

SUPPLEMENTARY MATERIAL

Title: Dermal fibroblasts have different extracellular matrix profiles induced by TGF- β , PDGF and IL-6 in a model for skin fibrosis

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Type III collagen formation cross-linking

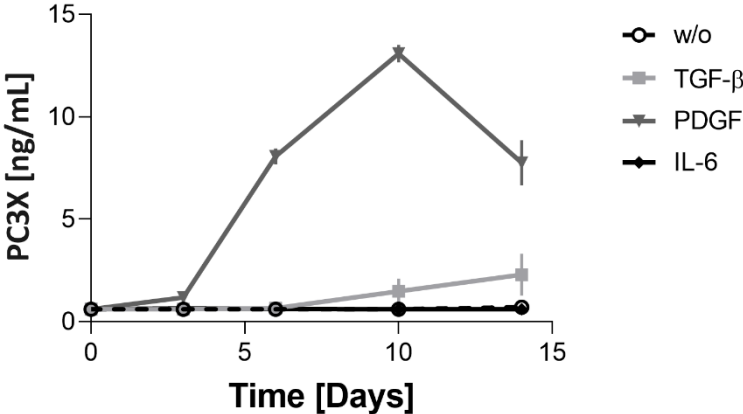


Figure S1. Type III collagen is cross-linked over time. Data are shown as mean ± SD.

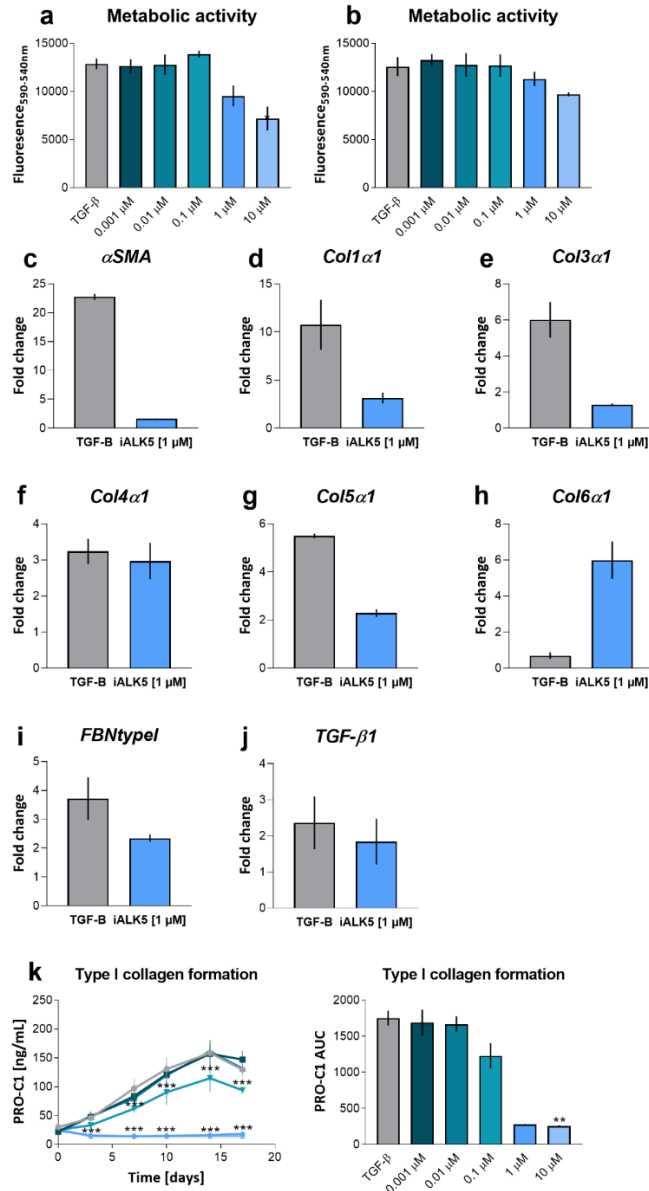


Figure S2. **TGF-β induced fibrosis can be modulated by iALK5.** (a) Metabolic activity of fibroblasts after addition of iALK5 from day 0. (b) Metabolic activity of fibroblasts after addition of iALK5 from day 7. (c) Gene expression of *αSMA*. (d) Gene expression of *Coll1α1*. (e) Gene expression of *Col3α1*. (f) Gene expression of *Col4α1*. (g) Gene expression of *Col5α1*. (h) Gene expression of *Col6α1*. (i) Gene expression of *FBNtype1*. (j) Gene expression of *TGF-β1*. (k) Type I collagen formation in response to TGF-β and iALK5 treatment from day 0. Four technical replicates were used to assess the metabolic activity and type I collagen formation, and two technical replicates were used to assess gene expression. Data are shown as mean ± SD. Data were analyzed by Kruskal-Wallis test and two-way ANOVA with Dunnett's multiple comparisons test. *: P<0.05, **: P<0.01, ***: P<0.001

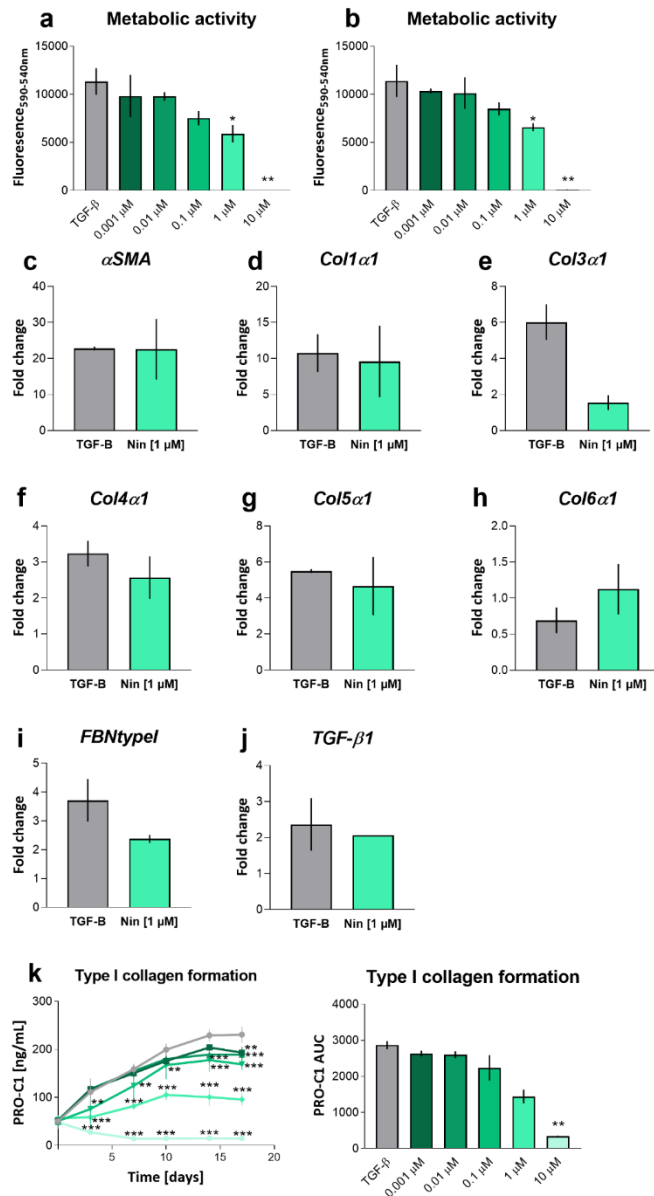


Figure S3. **TGF-β induced fibrosis can be modulated by nintedanib.** (a) Metabolic activity of fibroblasts after addition of nintedanib from day 0. (b) Metabolic activity of fibroblasts after addition of nintedanib from day 7. (c) Gene expression of *αSMA*. (d) Gene expression of *Col1α1*. (e) Gene expression of *Col3α1*. (f) Gene expression of *Col4α1*. (g) Gene expression of *Col5α1*. (h) Gene expression of *Col6α1*. (i) Gene expression of *FBNtype1*. (j) Gene expression of *TGF-β1*. (k) Type I collagen formation in response to TGF-β and nintedanib treatment from day 0. Four technical replicates were used to assess the metabolic activity and type I collagen formation, and two technical replicates were used to assess gene expression. Data are shown as mean ± SD. Data were analyzed by Kruskal-Wallis test and two-way ANOVA with Dunnett's multiple comparisons test. *: P<0.05, **: P<0.01, ***: P<0.001.

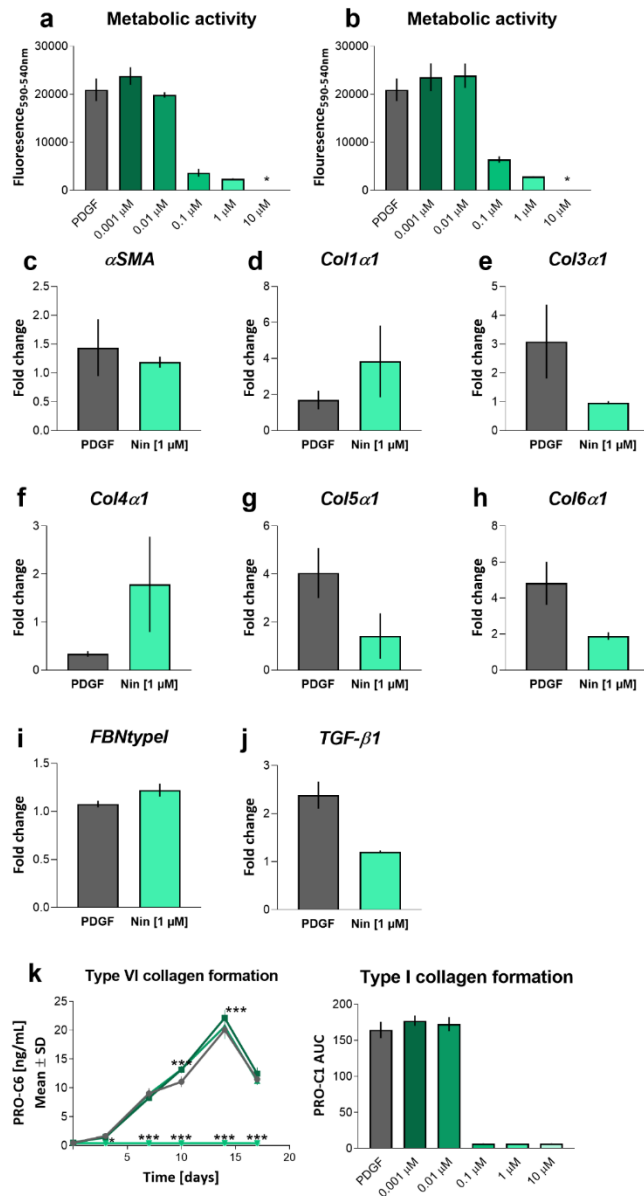


Figure S4. **PDGF induced fibrosis can be modulated by nintedanib.** (a) Metabolic activity of fibroblasts after addition of nintedanib from day 0. (b) Metabolic activity of fibroblasts after addition of nintedanib from day 7. (c) Gene expression of *αSMA*. (d) Gene expression of *Col1α1*. (e) Gene expression of *Col3α1*. (f) Gene expression of *Col4α1*. (g) Gene expression of *Col5α1*. (h) Gene expression of *Col6α1*. (i) Gene expression of *FBNtype1*. (j) Gene expression of *TGF-β1*. (k) Type VI collagen formation in response to PDGF and nintedanib treatment from day 0. Four technical replicates were used to assess the metabolic activity and type VI collagen formation, and two technical replicates were used to assess gene expression. Data are shown as mean ± SD. Data were analyzed by Kruskal-Wallis test and two-way ANOVA with Dunnett's multiple comparisons test. *: P<0.05, **: P<0.01, ***: P<0.001.