

Supplemental Material

YKL-40 Protein Expression in Human Tumor Samples and Human Tumor Cell Line

Xenografts: Implications for its use in tumor models

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Figure S1: Monoclonal antibody Mab 201.F9 specifically binds human YKL-40 but not murine YKL-40 in immunohistochemistry of FFPE tissue sections. (A) Human brain, (B) murine brain, (C) human kidney, (D) murine kidney, (E) human liver, (F) murine liver. ISO = Isotype antibody control. Scale bars = 100 μ m.

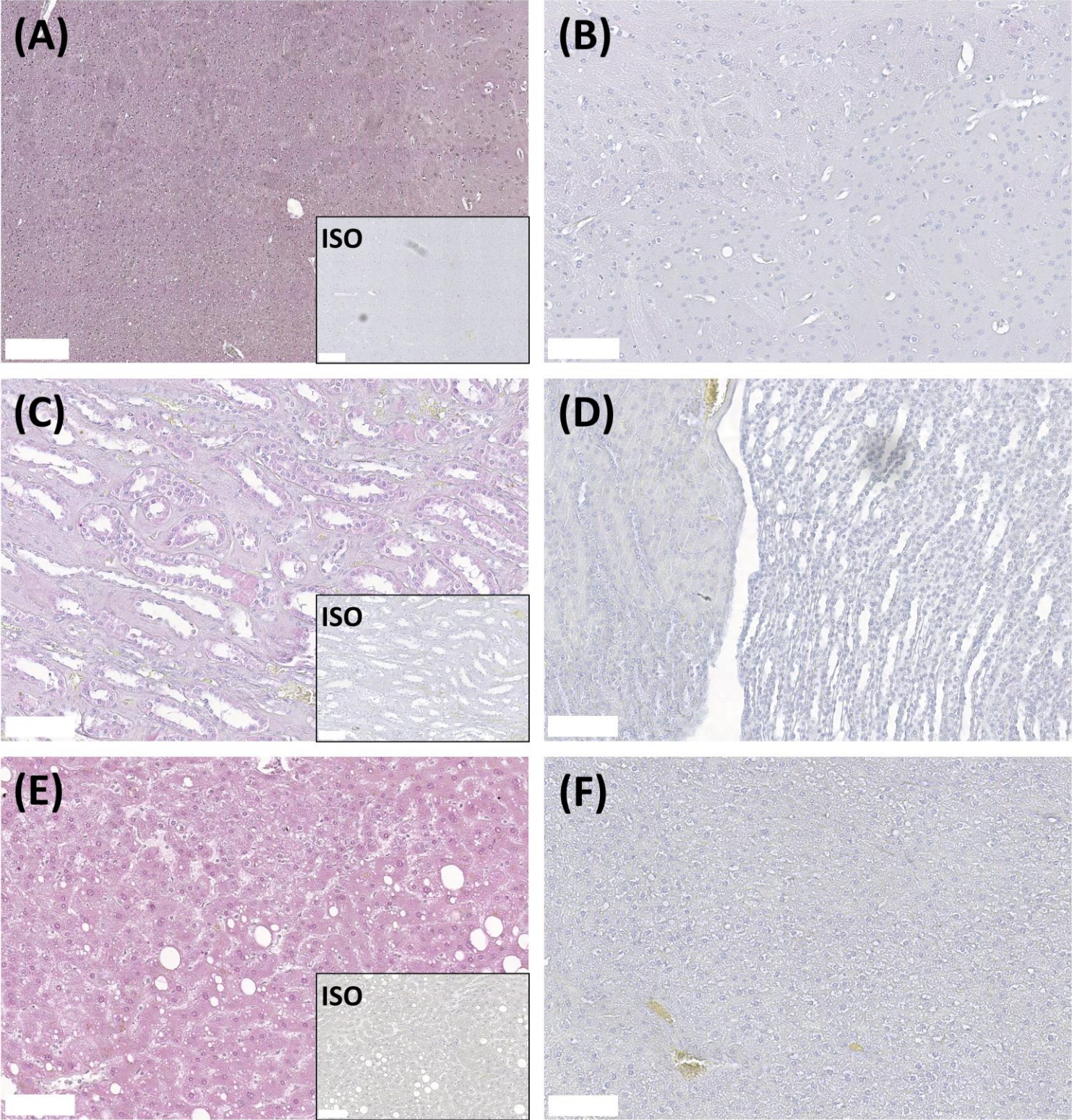


Figure S2: Immunohistochemical staining of human colon tissue with anti YKL-40 antibody MAb 201.F9. (A) Positive control, (B) isotype control antibody, and (C) absorbed with recombinant human YKL-40 protein.

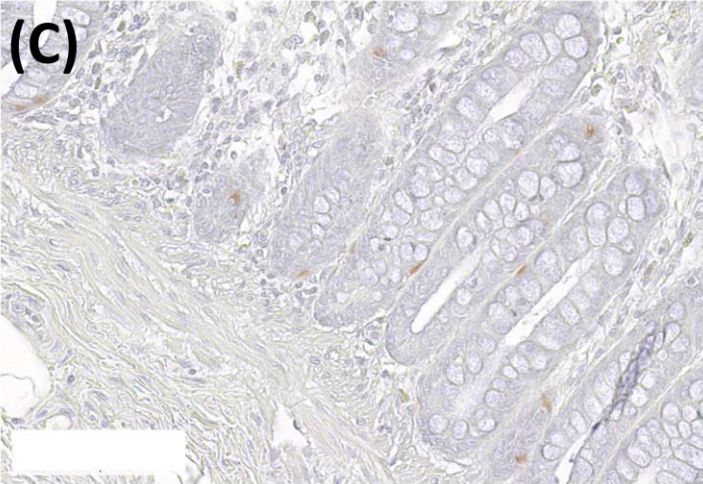
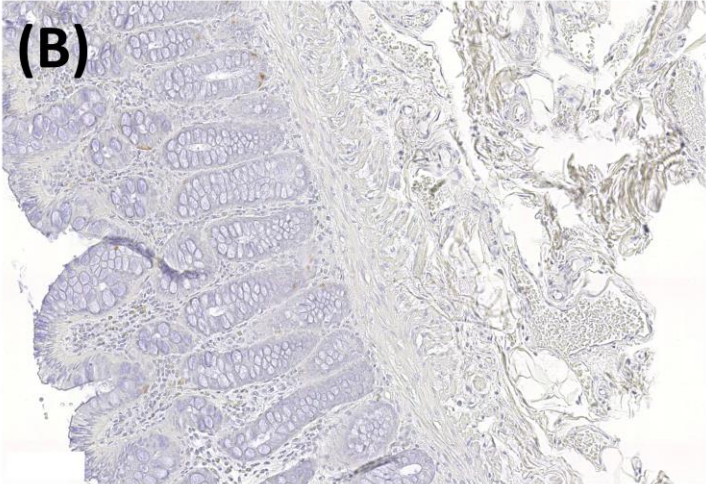
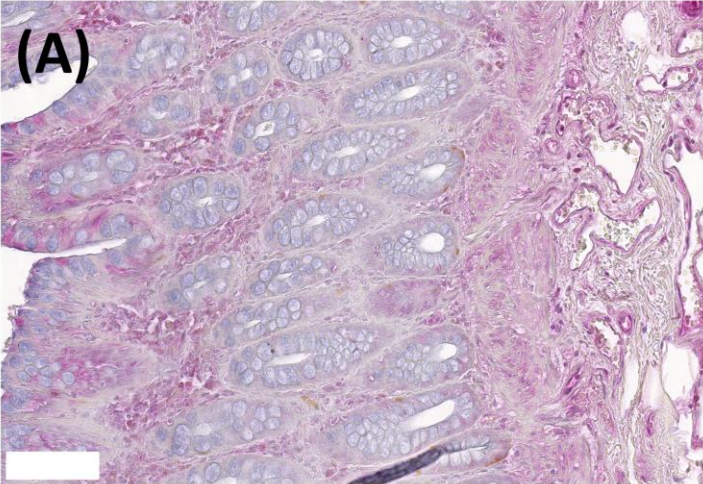


Figure S3: Analysis of CHI3L1 (YKL-40) mRNA expression profiles in publicly available GEO datasets. (A) Primary prostate organoid transcriptomic profile in co-culture with primary prostate stroma [1], (B) interaction between OVCAR-3 cells and mesenchymal stroma cells [2], (C) SKOV3 cells that could form heterotypic spheroids with high grade serous ovarian cancer derived cancer-associated fibroblasts and those remaining individual SKOV3 cells [3], (D) tissue-engineered mimic of ovarian cancer microenvironment [4].

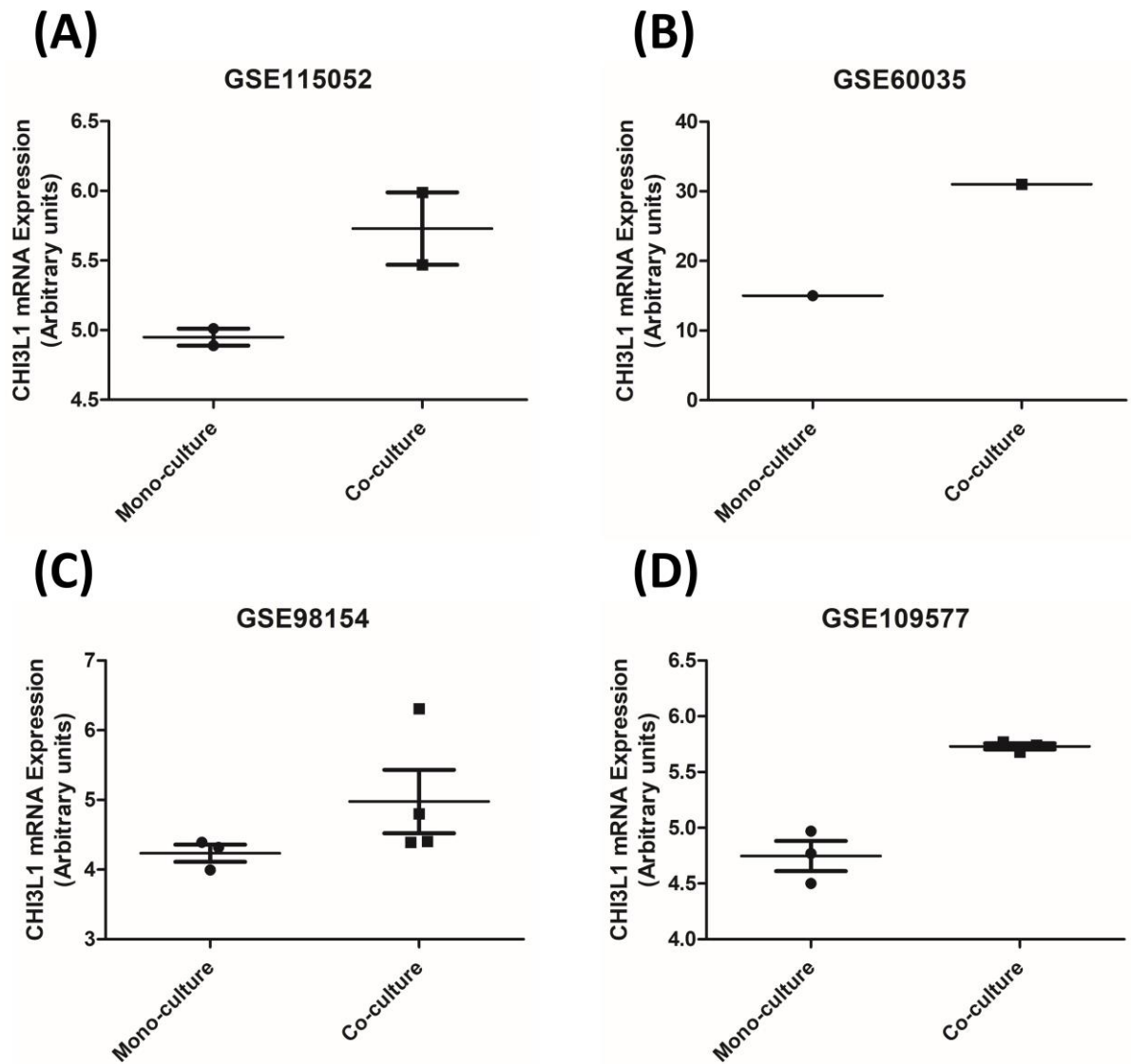


Figure S4: Analysis of CHI3L1 (YKL-40) mRNA expression profiles in publicly available GEO dataset GSE48433. Data derived from microarray analysis of xenograft models in use at the Developmental Therapeutics Program of the National Cancer Institute (DTP-NCI) [5]. For originating cell lines (passage 0, P0) and xenograft tumor fragments at passages 1, 4, and 10 (P1, P4 and P10), RNA was isolated, cDNA transcribed and hybridized to Affymetrix HG-U133 Plus 2.0 arrays. P0 samples have 2-3 replicates, whereas P1, P4 and P10 samples have 5 replicates. This dataset comprises a total of 823 array files.

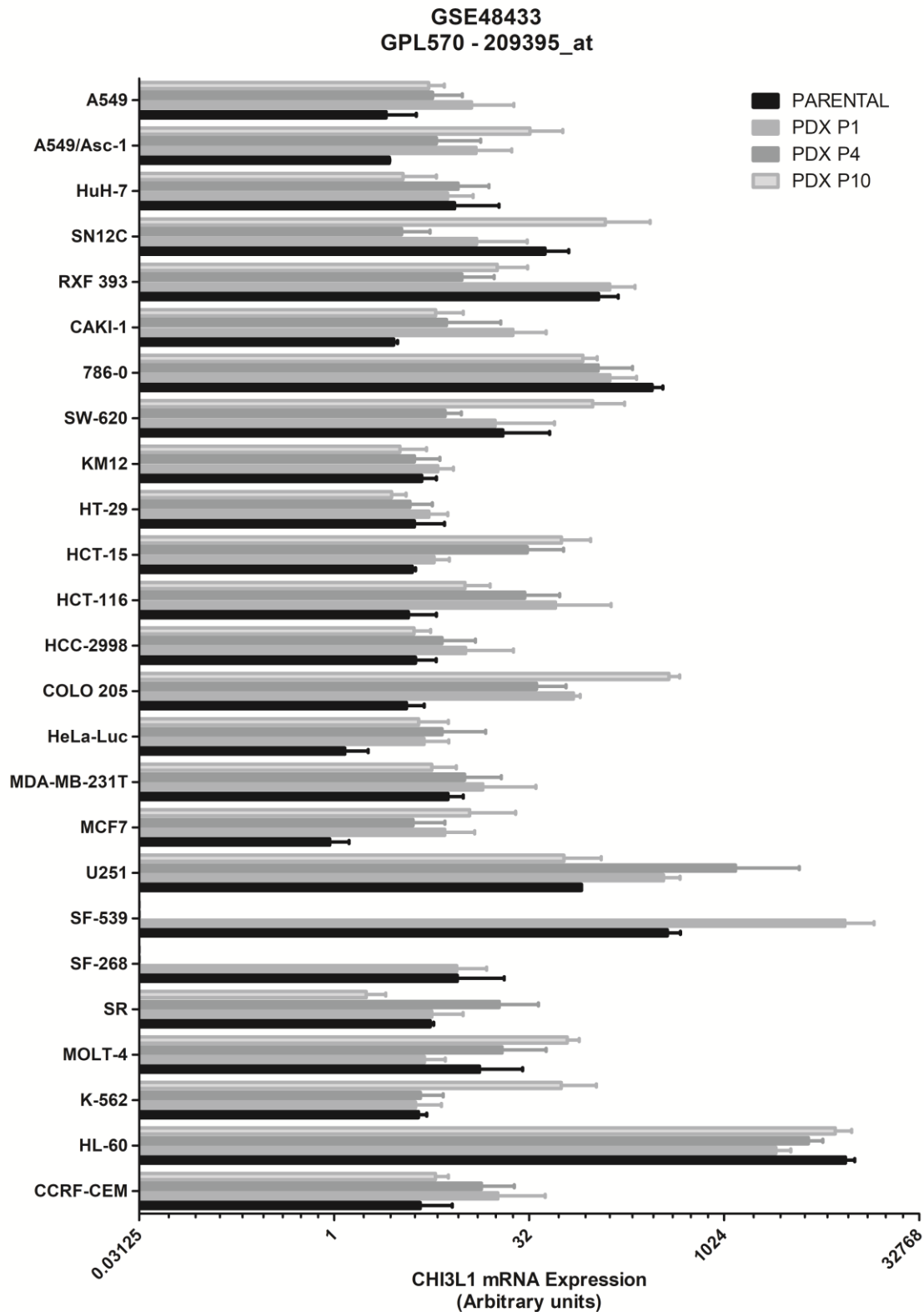
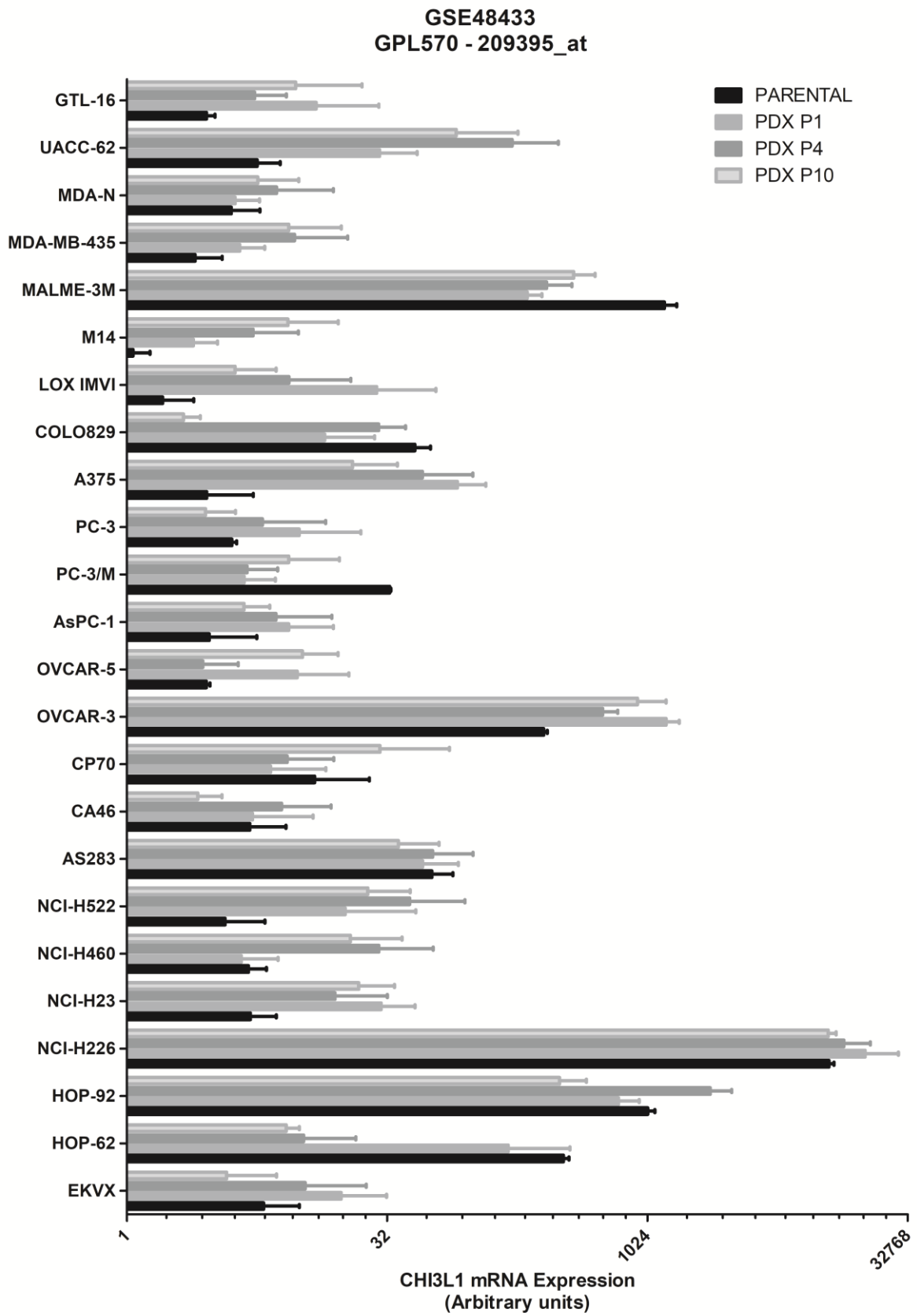


Figure S4 continued



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