

Supplementary Figures

Mediator Complex Subunit 8 promotes bladder cancer progression via Stearoyl-CoA Desaturase

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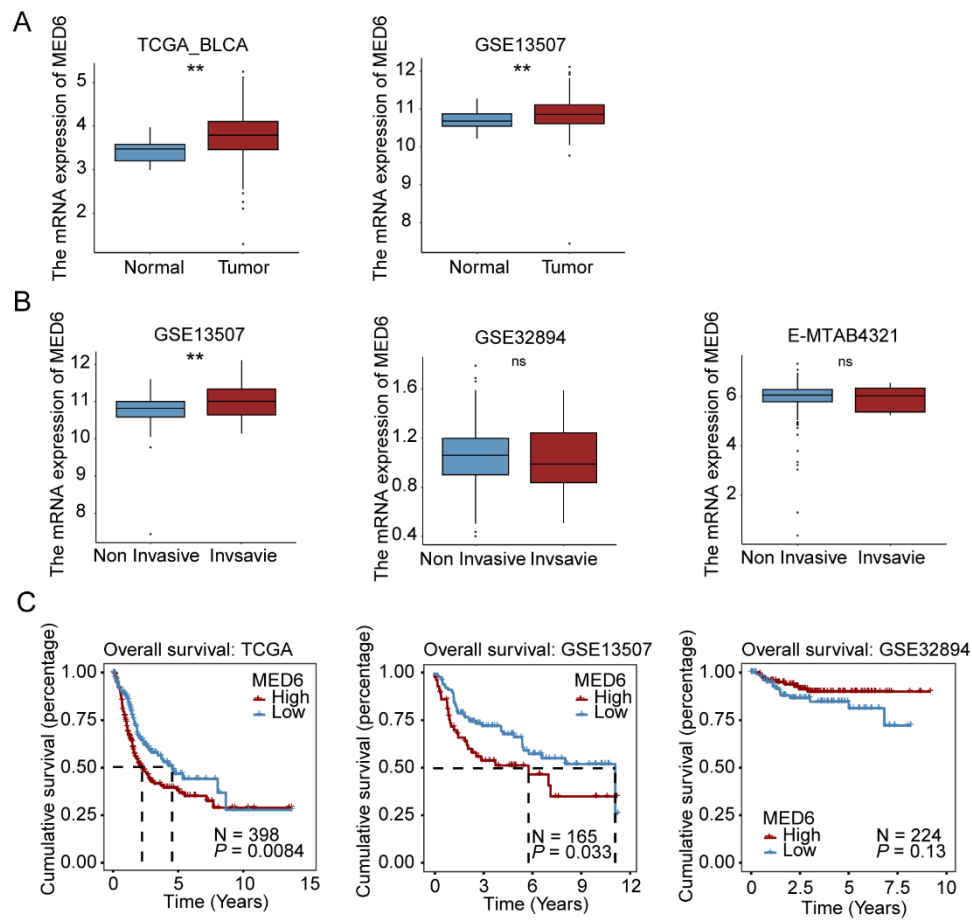


Fig. S1 Expression profile and clinical significance of MED6 in bladder cancer. (A) Box plots display MED6 expression levels in TCGA-BLCA and GSE13507 cohorts. (B) Box plots show differential mRNA expression of MED6 between non-invasive and invasive bladder cancer tissues in E-MTAB-4321, GSE32894, and GSE13507 datasets. (C) Kaplan-Meier survival curves illustrate the prognostic value of MED6 in bladder cancer patients from TCGA-BLCA, GSE32894, and GSE13507 cohorts. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$; ns, no statistical significance

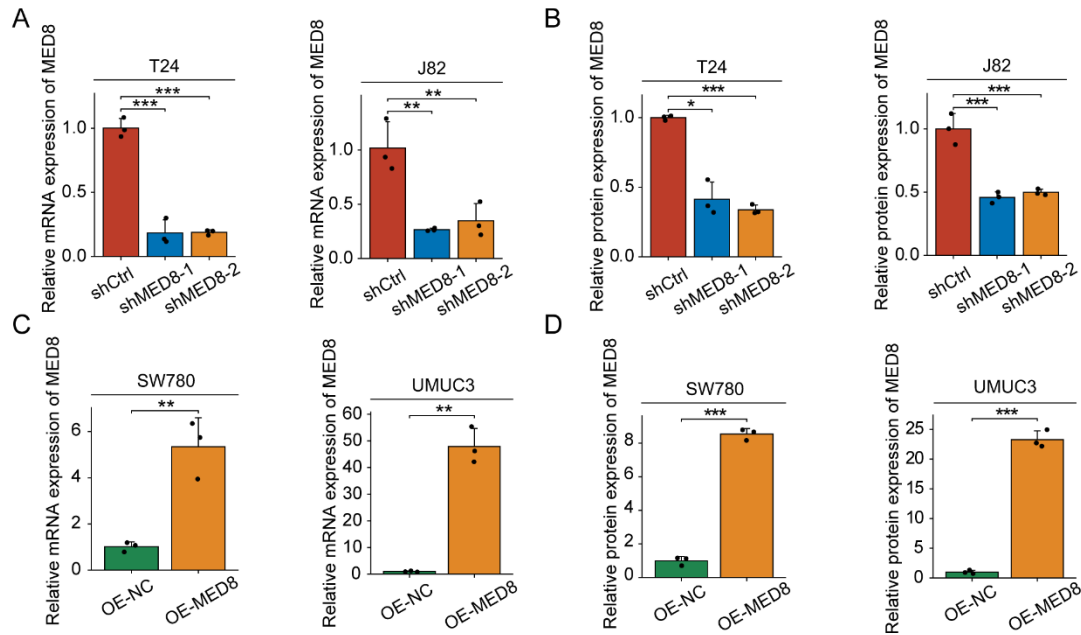


Fig. S3 Establishment of MED8 knockdown and overexpression models in BLCA cell lines. (A, B) Bar graphs show changes in MED8 mRNA (A) and protein (B) levels after knockdown in T24 and J82 bladder cancer cells. (C, D) Bar graphs display changes in MED8 mRNA (C) and protein (D) levels following overexpression in SW780 and UMUC3 bladder cancer cells. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$; ns, no statistical significance

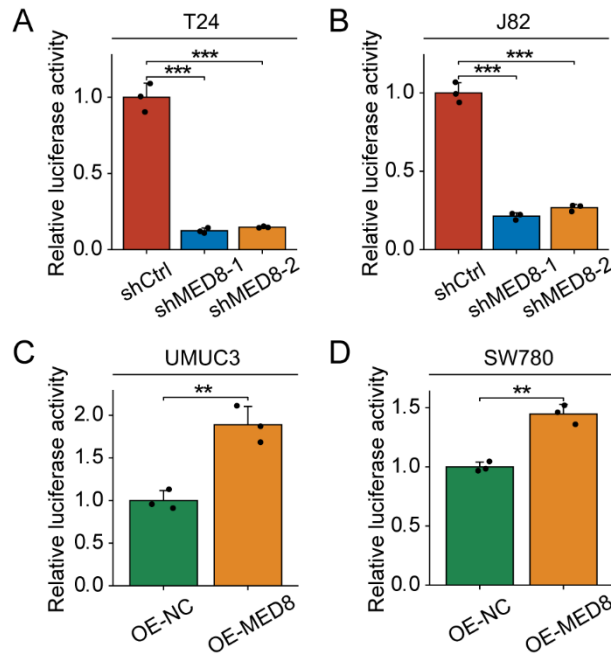


Fig. S4. Dual luciferase assays were performed to detect the regulation of SCD promoter activity by MED8. (A, B) Bar graphs show the relative luciferase activity of the SCD promoter in T24 (A) and J82 (B) bladder cancer cell lines with stable MED8 knockdown. (C, D) Bar graphs display the relative luciferase activity of the SCD promoter in UMUC3 (C) and SW780 (D) bladder cancer cell lines with stable MED8 overexpression. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$; ns, no statistical significance

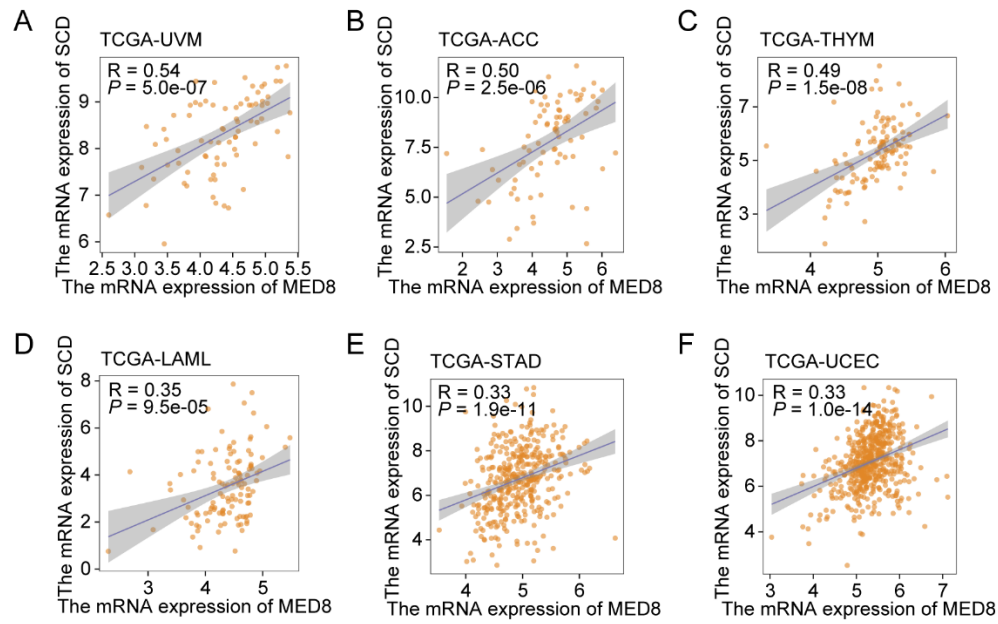


Fig. S5 Representative cancer types from the correlation analysis between MED8 and SCD in the TCGA Database. (A-F) Scatter plots demonstrate the correlation between SCD mRNA and MED8 mRNA expression levels in TCGA-UVM (A), TCGA-ACC (B), TCGA-THYM (C), TCGA-LAML (D), TCGA-STAD (E), and TCGA-UCEC (F).