

Human Estrogen Receptor Signaling PCR Array

Estrogen Receptors: ESR1 (ER α), ESR2 (ER β), GPER (GPR30).

ER Cofactors & Interacting Proteins: AHR, BCAR1, BRCA1, CAV1, CCND1, EFNA5, ESR1, ESR2, HSP90AA1, IGF1, MED1, MTA1, NCOA1, NCOA2, NCOA3, NCOR1, NCOR2, NR0B1, NR0B2, NRIP1, PELP1, PGR, PHB2, SAFB, TFF1 (PS2), VDR.

Estrogen Receptor Target Genes:

Female Sex Differentiation: BCL2L1 (BCL-X), FST, NRIP1, PGR, VEGFA, WNT4, WNT5A.

Male Sex Differentiation: BCL2L1 (BCL-X), CCND1, CYP19A1, WNT4, WNT5A.

Ovulation Cycle: BCL2L1 (BCL-X), BMP4, ERBB2 (HER2), FST, NRIP1, PGR, TGFB3, VEGFA, WNT5A.

Pregnancy: FOS, JUNB, PGR, PTGS2 (COX2), SNAI1 (Snail), SOCS3, SPP1 (Osteopontin), TGFB3, WNT4.

Mammary Gland Development: BMP4, CAV1, CCND1, ERBB2 (HER2), ERBB3, IGFBP5, IRS1, NR3C1 (GRL), PGR, PTCH1, TGFB3, VEGFA, WNT4, WNT5A.

Cardiovascular System Development: C3, CAV1, CCL2 (MCP-1), EGR3, ERBB2 (HER2), ERBB3, JUNB, KLK3, MMP9 (Gelatinase B), NRP1, PTCH1, PTGS2 (COX2), RARA, SOCS3, TGFA, THBS1, VEGFA, WNT4, WNT5A.

Nervous System Development: APBB1, BDNF, CCL2 (MCP-1), CITED2, CKB, CYP19A1, EGR3, ERBB2 (HER2), ERBB3, FOS, FOXA1, L1CAM, LGALS1, NAB2, NR2F6, NR3C1 (GRL), NRP1, PTCH1, S100A6, SPP1 (Osteopontin), VEGFA, WNT4, WNT5A.

Bone Development: BMP4, BMP7, IGF1, IGFBP5, JUNB, MMP9 (Gelatinase B), NAB2, PTGS2 (COX2), SNAI1 (SNAIL), SPP1 (Osteopontin), TGFB3, WNT4, WNT5A.

Growth Regulation: BMP7, CTGF, EBAG9, ERBB2 (HER2), IGFBP4, IGFBP5, NOV, NRP1, PTCH1, SOCS3, SPP1 (Osteopontin), WISP2, WNT5A.

Transcription: EGR3, FOS, FOXA1, JUNB, MAFF, MYC, NCOA1, NCOA3, NR3C1 (GRL), NR5A2, NRIP1, PGR, RARA, SNAI1 (Snail), XBP1.

Other Genes: AKAP1, CTSD, CYP1A1, G6PD, LPL, LTBP1, PDZK1, RALA, TFF1 (PS2).