

The Flavonoid Metabolite 2,4,6-Trihydroxybenzoic Acid Is a CDK Inhibitor and an Anti-Proliferative Agent: A Potential Role in Cancer Prevention

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Supplementary Material

Effect of 2,4,6-THBA on HCT-116 cell proliferation

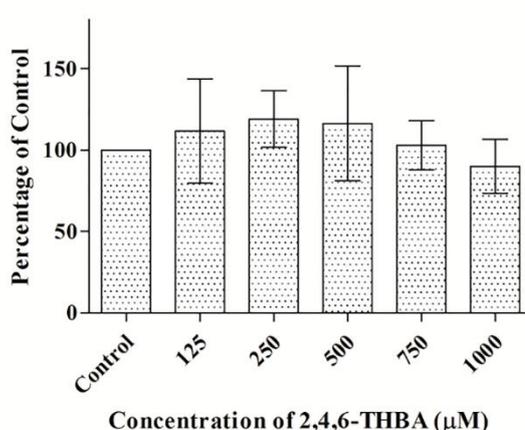


Figure S1. Effect of 2,4,6-THBA on HCT-116 cell proliferation. Cells were treated with 2,4,6-THBA for 72 h. Floating cells were collected, the adherent cells were washed, trypsinized and pooled with the floating cells and counted.

Effect of 2,4,6-THBA on cell cycle regulatory proteins in SLC5A8-pLVX cells

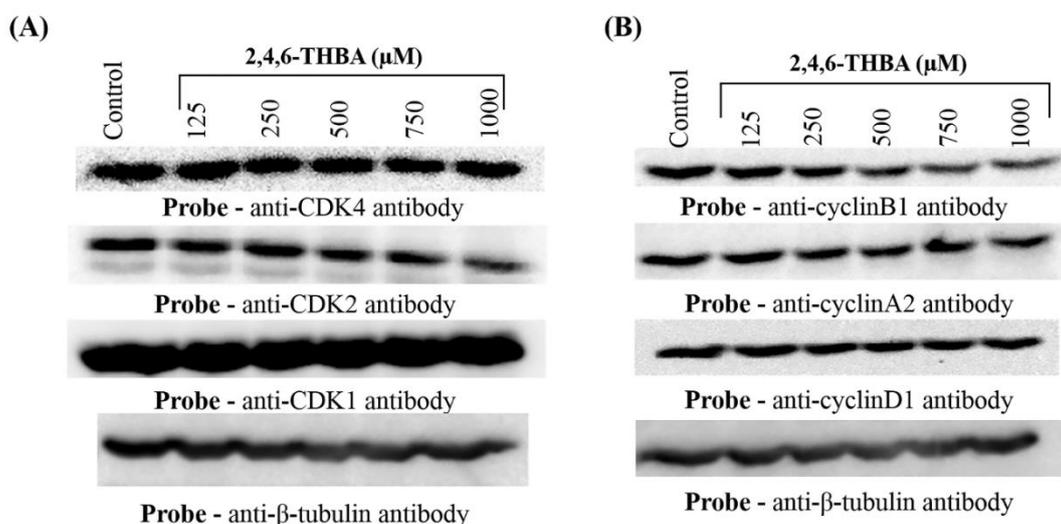


Figure S2. Western Blot analysis showing the levels of various CDKs and cyclins in SLC5A8-pLVX cells in response to 2,4,6-THBA.

Expression of SLC5A8 in different cell lines

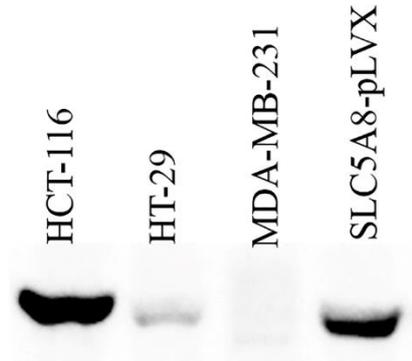


Figure S3. Western Blot demonstrating the expression levels of SLC5A8 protein in HCT-116, HT-29, MDA-MB-231 and SLC5A8-pLVX cell lines. Despite the expression of SLC5A8 in HCT-116 cells, uptake of 2,4,6-THBA was not observed (Figure 6A). In contrast, uptake was observed in SLC5A8-pLVX cells expressing the functional transporter. Consistent with the low expression of SLC5A8 in MDA-MB-231 cells, low levels of 2,4,6-THBA was observed in these cells.

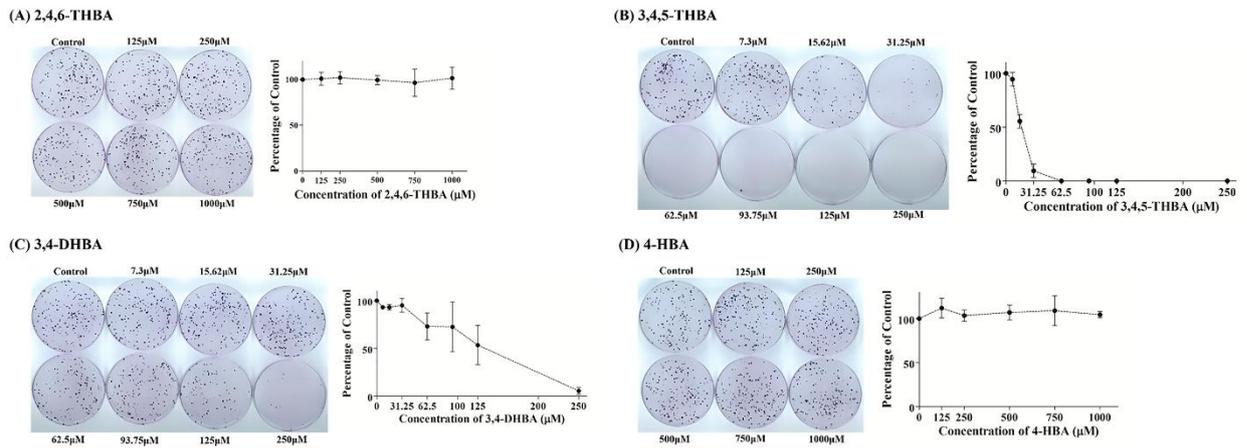


Figure S4. Effect of 2,4,6-THBA (A), 3,4,5-THBA (B), 3,4-DHBA (C) and 4-HBA (D) on colony formation in HT-29 cells.

Colony formation assay following treatment with 3,4-DHBA

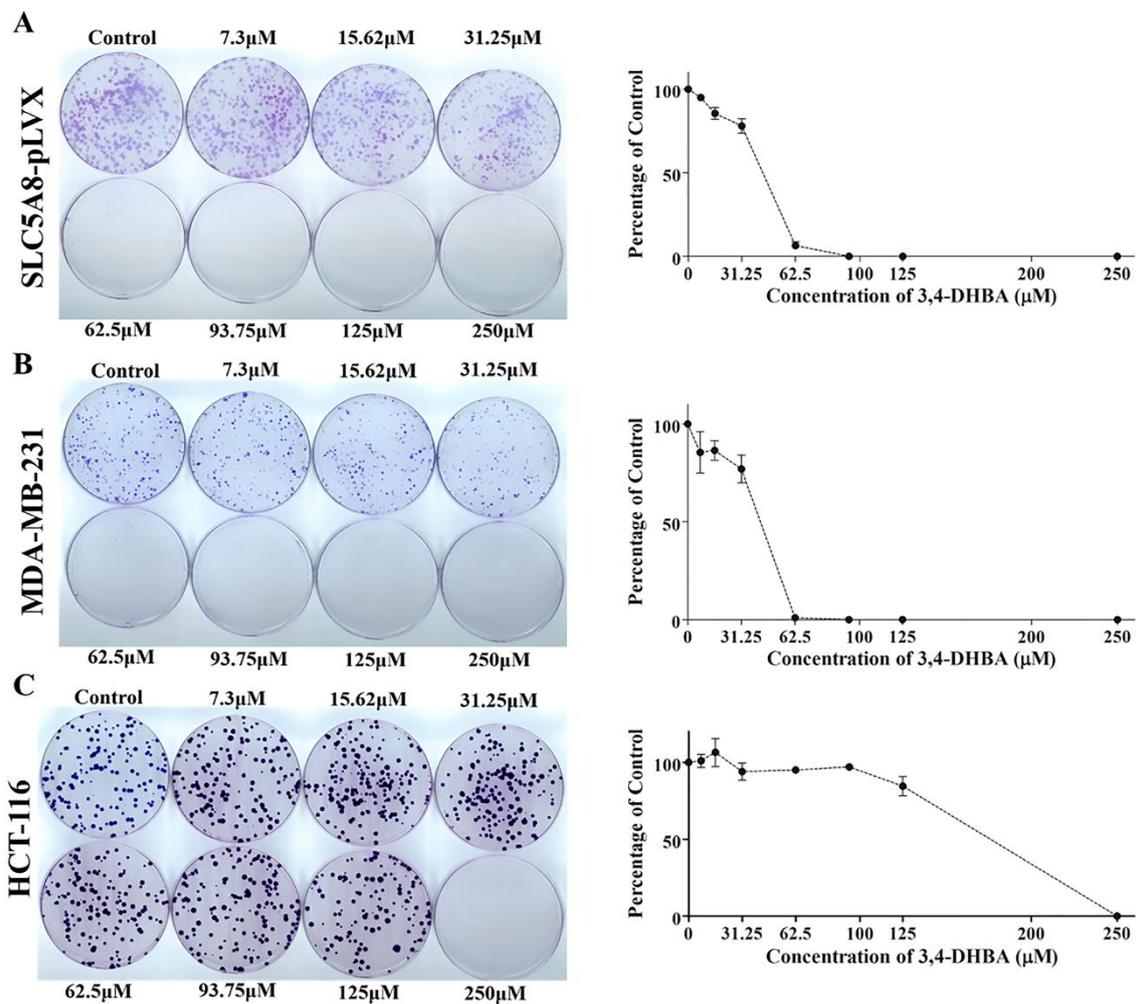


Figure S5. Effect of different concentrations of 3,4-DHBA on colony formation in SLC5A8-PLVX (A), MDA-MB-231 (B), and HCT-116 (C) cells.

Colony formation assay following treatment with 3,4,5-THBA

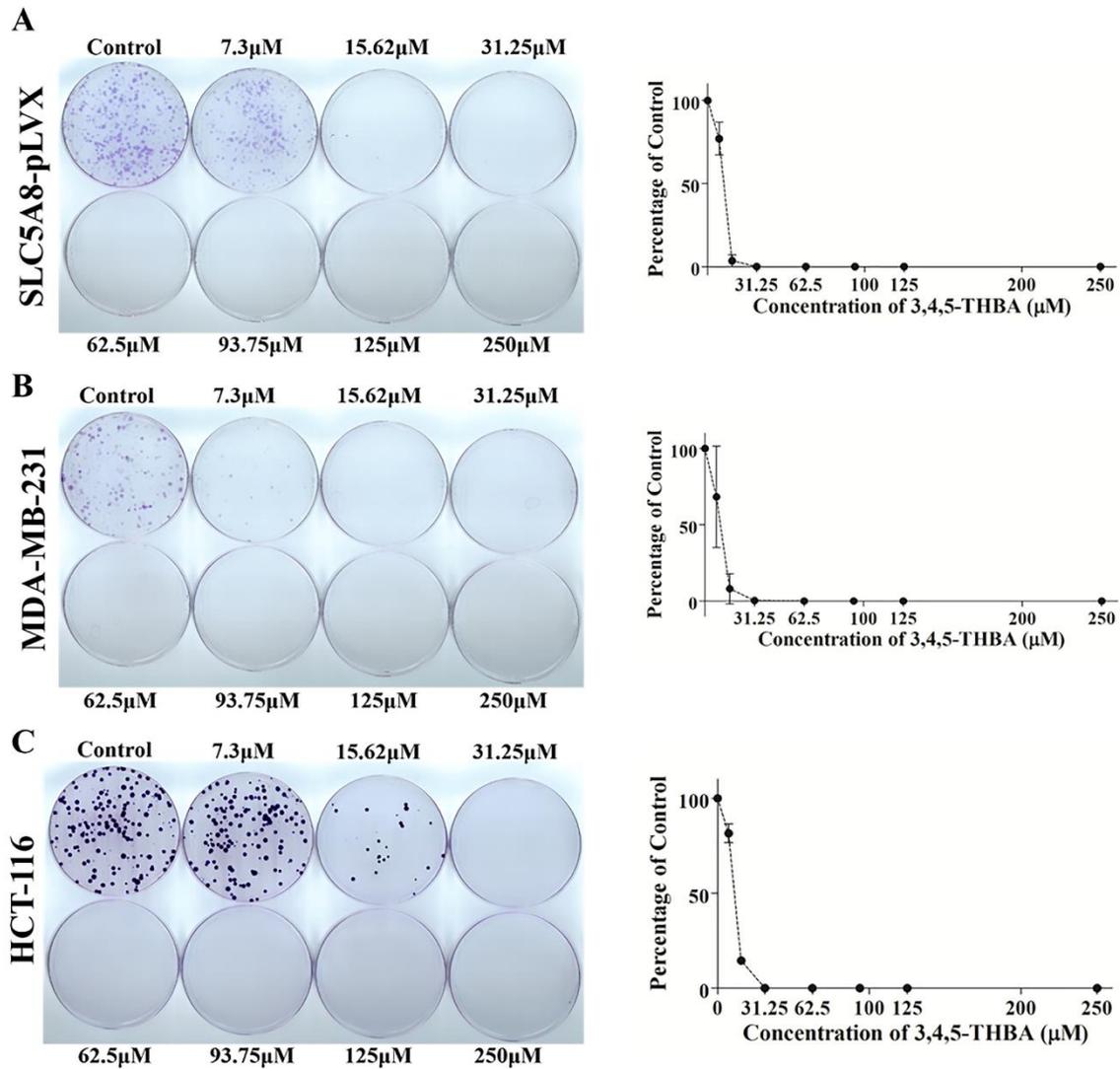


Figure S6. Effect of different concentrations of 3,4,5-THBA on colony formation in SLC5A8-PLVX (A), MDA-MB-231 (B), and HCT-116 (C) cells.

Colony formation assay following treatment with 4-HBA

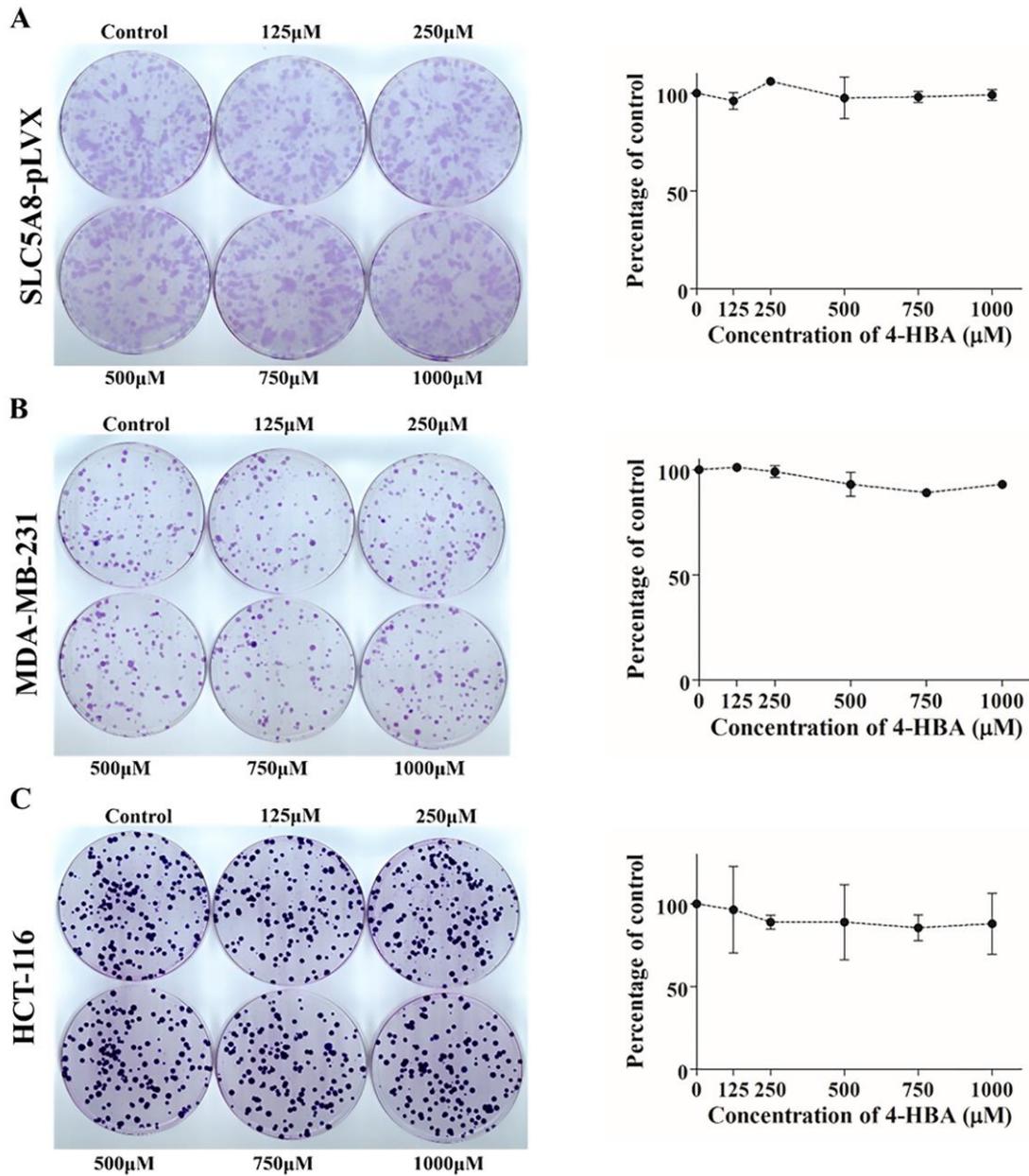


Figure S7. Effect of different concentrations of 4-HBA on colony formation in SLC5A8-PLVX (A), MDA-MB-231 (B), and HCT-116 (C) cells.

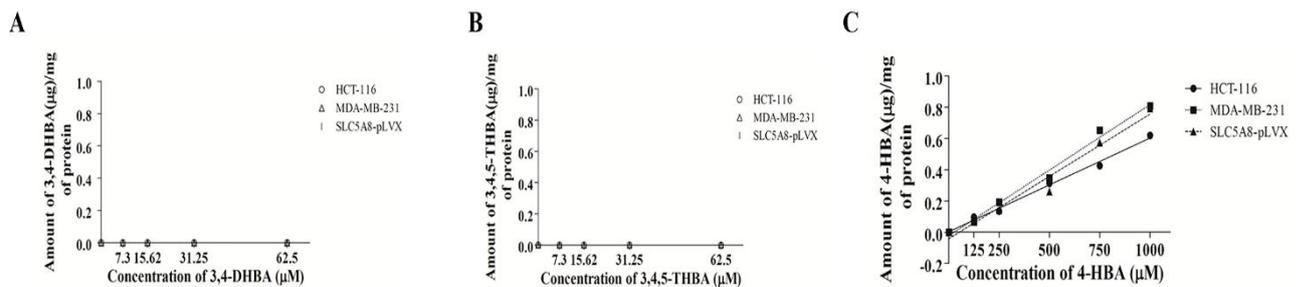


Figure S8. HPLC analysis showing the cellular uptake in SLC5A8-pLVX, MDA-MB-231 and HCT-116 cells following incubation with 3,4-DHBA (A), 3,4,5-THBA (B) and 4-HBA (C) in the cytosol.