

OHS-029**Oligo GEArray® Human DNA Damage Signaling Pathway Microarray****Description**

The Oligo GEArray® Human DNA Damage Signaling Pathway Microarray was designed to profile the expression of 113 key genes involved in DNA damage signaling pathways. The genes featured are those associated with the ATR/ATM signaling network and transcriptional targets of DNA damage response. DNA damage can result in cell cycle arrest, apoptosis, and the stabilization and repair of the cellular genome. With the OHS-029 Oligo GEArray Human DNA Damage Signaling Microarray you can compare your experimental samples with expression data from a manageable number of genes related to DNA Damage Signaling.

Functional Gene Groupings (more detailed information is provided in the gene table)**Apoptosis genes:**

ABL1, BRCA1, CIDEA, CIDEB, GADD45A, GADD45G, GML, IHPK3, PCBP4, PDCD8, PPP1R15A, RAD21, TP53, TP73.

Cell cycle genes

Cell cycle arrest: CHEK1, CHEK2, DDIT3, GADD45A, GML, GTSE1, HUS1, MAP2K6, MAPK12, PCBP4, PPP1R15A, RAD17, RAD9A, SESN1, ZAK.

Cell cycle checkpoint: ATR, BRCA1, FANCG, NBS1, RAD1, RBBP8, SMC1L1, TP53.

DNA repair

Damaged DNA binding: ANKRD17, BRCA1, DDB1, DDB2, DMC1, ERCC1, ERCC3, FANCG, FEN1, GTF2H3, MPG, MSH2, MSH3, MSH4, MSH5, MSH6, N4BP2, NBS1, OGG1, PMS2L4, PMS2L9, PNKP, RAD1, RAD18, RAD51, RAD51C, RAD51L1, RAD51L3, REV1L, SEMA4A, XPA, XPC, XRCC1, XRCC2, XRCC3.

Base-excision repair: APEX1, MBD4, MPG, MUTYH, NTHL1, OGG1, RAD51L3, UNG, UNG2.

Double-strand break repair: BRCA2, CIB1, FEN1, G22P1, KUB3, MRE11A, NBS1, PRKDC, RAD21, RAD50, RAD52, XRCC4, XRCC5.

Mismatch repair: ABL1, ANKRD17, EXO1, MLH1, MLH3, MSH2, MSH3, MSH4, MSH5, MSH6, MUTYH, N4BP2, PMS1, PMS2, PMS2L4, PMS2L9, TP73, TREX1.

Others: APEX2, ATM, ATRX, BTG2, CCNH, CDK7, CKN1, CRY1, CRY2, ERCC2, ERCC4, ERCC5, GTF2H1, GTF2H2, IGHMBP2, INPPL1, LIG1, LIG3, LIG4, MNAT1, NUDT1, PCNA, RAD23A, RAD23B, RAD54L, RPA1, RPA3, SUMO1, TREX2.

Storage Conditions

Please check the kit components immediately after you receive this package. SuperArray is only responsible for missing items reported within two (2) business days of receipt.

Oligo GEArrays are shipped at ambient temperature. They should be stored in the enclosed disposable hybridization tube at -20°C upon receipt.

References

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