

Supplementary Materials

Figure S1 (A-D)

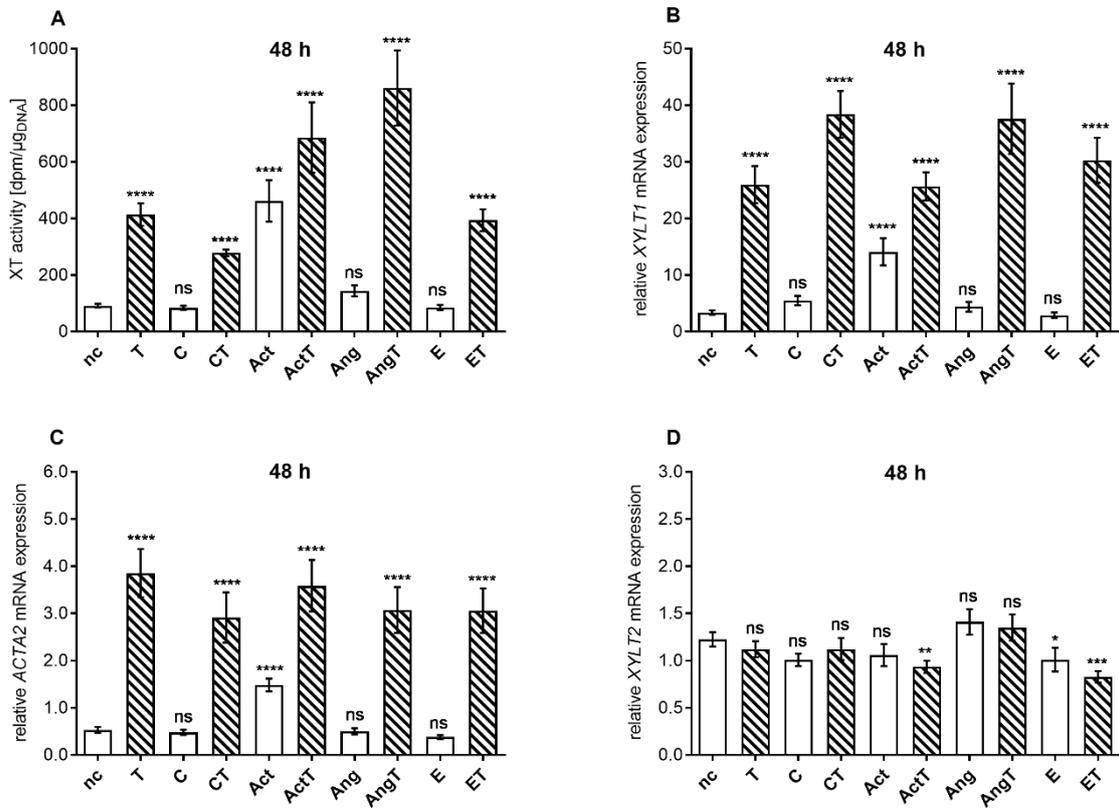


Figure S1. Various Cytokine and growth factor treatments of NHDF. Human primary fibroblasts ($n = 4$) were cultured the day before the experiment. Cells were serum-starved for 24 h and treated with vehicle (nc), activin A (Act; 50 $\mu\text{g/L}$), CTGF (C; 50 $\mu\text{g/L}$), angiotensin-II (Ang; 100 nmol/L), endothelin-1 (E; 100 nmol/L) alone or in combination with TGF β 1 (5 $\mu\text{g/L}$; T, CT, ActT, AngT, ET) for 48 h. (A) Extracellular XT activity was measured in cell supernatants by radiochemical enzyme assay and expressed as dpm per μg of total sample DNA. Relative (B) *XYLT1*, (C) *ACTA2* and (D) *XYLT2* mRNA expression levels were analysed by quantitative real-time PCR. Shown values are means \pm SEM for three biological and three technical replicates per experiment. Mann-Whitney *U* test: not significant (ns), $P < 0.05$ (*), $P < 0.001$ (**), $P < 0.0001$ (****).

Figure S2 (A-C)

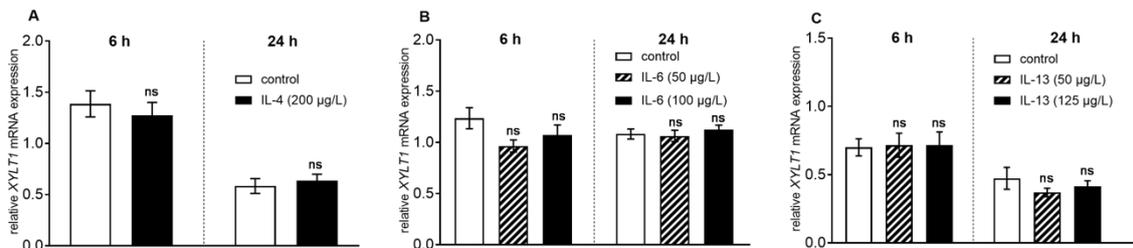


Figure S2. Interleukin treatments of NHDF. Human primary fibroblast cells were treated with (A) IL-4 ($n = 3$), (B) IL-6 ($n = 2$) or (C) IL-13 ($n = 2$) for 6 h and 24 h. Relative *XYLT1* mRNA expression levels

were analysed by quantitative real-time PCR. Shown values are means \pm SEM for three biological and three technical replicates per experiment. Mann-Whitney *U* test: not significant (ns).

Figure S3 (A-D)

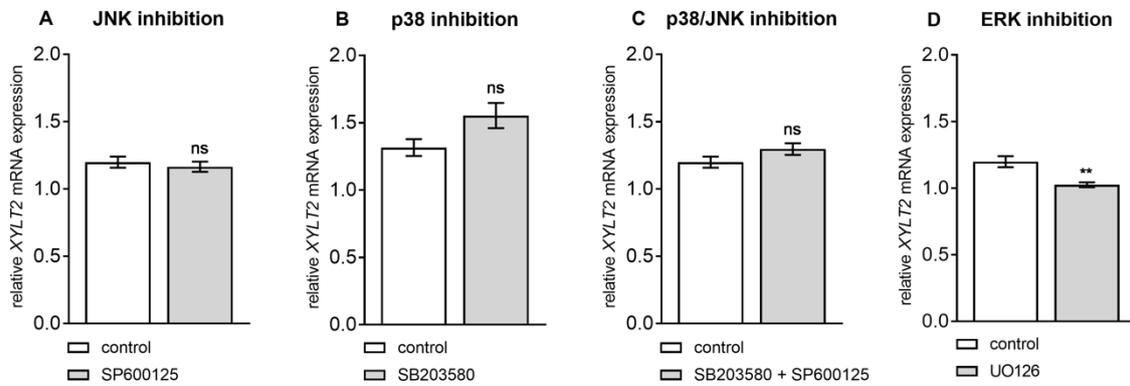


Figure S3. Inhibition of basal *XYLT2* mRNA expression by pharmacological inhibitors to MAPK JNK, p38 and ERK. Human primary fibroblast cells ($n = 3$) were cultured the day before the experiment. Cells were serum-starved for 24 h and treated with vehicle or (A) JNK inhibitor SP600125 (25 μ mol/L), (B) p38 inhibitor SB203580 (10 μ mol/L), (C) SP600125 (25 μ mol/L) and SB203580 (10 μ mol/L) or (D) ERK inhibitor UO126 (10 μ mol/L) for 6 h. Relative mRNA expression level of *XYLT2* was analysed by qRT-PCR. Shown values are means \pm SEM for three biological and three technical replicates per experiment. Mann-Whitney *U* test: not significant (ns), $P < 0.01$ (**).

Figure S4 (A-C)

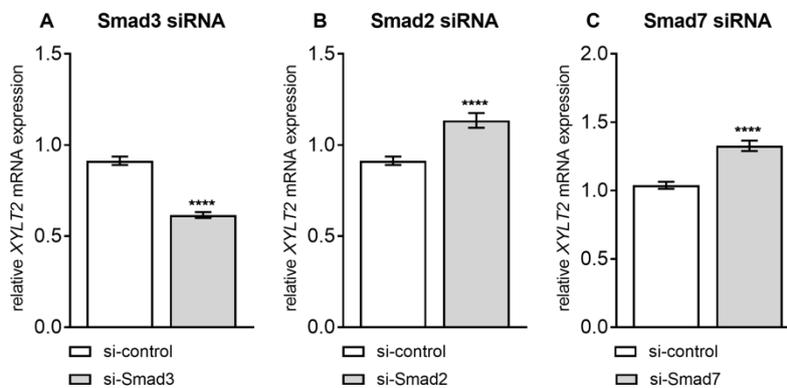


Figure S4. siRNA mediated Smads 2, 3 and 7 knockdowns. Human primary fibroblasts ($n=3$) were cultured for 24 h before transfection with a negative control siRNA (si-control, 50 or 100 nmol/L) or siRNA targeting against (A) Smad3 (si-Smad3, 50 nmol/L), (B) Smad2 (si-Smad2, 50 nmol/L) or (C) Smad7 (si-Smad7, 100 nmol/L). 24 h post-transfection cells were serum-starved for 16 h and maintained in serum-free media for additional 6 h. Relative *XYLT2* mRNA expression levels were analysed by qRT-PCR. Shown values are means \pm SEM for three biological and three technical replicates per experiment. Mann-Whitney *U* test: $P < 0.0001$ (****).