

Oligo GEArray® Human Cancer PathwayFinder™ Microarray

HybTube Format Cat. No. [OHS-033](#)
HybPlate Format Cat. No. [EHS-033](#)

Description

The Oligo GEArray® Human Cancer PathwayFinder™ Microarray profiles the expression of 113 genes representative of the six biological pathways involved in transformation and tumorigenesis listed below. Through a simple side-by-side hybridization experiment you can simultaneously determine which of the 6 pathways is involved in your experimental treatment. Once you have identified the pathways involved in your treatment with this microarray, you can then perform focused profiling experiments using our pathway-specific GEArray Microarrays. Through a simple side-by-side hybridization experiment you can determine differential gene expression between your samples.

Functional Gene Groupings

Cell Cycle Control & DNA Damage Repair: ATM, BRCA1, BRCA2, CCND1 (cyclin D1), CCNE1 (cyclin E1), CDC25A, CDK2, CDK4, CDKN1A (p21Waf1), CDKN1B (p27Kip1), CDKN2A (p16Ink4), CHEK2 (chk2 / Rad53), E2F1, MDM2, PRKDC (DNA-PK), PTEN, S100A4, RB1, TP53 (p53).

Apoptosis and Cell Senescence: APAF1, BAD, BAX, BCL2, BCL2L1 (bcl-X), BIRC5 (Survivin), CASP8, CASP9, CFLAR (CASPER), GZMA, HTATIP2, TERT (telomerase), TNFRSF1A (TNF- α receptor), TNFRSF6 (Fas), TNFRSF10B (DR5), TNFRSF25 (DR3).

Signal Transduction Molecules and Transcription Factors: AKT1, CTNNB1 (β -catenin), ERBB2, ETS2, FOS, JUN, MAPK14 (p38 MAPK), MAP2K1 (MEK), MYC, NFKB1 (NF κ B), NFKBIA (I κ B α), PIK3CB (PI3K p110 β), PIK3R1 (PI3K p85 α), RAF1, RASA1, SNCG, SRC.

Adhesion: CD44, CDH1 (E-cadherin), ICAM1, ITGA1 (integrin α 1), ITGA2 (integrin α 2), ITGA3 (integrin α 3), ITGA4 (integrin α 4), ITGA5 (integrin α 5), ITGA6 (integrin α 6), ITGAV (integrin α V), ITGB1 (integrin β 1), ITGB3 (integrin β 3), ITGB5 (integrin β 5), MCAM, MICA (MUC18), MTSS1, NCAM1, PNN, SYK, UCC1.

Angiogenesis: ANGPT1 (angiopoietin-1), ANGPT2 (angiopoietin-2), BAI1, COL18A1 (endostatin), EGF, EGFR, FGF2 (bFGF), FGFR2, FLT1 (VEGFR), HGF, IFNA1 (IFN α), IFNB1 (IFN β), IGF1, IL8, PDGFA, PDGFB, TEK (tie-2), TGFB1, TGFB1 (ALK-5), THBS1 (thrombospondin-1), THBS2 (thrombospondin-2), TNF, VEGF.

Invasion and metastasis: KISS1, KAI1, MET, MMP1 (collagenase-1), MMP2 (gelatinase A), MMP9 (gelatinase B), MTA1, MTA2, NME1, NME4 (Nm23), PLAUR, PLAUR, S100A4, SERPINB2 (PAI2), SERPINB5 (maspin), SERPINE1 (PAI1), TIMP1, TIMP3, TWIST1.

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.

GEArray microarrays are shipped at ambient temperature enclosed in either a HybTube or ExpressPak Storage Box. They should be stored at -20°C upon receipt.

References

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4. Detmar, M. (2000) Tumor Angiogenesis. *JID Symposium Proceedings* **5**: 20-23.
5. Klingelhutz, A.J. (1999) The Roles Of Telomeres And Telomerase In Cellular Immortalization And The Development Of Cancer. *Anticancer Res* **19**: 4823-4830.
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9. Molinari, M. (2000) Cell Cycle Checkpoints And Their Inactivation In Human Cancer. *Cell Prolif* **33**: 261-274.
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