

Human Ubiquitination (Ubiquitylation) Pathway PCR Array

Ubiquitin-Activating Enzymes (E1):

ATG7, MOCS3, NAE1, NEDD8, SAE1, UBA1, UBA2, UBA3, UBA5, UBA6, UBE2Z.

Ubiquitin-Conjugating Enzymes (E2):

Regulators of Apoptosis: BARD1, BRCA1, TP53, UBE2Z.

Regulators of Cell Cycle: ANAPC2, BARD1, BRCA1, CDC34, TP53, UBE2C, UBE2I.

Regulators of Transcription: BRCA1, TP53, UBE2K, UBE2W.

Other Ubiquitin-Conjugating Enzymes (E2): ARIH1, BTRC, NEDD8, PARK2, STUB1, TMEM189, UBA6, UBE2A, UBE2B, UBE2D1, UBE2D2, UBE2D3, UBE2E1, UBE2E2, UBE2E3, UBE2G1, UBE2G2, UBE2H, UBE2J1, UBE2J2, UBE2L3, UBE2M, UBE2N, UBE2Q1, UBE2R2, UBE2S, UBE2T, UBR2.

Ubiquitin-Protein Ligases (E3):

Regulators of Apoptosis: BARD1, BRCA1, CUL1, CUL2, CUL3, CUL4A, CUL5, TP53, UBE4B, VHL.

Regulators of Cell Cycle: ANAPC11, ANAPC2, BARD1, BRCA1, CUL1, CUL2, CUL3, CUL4A, CUL4B, CUL5, CUL7, DDB1, MDM2, CUL9, SKP1, SKP2, TP53, VHL.

Regulators of Transcription: BRCA1, CBL, MDM2, SMURF2, TP53, VHL, WWP1.

Other Ubiquitin-Protein Ligases (E3): ARIH1, BRCC3, BTRC, DZIP3, FBXO3, FBXO31, FBXO4, FBXW10, FBXW9, HECW1, HECW2, HERC5, HUWE1, MARCH5, MIB1, MUL1, NEDD8, PARK2, RFWD2, RNF123, RNF148, SMURF1, STUB1, SYVN1, UBE2L3, UBE2T, UBR1, UBR2.