

Figure S1. Enlarged image of the primary cancer-associated fibroblasts. Only spindle-shaped cells proliferated from the tissue samples. Scale bar=200  $\mu\text{m}$ .

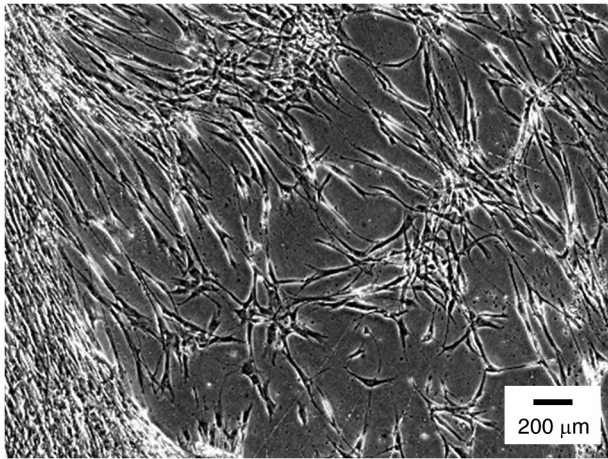


Figure S2. Macroscopic and microscopic image of each tissue sample of eight pancreatic cancer patients. Top row: Macroscopic images; Bottom row: Microscopic images (H&E staining; magnification, x100).

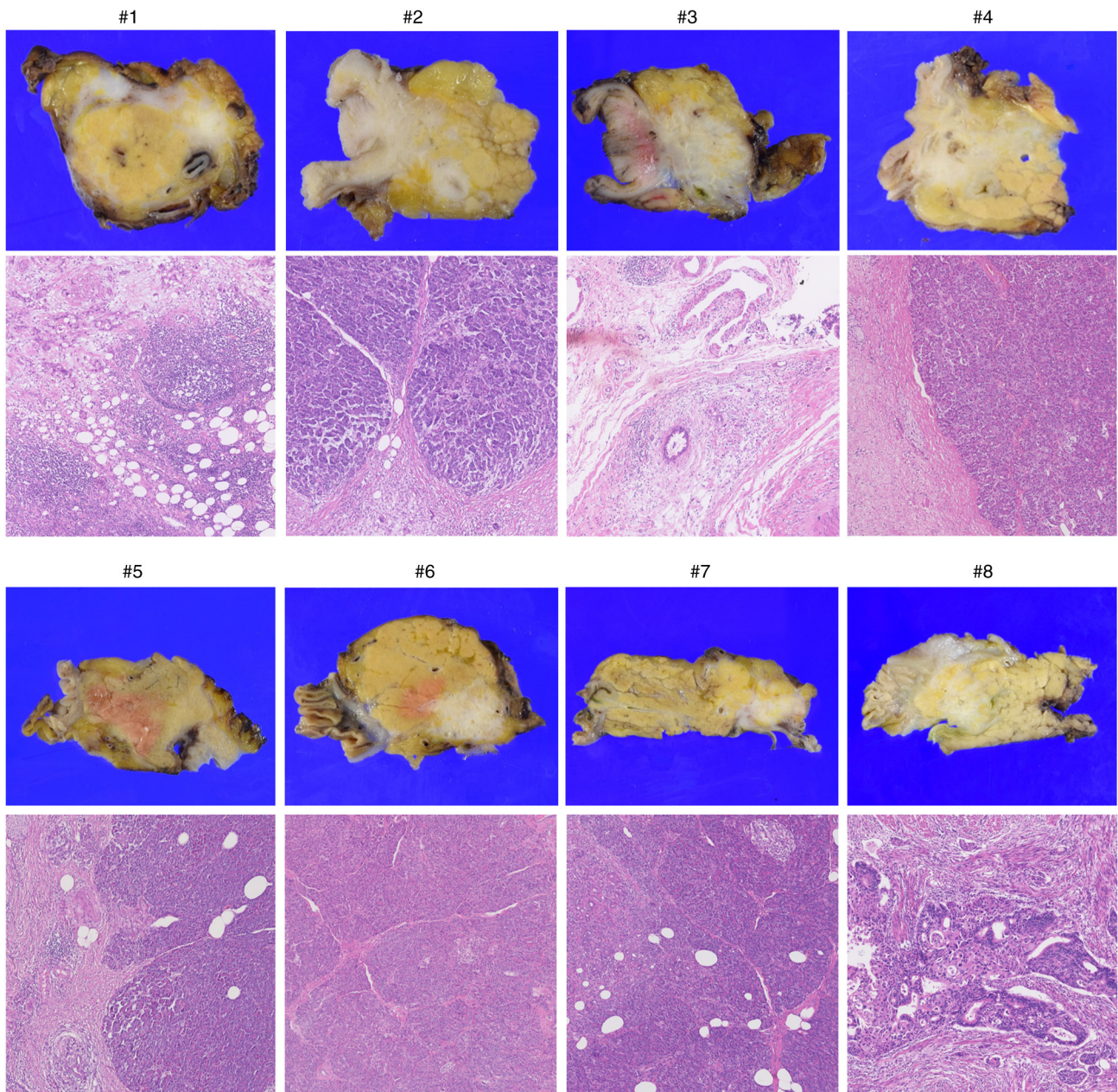


Figure S3. Gene expression of TERT, Vimentin,  $\alpha$ -SMA, and FAP in each primary CAF. The graph shows the gene expression levels of the CAF markers (Vimentin, ACTA2, FAP) and TERT, which is known to be expressed in cancer cells, quantified by reverse transcription-quantitative PCR using the  $2^{-\Delta\Delta Cq}$  method. CAF, cancer-associated fibroblast.

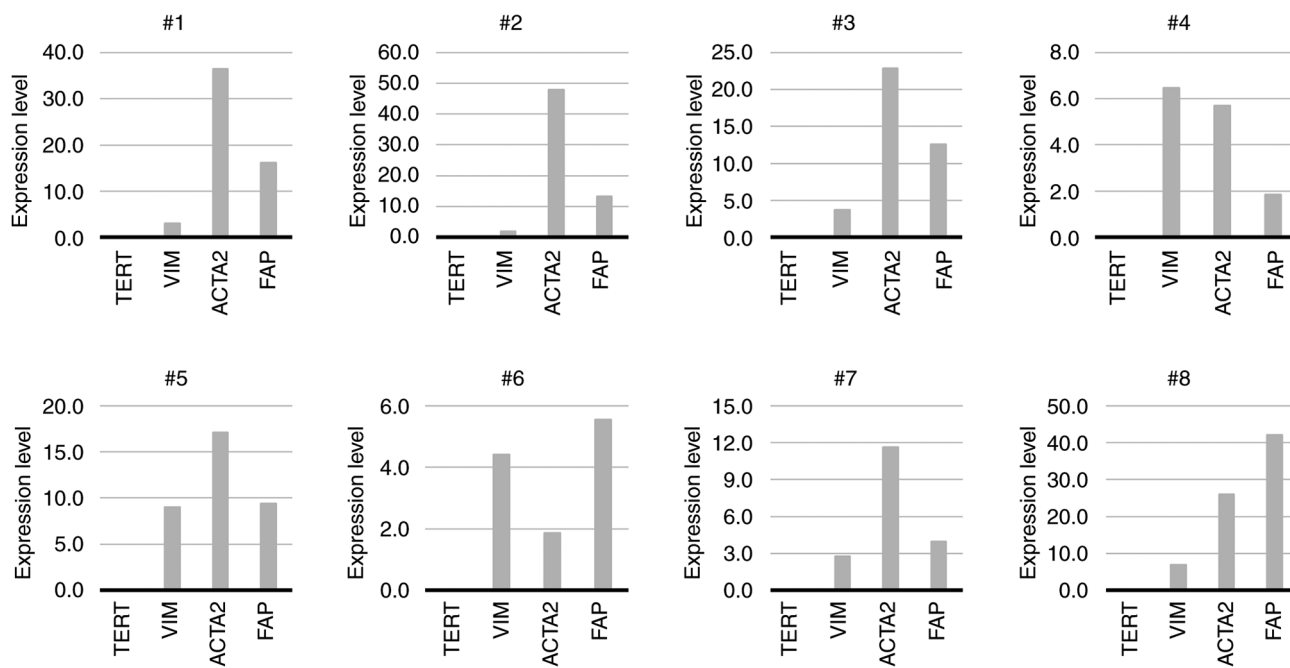


Figure S4. Expression levels of cellular senescence- and SASP-related genes in condition with and without serum, respectively. Graph shows expression level of each gene on the vertical axis. Expression level was calculated using the  $2^{-\Delta\Delta Cq}$  method based on the expression level of GAPDH, the housekeeping gene. (A) Data regarding four genes associated with the p53/p21 and p16/RB pathways. (B) Data regarding seven genes associated with SASP. SASP, senescence-associated secretory phenotype.

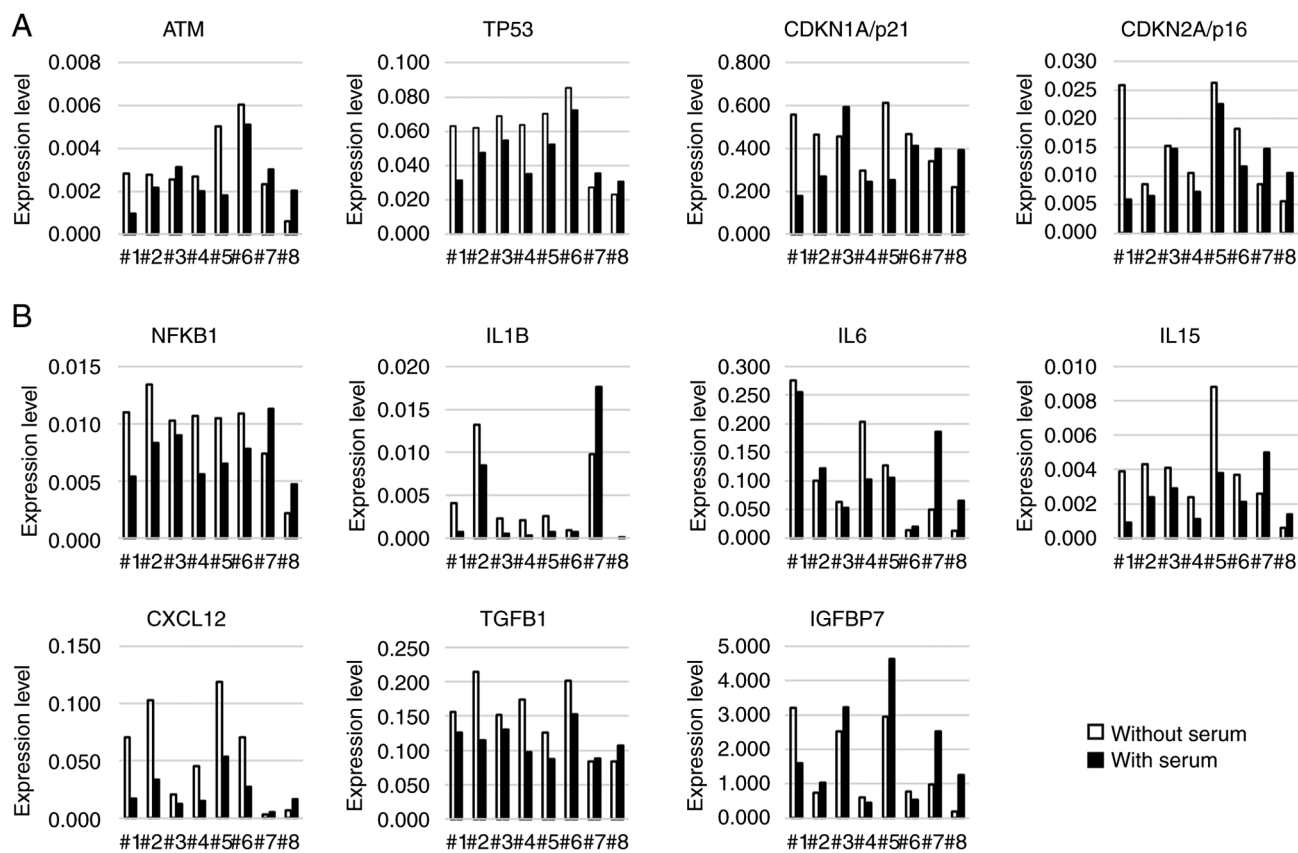


Figure S5. Correlation between serum CA19-9 level at the time of surgery and RNA levels of cellular senescence- and SASP-related genes. Graph shows RNA level (fold-change) of each gene on the horizontal axis, and serum CA19-9 level at the time of surgery on the vertical axis. (A) Data regarding four genes associated with the p53/p21 and p16/RB pathways. (B) Data regarding seven genes associated with SASP. The square of the correlation coefficient and the P-value are shown. Data were obtained for 6 patients, excluding the two Lewis antigen-negative patients. SASP, senescence-associated secretory phenotype; CA19-9, carbohydrate antigen 19-9.

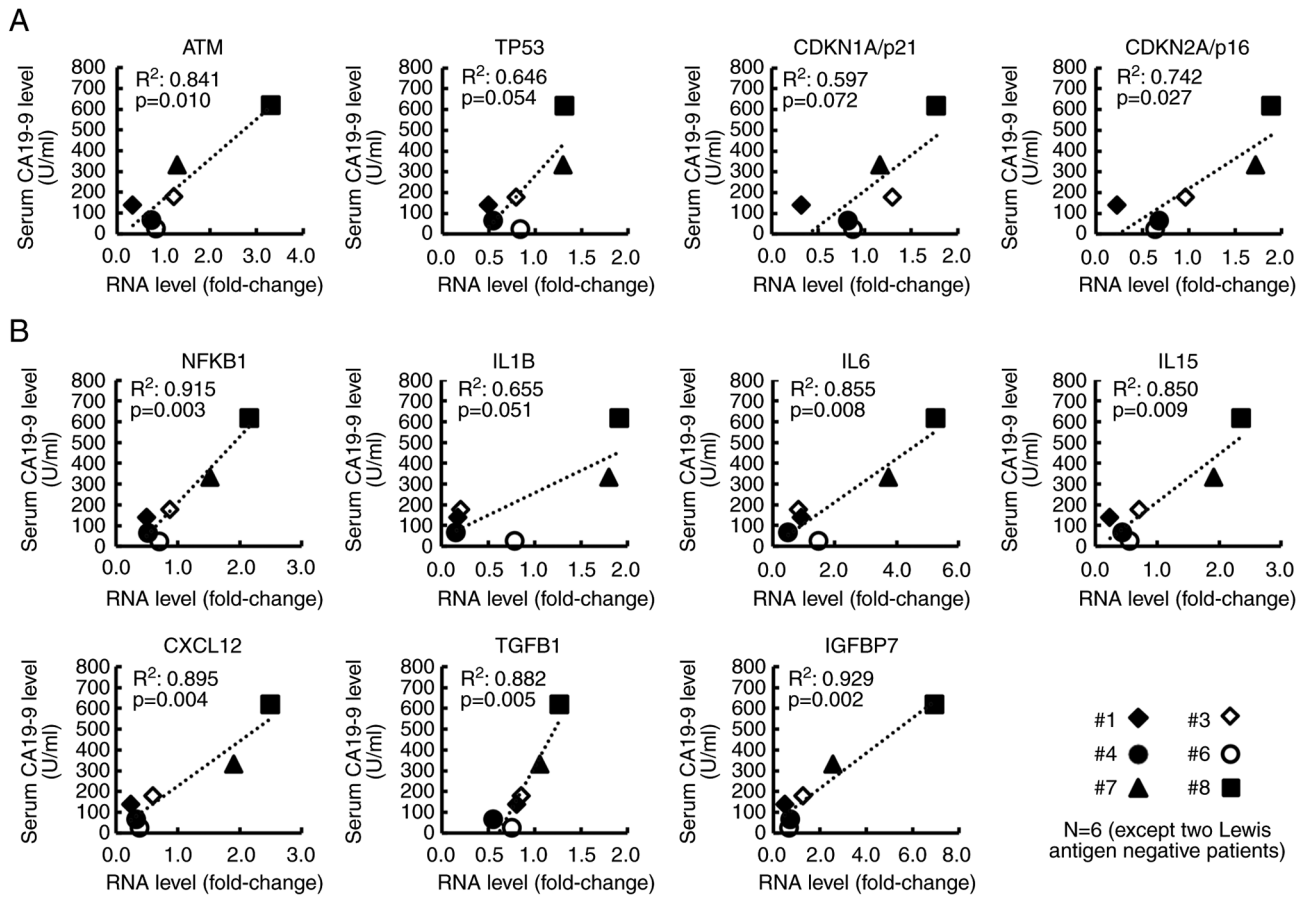


Figure S6. Morphology of cancer-associated fibroblasts after 5 days of incubation with pifithrin-alpha or DMSO. Top row: DMSO-treated; Bottom row: PFT-alpha-treated. Scale bar=100  $\mu$ m.

