

Human Stress & Toxicity PathwayFinder PCR Array

Oxidative Stress: FTH1, GCLC, GCLM, GSR, GSTP1, HMOX1, NQO1, PRDX1, SQSTM1, TXN, TXNRD1.

Hypoxia: ADM, ARNT, BNIP3L, CA9, EPO, HMOX1, LDHA, MMP9 (Gelatinase B), SERPINE1 (PAI-1), SLC2A1, VEGFA.

Osmotic Stress: AKR1B1, AQP1, AQP2, AQP4, CFTR, EDN1, HSPA4L, NFAT5, SLC5A3.

Cell Death:

Apoptosis: CASP1 (ICE), FAS, MCL1, TNFRSF10A, TNFRSF10B (DR5), TNFRSF1A.

Autophagy: ATG5, ATG7, ATG12, BECN1, FAS, ULK1.

Necrosis: FAS (TNFRSF6), GRB2, PARP1 (ADPRT1), PVR, RIPK1, TNFRSF10A, TNFRSF1A, TXNL4B.

Inflammatory Response: CCL2 (MCP-1), CD40LG (TNFSF5), CRP, IFNG, IL1A, IL1B, IL6, IL8, TLR4, TNF.

DNA Damage Signaling:

Cell Cycle Checkpoint/Arrest: CDKN1A (p21CIP1/WAF1), CHEK1, CHEK2 (RAD53), DDIT3 (GADD153/CHOP), HUS1, MRE11A, NBN (NBS1), RAD17, RAD9A.

Other Responses: ATM, ATR, DDB2, GADD45A, GADD45G, RAD51, TP53, XPC.

Heat Shock Proteins/Unfolded Protein Response: ATF4, ATF6, ATF6B, BBC3, BID, CALR, DDIT3, DNAJC3, HSP90AA1, HSP90B1 (TRA1), HSPA4 (HSP70), HSPA5 (GRP78).