

cAMP/Ca²⁺ PathwayFinder PCR Array

Genes whose promoters contain the CRE enhancer sequence:

Neuropeptides / Neurotransmitters: ADRB1 (b1 adrenergic receptor), CGA (Chorionic gonadotropin A), CHGA (Chromogranin), GCG (Glucagon), GIPR, INHBA (Inhibin A), KCNA5 (KV1.5), NOS2 (Inducible nitric oxide synthase), PENK (Enkephalin), PRL, S100A12 (CGRP), S100G, SCG2, SLC18A1 (Vesicular monoamine transporter), SST (Somatostatin), SSTR2 (Somatostatin receptor 2), TACR1 (Substance P receptor), TH(Tyrosine hydroxylase), VIP.

Cell Cycle / Cell Survival / DNA Repair: BCL2, BRCA1, CCNA1 (CyclinA), CCND1 (CyclinD1), CDK5, CDKN2B (p15IND4b), GEM, NF1, PCNA, PMAIP1 (NoxA), PPP1R15A (GADD34), RB1.

Growth Factor: AREG (Amphiregulin), BDNF, CTF1 (Cardiotrophin), FGF6, TGFB3, TNF.

Signaling: DUSP1 (Ptprn16), HSPA5 (Grp78), PLN (Phospholamban), PPP2CA (Protein phosphatase 2A alpha), PRKAR1A (Protein kinase A regulatory subunit), SGK1.

Transcription: ATF3, CREB1, CREM, EGR1, EGR2, FOS, JUND, MAF, NR4A2 (Nurr1), PER1, POU1F1 (Pit-1), POU2AF1 (OCA-B), STAT3.

Metabolism: AHR, AMD1, ENO2, HK2, LDHA, PCK2, SOD2.

Immune Regulation: IL2, IL6, MIF, PTGS2 (Cox-2).

Genes whose promoters contain other Ca²⁺ responsive elements: CALB1 (calbindin 1), CALB2 (calbindin 2), CALM1 (Calmodulin 1), CALR (Calreticulin), DDIT3 (GADD153), NCAM1, NPY, PLAT (tPA).