



**Figure S1: Generation of  $\alpha$ 1 deficient WI-26 VA4 cell line.** (A) Supernatants from control WI-26 VA4 cells (CTRL) and COL6A1 knock out (KO) cells were separated on a 6 % SDS-PAGE gel (anti- $\alpha$ 1) and on a composite agarose/polyacrylamide gel (anti- $\alpha$ 3C5). hdf, supernatant from human dermal fibroblast cultures. (B,C) CTRL and KO cells were incubated for seven days in the presence of ascorbic acid. Labellings were performed with the  $\alpha$ 1 antibody (B) and the  $\alpha$ 3C5 and  $\alpha$ 3N antibody (C) to detect collagen VI microfibrils.

**Table S1: Synthetic double stranded DNA fragment (Invitrogen GeneArt Strings).**

Target organism	Gene	Protein	Sequence (5' – 3')	Restriction site(s)*
Human	<i>COL6A1</i> <i>c.930+18</i> <i>9C&gt;T</i>	Col6α1pex	tata <u>TCGAA</u> TGCCAGCCTGCAAGAGGACCTCCGGGGCTCCGGGGC GACCCCGGCTTTGAGGGAGAACGAGGCAAGCCGGGGCTCCAGGA GAGAAGGGAGAAGCCGGAGATCCTGGAAGACCCGGGGACCTCGG ACCTGTTGGTACCAGGGAATGAAGGGAGAAAAAGGGAGCCGTG GGGAGAAG <u>ACCCGCTCCACCGCCCTCGCCGTCCCTCCATCTGGA</u> <u>AGGACAAGGACAGCCACCCAGGCACCCAGCAAAG</u> GGCTCCAGGGG ACCCAAGGGCTACAAGGGAGAGAAGGGCAAGCGTGGCATCGACG GGGTGGACGGCGTGAAGGGGGAGATGGGGTACCCAGGCTGCCA GGCTGCAAGGGCTCGCCGGTTTACGCGCATCAAGACCCCTG GCCCAAGGGAGACCCGGTGCCTTTGGACTGAAAGGAGAAAAGG GCGAGCCTGGAGCTGACGGGGAGCGGGGAGACCAGGGAGCTCG GGACCATCTGGAGACGAGGGCCAGCCGGGAGAGCCTGGGCCCCC GGAGAGAAAGGAGAGGCGGGCGACGAGGGGAACCCAGGACCTGA CGGTGCCCCGGGAGCGGGTGGCCCTGGAGAGAGAGGACCAC GGGGACCCAGGCACGCGGGACCAAGAGGAGACCTGGTGAA GCTGGCCCGAGGGTGATCAGGGAAGAGAAGCCCCGTTGGTGTG CCTGGAGACCCGGGCGAGGCTGGCCCTATCGGACCTAAAGGCTAC CGAGGCGATGAGGGTCCCCAGGGTCCGAGGGTCCAGAGGAGC CCCAGGACCTGCCGACCCCTGGAGACCCGGGGCTGATGGGTGA AAGGGGAGAAGACGCCCCGCTGGAAATGGCACCGAGGGCTTCCC CGGCTTCCCCGGGTATCCGGGCAACAGGGGCGCTCCCGGATAAA CGGCACGAAGGGTACCCCGCCTCAAGGGGGACGAGGGAGAAG CCGGGACCCCGAGACGATAACAACGACATTGCACCCGAGGAG TCAAAGGAGCAAAGGGTACCGGGTCCCAGGGGCCCCAGGGA CCCCAGGACACCAAGGACCGCCTGGCCGGACGAATGCGAGATT TTGGACATCATGAAAATGTGCTTTGCTGTGAATGCAAGTGCG GCCCCATCGACCTCTGTTCGTGCTGGACAGCTCAGAGAGCATTGG CCTGAGAACTTCGAGATTGCAAGGACTTCGTCGTCAAGGTCATC GACCGGCTGAGCCGGGACGAGCTGGTCAAGTTCGAGCCAGGGCAG <u>TCGTAC</u> Gatat	BstBI BsiWI

\*restriction sites are *underlined*, the pseudoexon encoding sequence is given in *red*.