (14-3-3).
Long Term Depression (LTD): GNAI1, GRIA1, GRIA2, GRIA3, GRIA4, GRIP1, GRM1, GRM2, IGF1, MAPK1, NOS1, NGFR, PICK1, PLAT (tPA), PPP1CA, PPP1CC, PPP1R14A (CPI-17), PPP2CA, PPP3CA, PRKCA, PRKG1.
Cell Adhesion: ADAM10, CDH2 (N-cadherin), GRIN2A, GRIN2B, NCAM1, PCDH8, PPP2CA, RELN, TNF.
Extracellular Matrix & Proteolytic Processing: ADAM10, MMP9 (Gelatinase B), PLAT (tPA), RELN, TIMP1.
CREB Cofactors: AKT1, CAMK2G, GRIN1, GRIN2A, GRIN2B, GRIN2C, GRIN2D, MAPK1 (ERK2), PPP1CA, PPP1CC.
Neuronal Receptors: EPHB2, GABRA5, GRIA1, GRIA2, GRIA3, GRIA4, GRIN1, GRIN2A, GRIN2B, GRIN2C, GRIN2D, GRM1, GRM2, GRM3, GRM4, GRM5, GRM7, GRM8, NTRK2.
Postsynaptic Density: ADAM10, ARC, DLG4 (PSD95), GRIA1, GRIA3, GRIA4, GRIN1, GRIN2A, GRIN2B, GRIN2C, GRM1, GRM3, HOMER1, PICK1, SYNPO.
Others: KIF17, SIRT1.