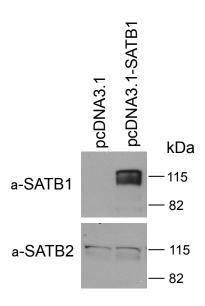
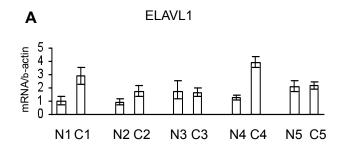


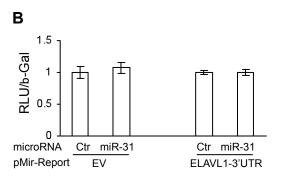
Supplementary Fig. S1 Vimentin and cytokeratin staining of fibroblasts.



## **Supplementary Fig. S2**

SATB2 antibody specificity. Recombinant SATB1 protein or vector control were ectopically expressed in HeLa cells and protein lysates were analyzed by western blotting using anti-SATB1 or anti-SATB2 antibody.





## Supplementary Fig. S3

ELAVL1 (HuR) is upregulated in the majority of CAFs but is not targeted by miR-31.

- A. Quantitative RT-PCR of ELAVL1 in normal (N) fibroblasts and CAFs (C).
- B. Luciferase reporter assay with pMIR-Report vector with or without 3'UTR of ELAVL1.