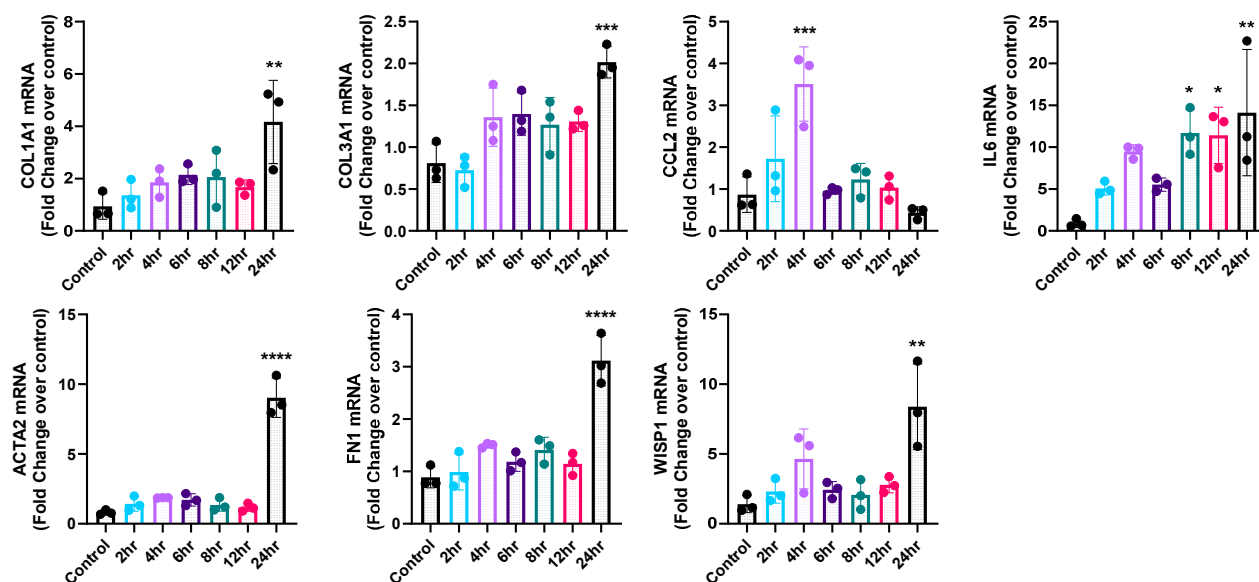


Supplementary Materials

A

NHLF



B

DHLF

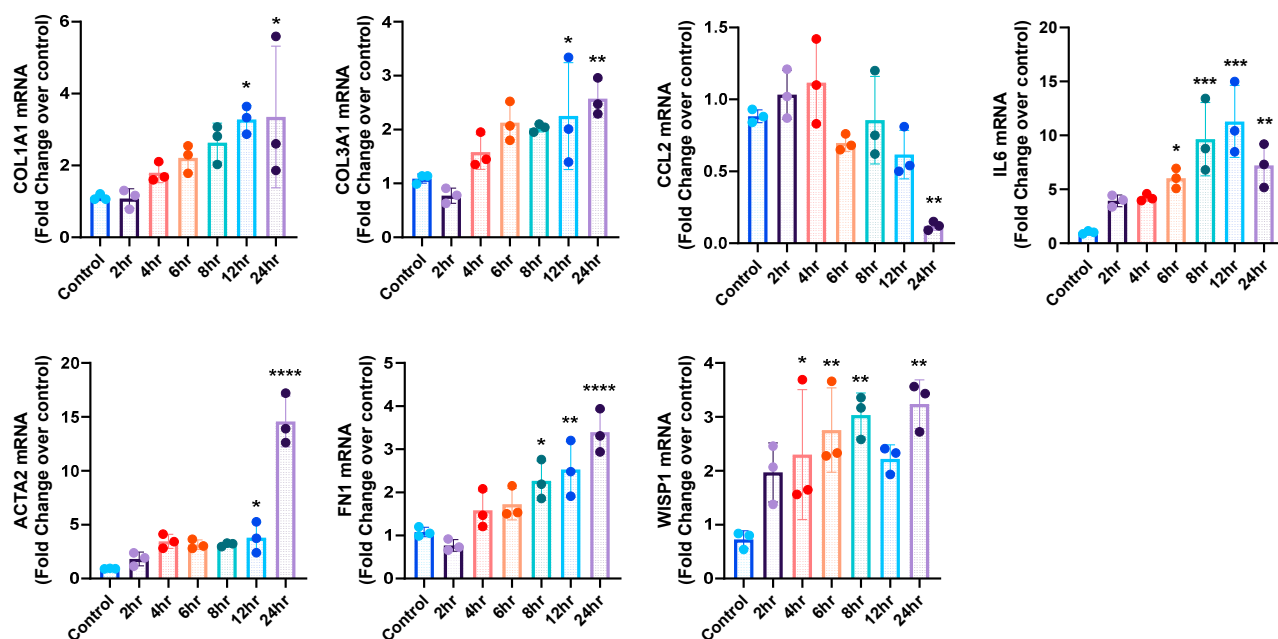


Figure S1: TGFβ time-dependently increases WISP1 expression. Stimulation with TGFβ1 (1ng/ml) yielded a time-dependent increase in profibrotic genes such as Col1A1, Col3A1, ACTA2, FN1 etc. in both (A) NHLF and (B) DHLF. Statistical analysis was performed using One-way ANOVA with Tukey's Post-hoc analysis vs vehicle control for respective donors. * denotes $p < 0.5$, ** denotes $p < 0.01$, *** denotes $p < 0.001$, **** denotes $p < 0.0001$ versus the vehicle control, as shown.

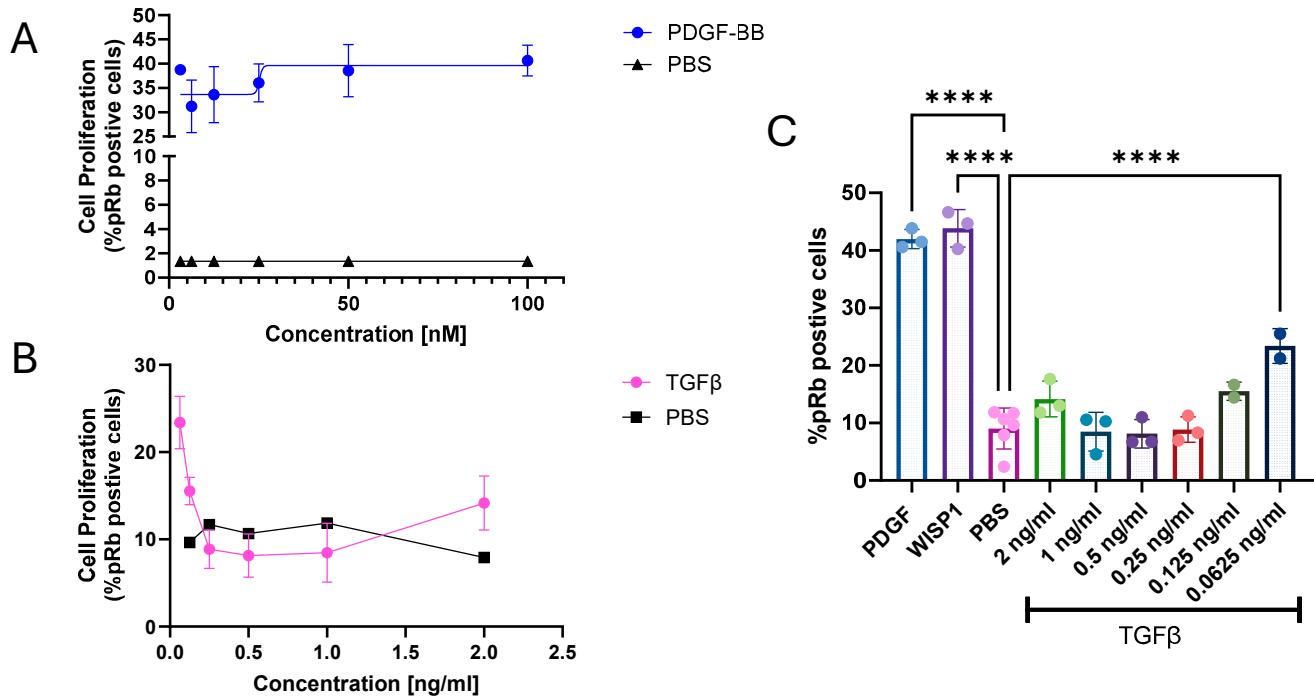


Figure S2: Effect of TGFβ and PDGF-BB on fibroblast cell proliferation. (A) PDGF-BB stimulation significantly increases ($p < 0.0001$ via One-way ANOVA) cell proliferation in a dose-dependent manner. (B) TGFβ1 had no significant effect on % pRb positive cells at higher concentration. (C) However, lower concentration of TGFβ1 (0.0625ng/ml) significantly increased ($p < 0.0001$ via One-way ANOVA) cell-proliferation as compared to control. Three independent experiments ($n=3$) were performed in triplicates. Statistical analysis was performed using One-way ANOVA with Tukey's post-hoc analysis versus the vehicle-control condition and significance denoted as * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

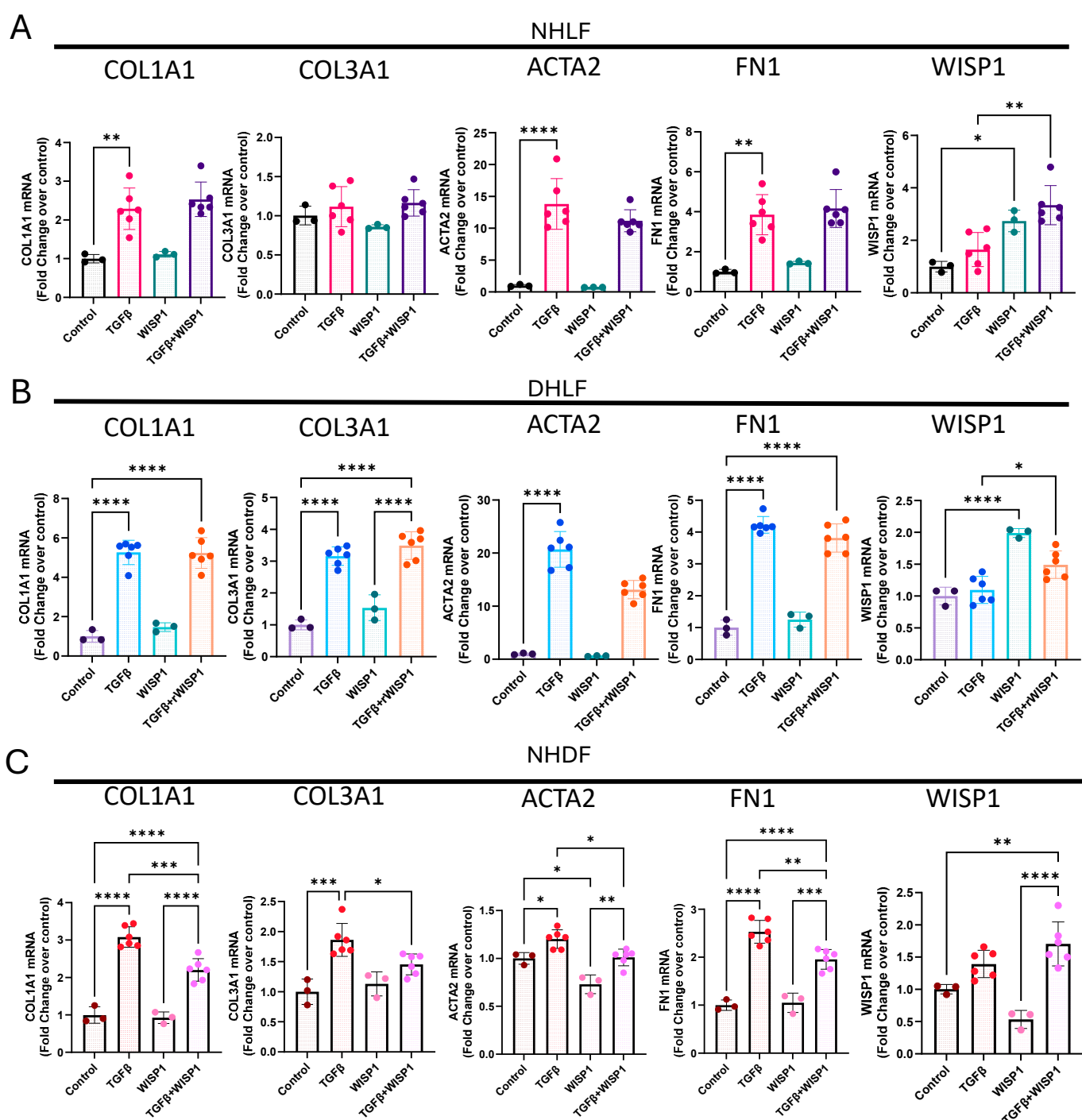


Figure S3: Recombinant WISP1 + TGF β gene expression analysis.

Primary human fibroblasts were stimulated with TGF β (1ng/ml) for 24 hr for initiation, followed by WISP1 (1000nM) for another 24hr as per the experimental layout. No significant changes in the profibrotic gene expression, such as *COL1A1*, *COL3A1*, *ACTA2* and *FN1* were observed in (A) normal human lung, (B) IPF-diseased lung fibroblasts and (C) dermal fibroblast. Statistical analysis was performed using One-way ANOVA with Tukey's Post-hoc analysis vs vehicle control for respective donors. * denotes $p < 0.5$, ** denotes $p < 0.01$, *** denotes $p < 0.001$, **** denotes $p < 0.0001$ versus the unstimulated control, for three biological replicates ($n=3$).

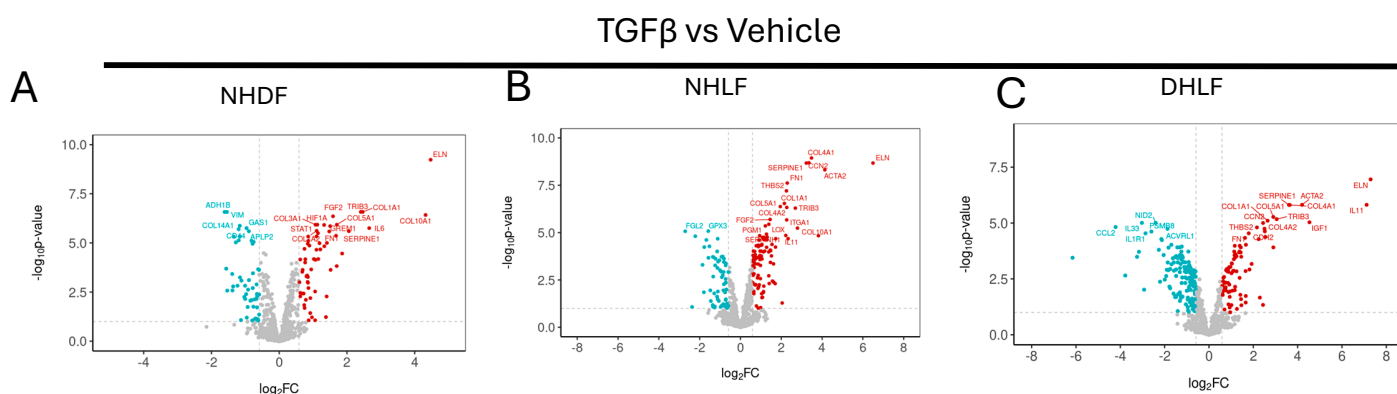


Figure S4: NanoString TGF β gene signature in lung and dermal fibroblast. The volcano plot illustrates fibroblast genes upregulated (red) and downregulated (blue) upon stimulation with TGF β (A) NHDF, (B) NHLF and (C) IPF-DHLF as compared to control. The plots represent statistically significant gene with $|FC| > 1.5$ and Adj Pval < 0.1 are plotted with the x-axis representing $\log_2$ Fold change (FC) versus the y-axis $-\log_{10}$ p-value.

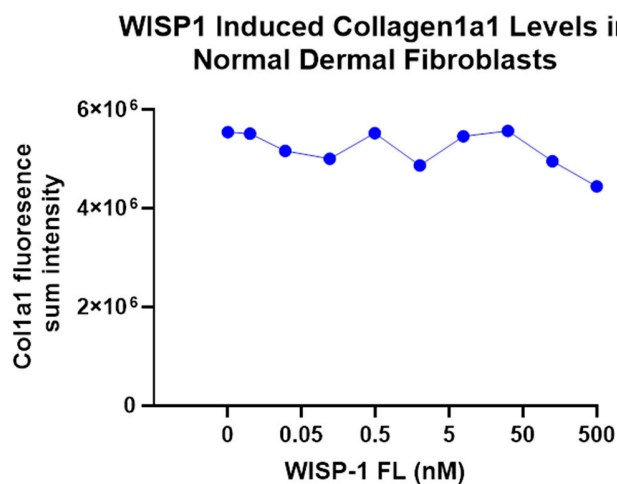


Figure S5: Effect of WISP1 on Collagen levels. Treatment of NHLF with increasing concentration of WISP1 had no significant effect on Col1A1 protein levels as assessed via immunofluorescence.