Supplementary Material

SUPT5H Post-Transcriptional Silencing Modulates PIN1 Expression, Inhibits Tumorigenicity, and Induces Apoptosis of Human Breast Cancer Cells

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Target gene	Sense (5'-3')	Antisense (5'-3')
SUPT5H	GAACAACAUCCAUGUGAAATT	UUUCACAUGGAUGUUGUUCUG



Supplementary Fig. S1. MDA-MB-231 cells were transfected with the indicated vectors and siRNAs. The rescue of SUPT5H protein was obtained with the transfection of siRNA-SUPT5H resistant expression construct.



Supplementary Fig. S2. (A) Silencing effect of siRNA-SUPT5H# in MDA-MB-231 and siRNA-SUPT5H in MCF-7 and MDA-MB-453 on SUPT5H expression was determined at protein levels in comparison with control using western blotting. (B) MDA-MB-231 cells were transfected with siRNA-SUPT5H# and MCF-7 and MDA-MB-453 cells were transfected with siRNA-SUPT5H, silencing of SUPT5H exhibited the reduced cell viability in breast cancer cells.



Supplementary Fig. S3. MDA-MB-231 cells were transfected with siRNA-SUPT5H# and MCF-7 and MDA-MB-453 cells were transfected with siRNA-SUPT5H. Silencing of SUPT5H decreased the colony formation ability in different breast cancer cells.



Supplementary Fig. S4. Two independent SUPT5H siRNAs were used (siRNA-SUPT5 and siRNA-SUPT5H#). The siRNA-SUPT5H# was transfected in MDA-MB-231 cells and siRNA-SUPT5H was transfected in MCF-7 and MDA-MB-453 cells. The above figure demonstrated that silencing of SUPT5H decreased the migratory and invasive potential of breast cancer cells.



Supplementary Fig. S4. Two independent SUPT5H siRNAs were used (siRNA-SUPT5 and siRNA-SUPT5H#). The siRNA-SUPT5H# was transfected in MDA-MB-231 cells and siRNA-SUPT5H was transfected in MCF-7 and MDA-MB-453 cells. The above figure demonstrated that silencing of SUPT5H decreased the migratory and invasive potential of breast cancer cells (continued).



Supplementary Fig. S5. Silencing of SUPT5H in MDA-MB-231 with siRNA-SUPT5H# and MCF-7 and MDA-MB-453 with siRNA-SUPT5H cells leads to the arrest of breast cancer cells in the S-phase of cell cycle, compared to cells transfected with non-specific siRNA (siRNA-scr), as demonstrated by FACS histogram



Supplementary Fig. S6. Silencing of SUPT5H in MDA-MB-231 with siRNA-SUPT5H# and MCF-7 and MDA-MB-453 with siRNA-SUPT5H cells promotes apoptosis in breast cancer cells, compared to cells transfected with non-specific siRNA (siRNA-scr) as demonstrated by annexin V /PI cell death assay.