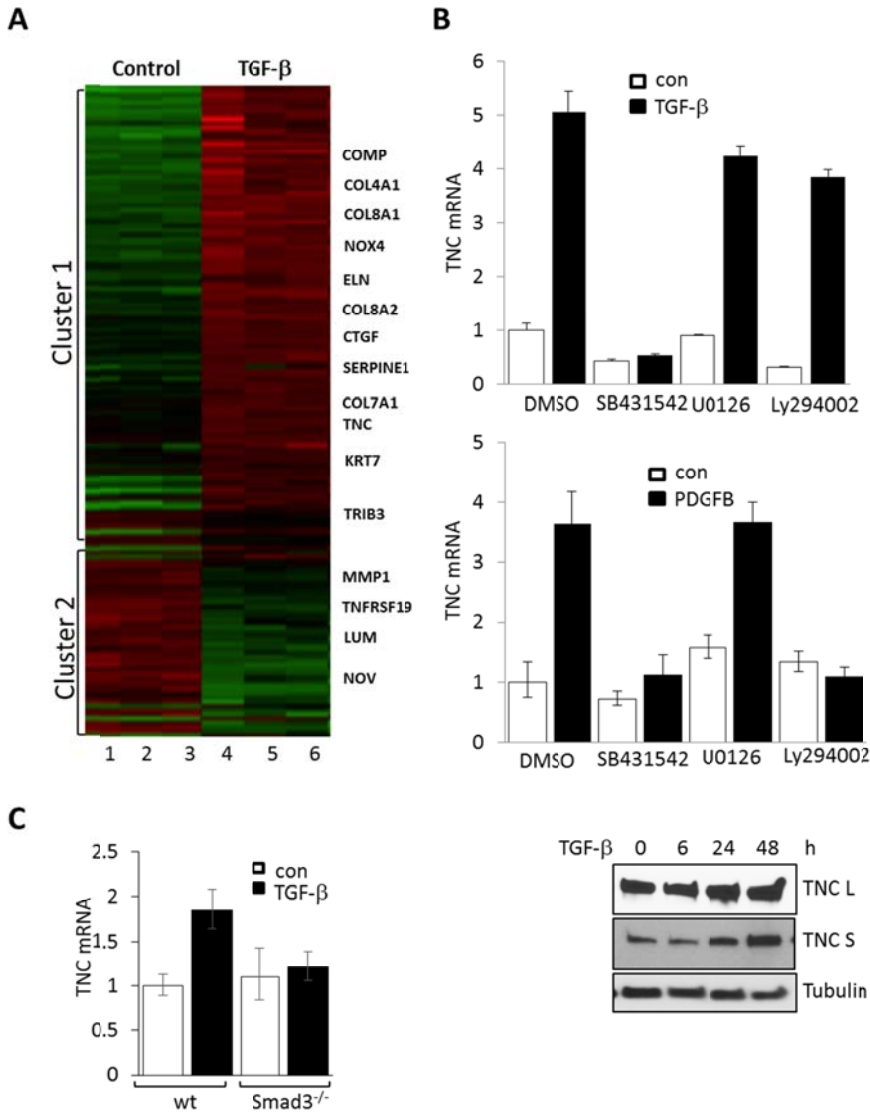


Supplementary Fig. 1.

Elevated tenascin-C in SSc skin biopsies and isolated skin fibroblasts.

A. Correlation of tenascin-C and IL-6 mRNA levels in an SSc biopsy-derived transcriptome dataset (GSE32413; see Fig 1 for full description). **B.** Transcriptome dataset from an independent cohort of 17 SSc and 6 healthy control skin biopsies (GSE9285). Tenascin-C mRNA levels in intrinsic subsets (H, healthy controls; D1, diffuse 1; D2, diffuse 2; I, inflammatory) shown as box plots spanning values from 25-75 percentile. Horizontal lines represent median, maximum and minimum values. One-way ANOVA followed by Sidak's multiple comparison test. **C.** RNA from healthy control (n=4) or SSc (n=6) skin fibroblasts was

examined by qPCR. Results are means \pm S.D. from triplicate determination. Mann-Whitney *U* test. **D.** Immunofluorescence of explanted SSc (n =3) and healthy control (n = 2) skin fibroblasts using antibodies to tenascin-C and α SMA; nuclei identified using DAPI. Representative confocal images; bar =25 μ m.

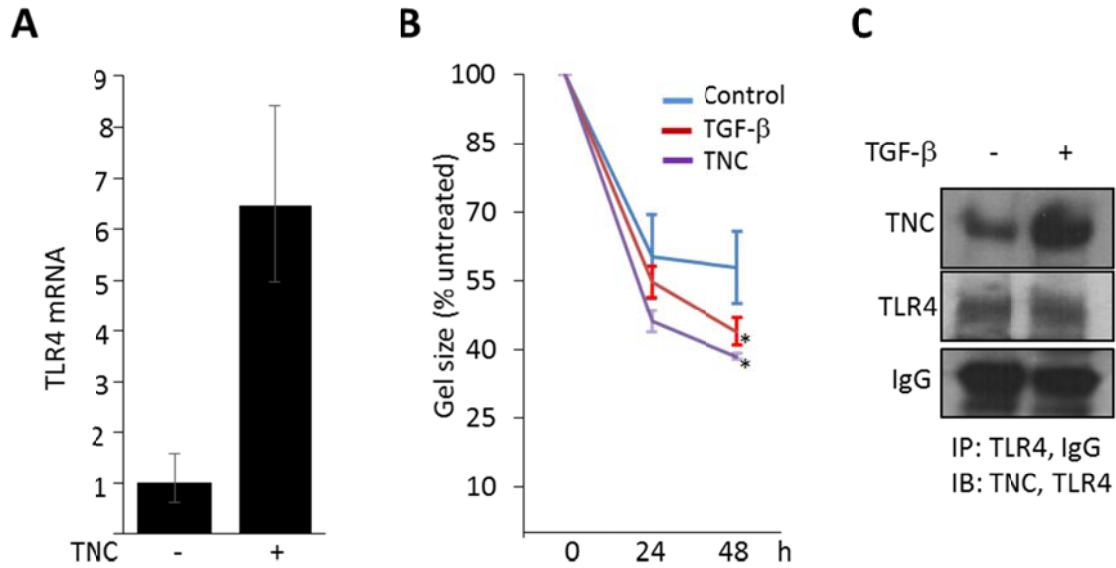


Supplementary Fig. 2.

Regulation of tenascin-C expression in skin fibroblasts

A. RNA isolated from healthy adult skin fibroblasts incubated with or without TGF-β1 for 24 h was hybridized to Illumina human HT-12 Microarray Chips. Heatmap showing -fold change in gene expression compared with the average in control samples. Red, up-regulated; green, down-regulated. Lanes 1-3, untreated control fibroblasts; lanes 4-6, TGF-β-treated fibroblasts

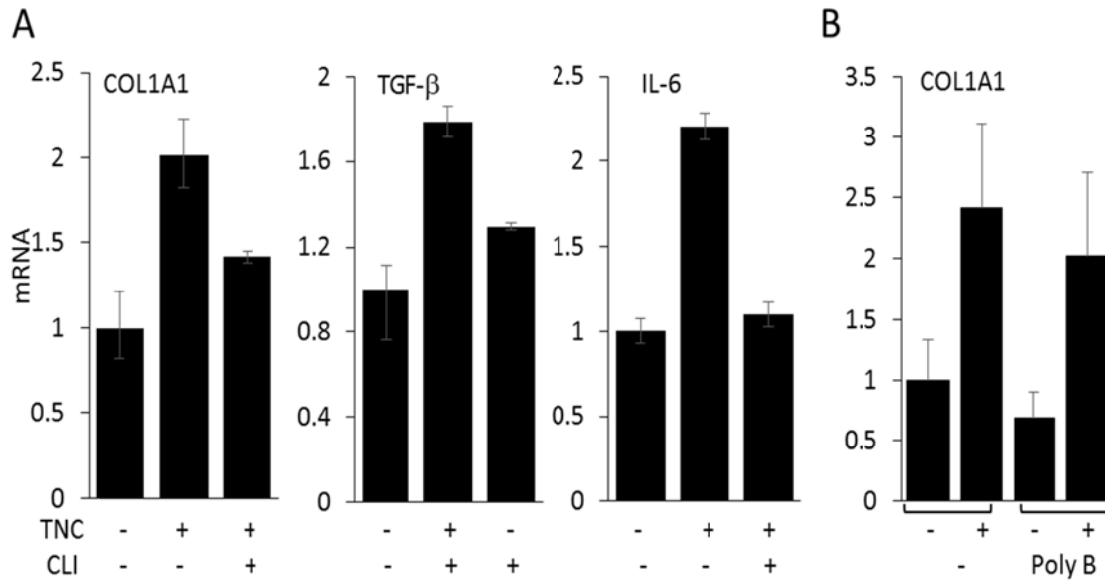
(triplicates). FDR 0.05, >1.5-fold change. Clusters indicate genes significantly up- or down-regulated. **B.** Foreskin fibroblasts were incubated with TGF- β (10 ng/ml) (upper panel) or PDGFB (25 ng/ml) (lower panel) alone, or in the presence or absence of SB431532 or U0126 or Ly294002. Results of real-time qPCR represent means \pm S.D. of triplicate determinations from a representative experiment. Closed bars, treated fibroblasts; open bars, untreated fibroblasts. **C.** Confluent cultures of wt and SMAD3^{-/-} MEFs were incubated with TGF- β (10 ng/ml) for 24h. Results of real-time qPCR represent means \pm S.D. of triplicate determinations from a representative experiment. Closed bars, treated fibroblasts; open bars, untreated fibroblasts. **D.** Confluent adult skin fibroblasts were incubated with TGF- β (10 ng/ml). Whole cell lysates were examined by Western analysis. S, secreted; L, lysates.



Supplementary Fig. 3.

Tenascin-C enhances fibroblast contractility, induces TLR4 expression and interacts directly with TLR4.

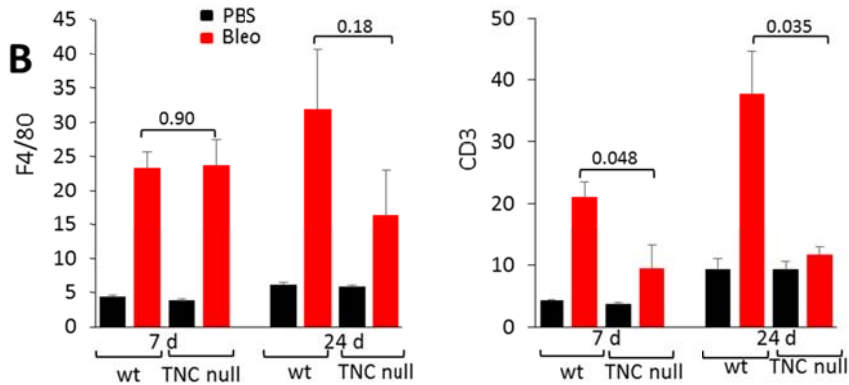
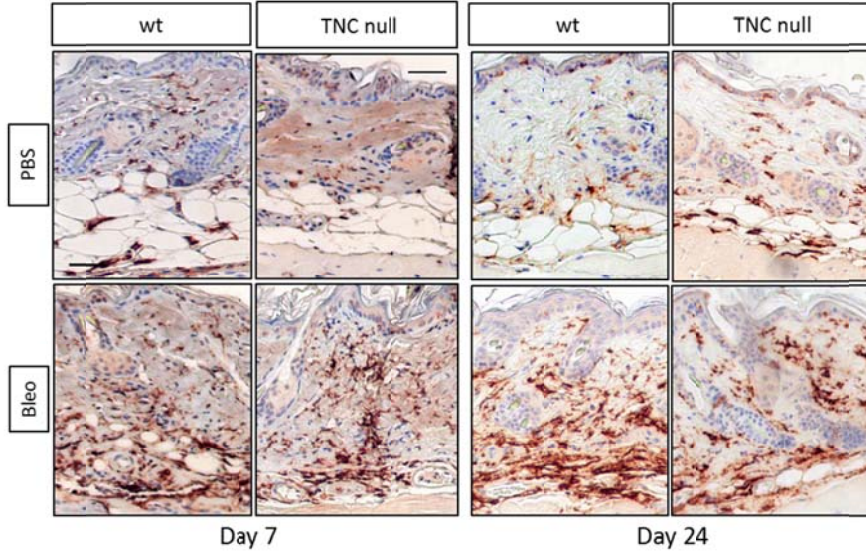
Confluent foreskin fibroblasts were incubated with tenascin-C (2 $\mu\text{g/ml}$) and/or TGF- β 1. **A.** Results of qPCR shown as means \pm SD from triplicate determinations. **B.** Fibroblasts seeded in Type I collagen gels were incubated in media with TGF- β in the presence or absence of tenascin-C (2 $\mu\text{g/ml}$). At 24 and 48 h, gel diameters were determined. Results, expressed as percentage of gel area compared to controls (time 0) are the mean \pm S.D. of triplicate determinations from three separate wells. Mann-Whitney *U* test. **C.** Whole-cell lysates were immunoprecipitated with antibodies to TLR4 or IgG, followed by immunoblotting with antibodies to tenascin-C or TLR4. Representative immunoblot.



Supplementary Fig. 4.

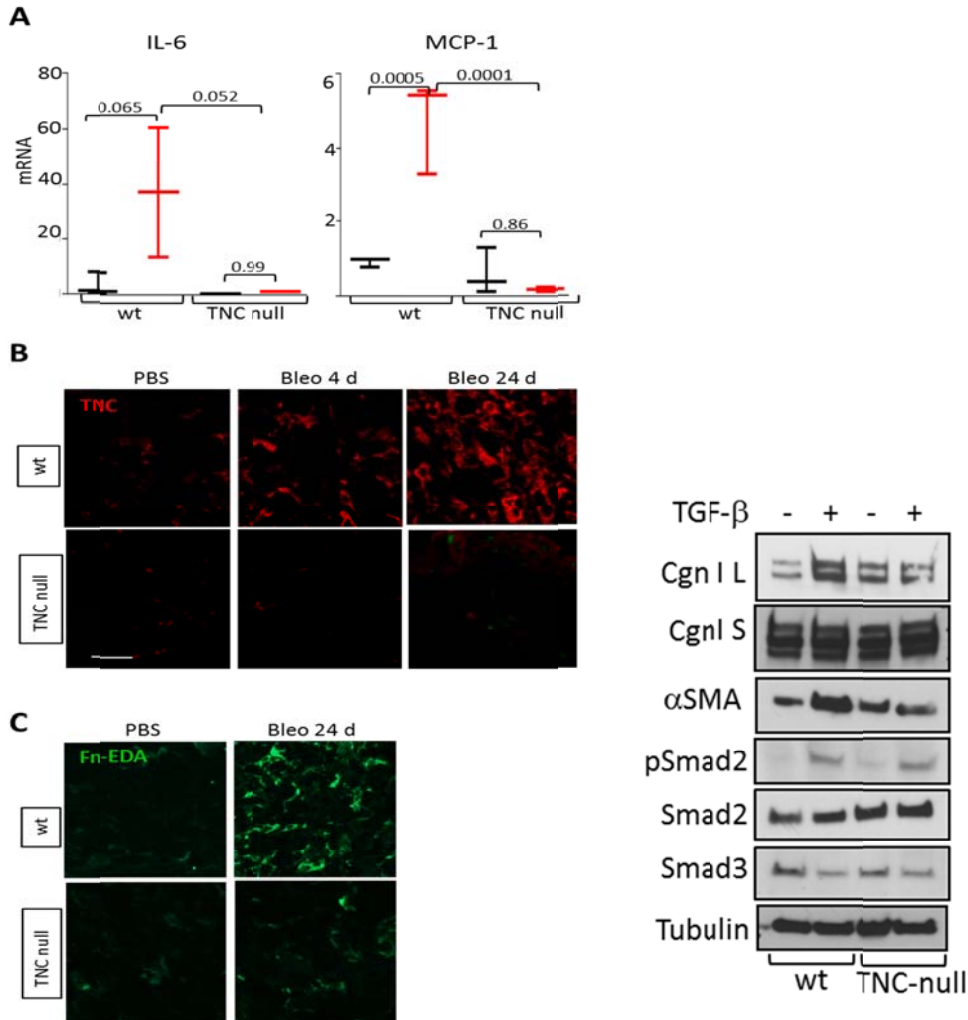
Tenascin-C-induced fibrotic responses are TLR4-dependent

Foreskin fibroblasts were incubated in media with tenascin-C (2 μ g/ml) in the absence or presence of CLI-095 for 72 h (A), or polymyxin B for 24 h (B). qPCR results shown as means \pm S.D. from triplicate determinations from representative experiments.

A**Supplementary Fig. 5.****Bleomycin-induced macrophage and T cell accumulation in skin in wildtype and TNC^{-/-} mice.**

Wildtype mice and TNC^{-/-} mice received bleomycin or PBS via s.c. injections. Skin was harvested at day 7 and day 24. **A.** Immunohistochemistry using antibodies to F4/80.

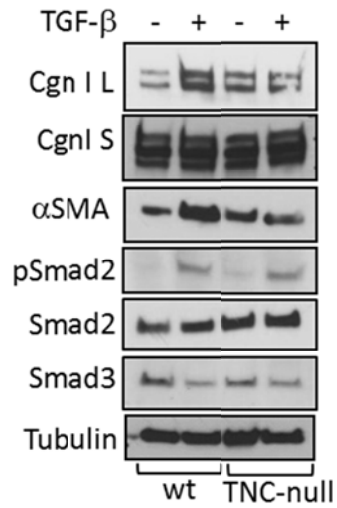
Representative photomicrographs. Bars, 50 μ m. **B.** Positive immunostaining quantified using Image J. Results (percentage of area stained positive for F4/80 or CD3 from three randomly selected areas) are means \pm S.D. of three mice/group. Student's t-test.



Supplementary Fig. S6

Attenuated cutaneous inflammation and Fn-EDA and tenascin-C deposition in $TNC^{-/-}$ mice.

Wildtype mice and $TNC^{-/-}$ mice were administered bleomycin or PBS via s.c. injections. Skin was harvested at day 14 (A) or 24 (B). **A**. Results of qPCR, normalized with GAPDH, are means \pm S.D. of triplicate determinations from three mice/group. **B**, **C**. Immunofluorescence microscopy using antibodies to tenascin-C or Fn-EDA. Representative images; bars = 25 μ m.

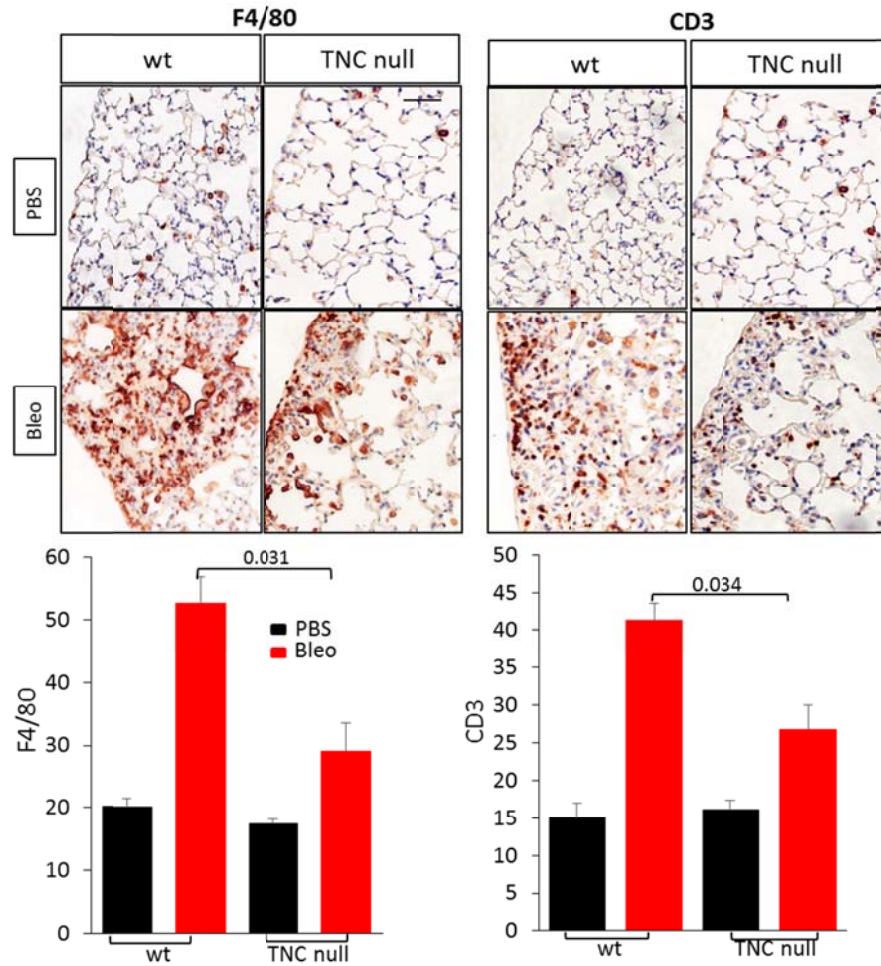


Supplementary Fig. 7.

Impaired TGF-β responses in *TNC*^{-/-} skin fibroblasts.

Confluent skin fibroblasts isolated from wildtype mice and *TNC*^{-/-} mice were incubated in parallel with TGF-β for 24 h. Whole cell lysates were examined Western blot analysis.

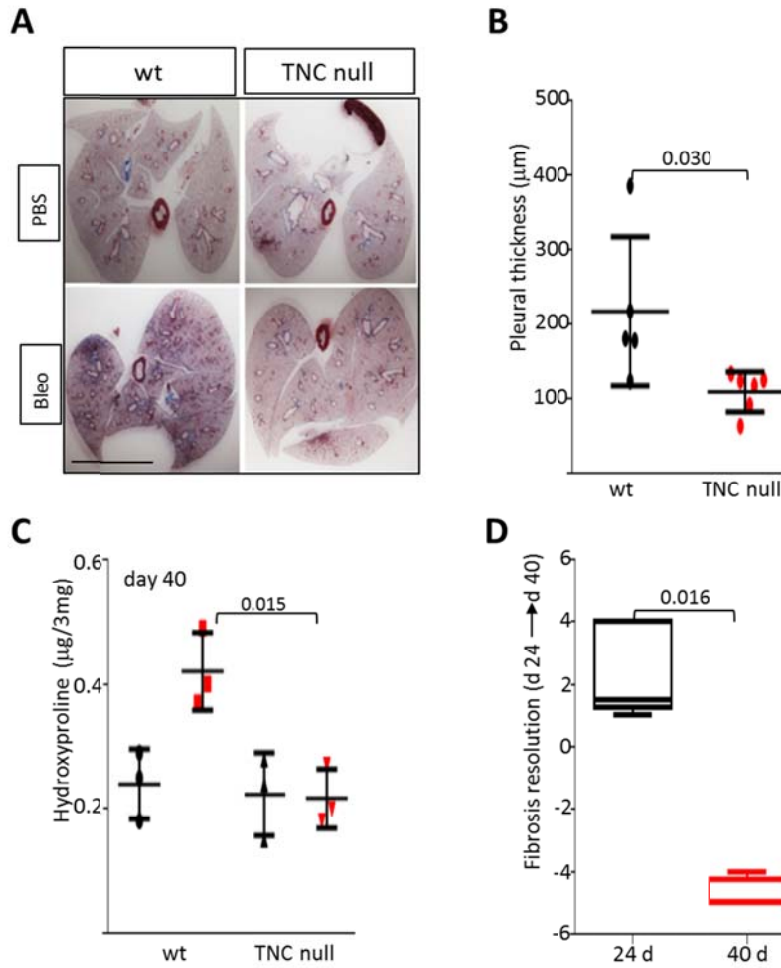
Representative immunoblot. S, secreted; L, lysates.



Supplementary Fig. 8.

Bleomycin-induced macrophage accumulation in the lungs in wildtype and TNC^{-/-} mice.

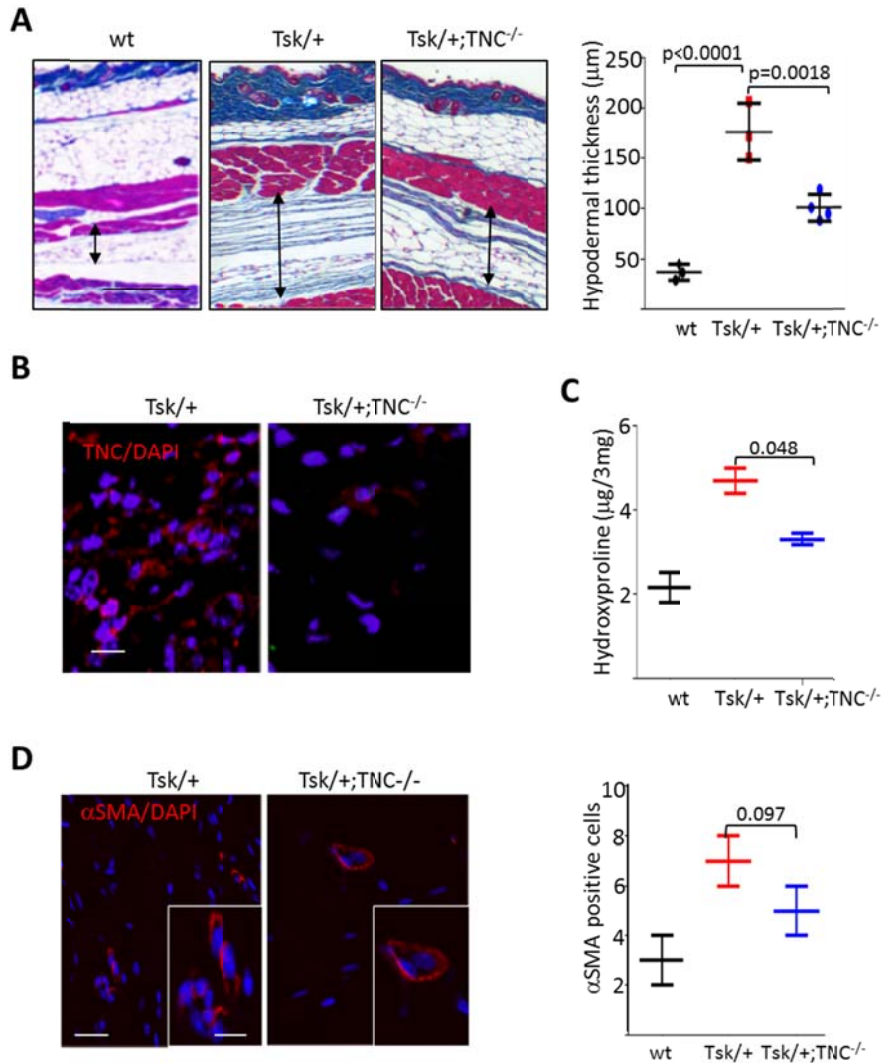
Wildtype mice and TNC^{-/-}-null mice were administered bleomycin via s.c. injections, and lungs were harvested at day 24. Upper panels, immunohistochemistry using antibodies to F4/80 or CD3. Representative photomicrographs. Bars, 50 μ m. Lower panels, positive immunostaining was quantified using Image J; results (percentage of area stained positive for F4/80 or CD3) are means \pm S.D. of percentage of area stained positive for F4/80 or CD3 from three randomly chosen fields from a single mouse representative of 3 mice. Student's t-test.



Supplementary Fig. 9.

Attenuated lung fibrosis and accelerated resolution in *TNC*^{-/-} mice.

Wildtype mice and *TNC*^{-/-} mice were administered bleomycin via s.c. injections, and lungs were harvested at day 24 (A,B) or day 40 (C,D). **A.** Trichrome stain. Representative images. Bars = 0.2 mm. **B.** Pleural thickness. Mann-Whitney *U* test. **C.** Lung collagen content at 40 d determined by hydroxyproline assays. Mann-Whitney *U* test. Results are the means ± SD of triplicate determinations from 3 mice/group. **D.** Fibrosis resolution from day 24 to day 40. Mann-Whitney *U* test.



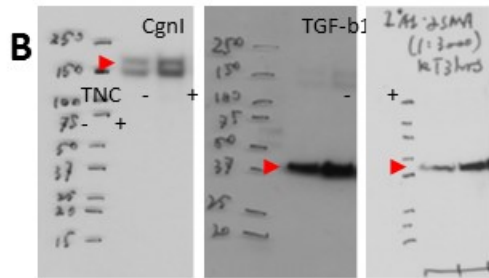
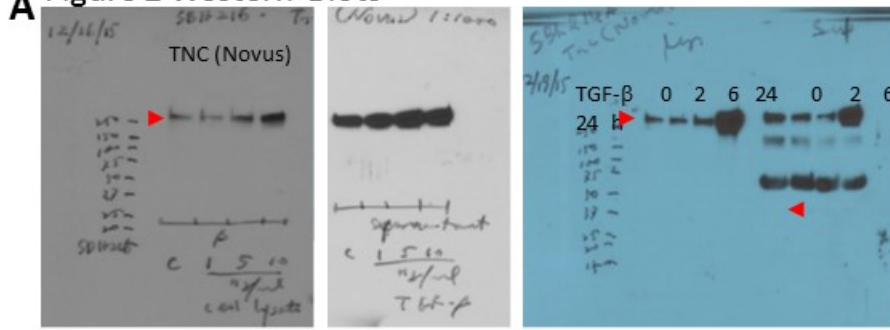
Supplementary Fig. 10.

Attenuated hypodermal fibrosis in TSK/+ mice lacking tenascin-C

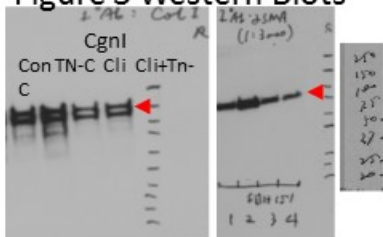
Mice were sacrificed at 12 weeks of age, and skin including hypodermis was harvested. **A.** Trichrome stain. Arrows indicate hypodermis. Bar, 100 µm. Representative images from 2-3 mice/group. Right panel, hypodermal thickness. Results are means ± SD from 5 hpf/mouse. One-way ANOVA followed by Sidak's multiple comparison test. **B, D.** Immunofluorescence microscopy using antibodies to tenascin-C or αSMA; DAPI used to identify nuclei. Bar, 25 µm (B) or 50 µm (D). Student's t-test. **C.** Collagen content determined by hydroxyproline assays.

Results are the means \pm S.D. from triplicate determinations from 2 mice/group. Right panel, quantitation of α SMA-immunopositive interstitial cells within the hypodermis. Results are the means \pm S.D. of three determinations from 3 randomly chosen hpf. Student's t-test.

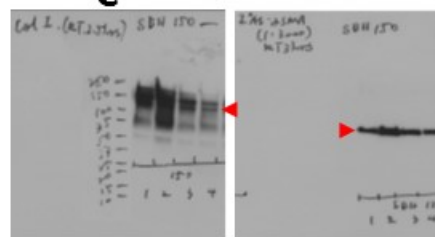
A Figure 2 Western Blots



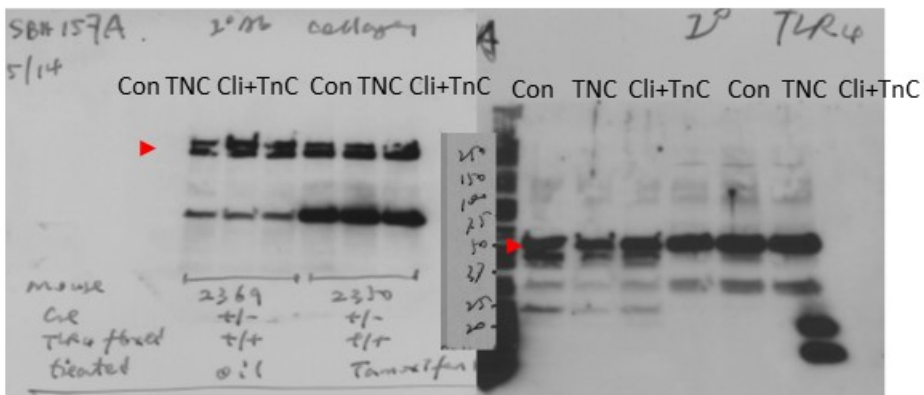
A Figure 3 Western Blots



C



D



Supplementary Fig. 11. The full Western blots of Figs. 2 and 3.

Supplementary Table 1

Expression of endogenous TLR4 ligands in skin biopsies

Endogenous TLR ligand	Expression in SSc skin	Expression in healthy skin
Fibronectin-EDA	++++	-
Tenascin-C	++++	-
HA (low molecular weight)	++	-
Biglycan	variable	-
GP96	-	-
HMGB1	-	-

Forearm skin biopsies from SSc patients (n=3) and healthy controls (n=3) were examined by immunofluorescence and/or immunohistochemistry. Staining intensity in the dermis for each antibody was scored by two blinded observers as follows: -, undetectable in the interstitial space; +, weak expression; ++, strong expression; +++, very strong expression.

Supplementary Table 2 (Cohort 4)

Subject code	Age	Gender	Subtype	MRSS	scl-70	RNA Th/To	RNA U11.
874	46	F	lcSSc	13	1	NA	NA
975	27	F	dcSSc	14	1	NA	NA
1007	25	F	lcSSc	10	1	NA	NA
1194	54	F	lcSSc	2	0	1	NA
1219	36	F	lcSSc	3	0	1	NA
1556	27	F	lcSSc	0	1	0	NA
1602	32	F	dcSSc	13	1	0	NA
1661	31	F	lcSSc	4	1	0	NA
1857	20	F	dcSSc	12	1	0	NA
1939	18	F	lcSSc	3	1	NA	NA
2039	42	F	lcSSc	17	1	NA	NA
2136	46	F	lcSSc	0	0	1	NA
2221	27	F	dcSSc	14	1	0	NA
2244	28	F	lcSSc	10	1	NA	NA
2259	20	F	lcSSc	3	1	NA	NA
2302	42	F	dcSSc	2	0	1	NA
2448	41	F	lcSSc	6	0	1	NA
2457	36	F	lcSSc	13	1	NA	NA
2620	37	F	lcSSc	7	0	NA	1
2635	42	F	lcSSc	32	1	NA	NA
2725	43	F	lcSSc	17	1	NA	NA
2748	23	F	lcSSc	10	1	NA	NA
2749	28	F	dcSSc	2	0	1	NA
2776	33	F	lcSSc	18	1	NA	NA
2781	43	F	lcSSc	17	1	NA	NA
2819	44	F	dcSSc	27	1	NA	NA
2821	46	F	dcSSc	4	0	1	NA
2834	36	F	lcSSc	8	1	NA	NA
2919	49	F	lcSSc	21	1	NA	NA
2962	22	F	dcSSc	6	1	NA	NA
3049	45	F	dcSSc	5	0	NA	1
3098	36	F	dcSSc	2	1	NA	NA
3137	42	F	lcSSc	27	1	NA	NA
3211	54	F	lcSSc	27	1	NA	NA
3224	30	F	dcSSc	4	0	1	NA
3339	41	F	lcSSc	7	1	NA	NA
3340	30	F	lcSSc	2	1	NA	NA

3354	17	F	dcSSc	20	1	NA	NA
3428	35	F	lcSSc	6	1	NA	NA
3433	45	F	lcSSc	4	0	1	NA
3486	30	F	dcSSc	43	1	NA	NA
3487	35	F	lcSSc	6	1	NA	NA
3633	37	F	lcSSc	6	1	NA	NA
3645	29	F	lcSSc	10	1	NA	NA
3663	28	F	lcSSc	6	1	NA	NA
3665	50	F	lcSSc	4	1	NA	NA
3835	26	F	dcSSc	1	0	1	NA
3843	25	F	dcSSc	14	1	NA	NA
3880	46	F	lcSSc	1	1	NA	NA
3919	36	F	lcSSc	0	0	1	NA
3920	50	F	lcSSc	4	1	0	NA
3942	56	F	dcSSc	9	1	NA	NA
3954	51	F	lcSSc	3	0	1	NA
3981	48	F	lcSSc	8	0	1	NA
4054	48	F	dcSSc	14	1	NA	NA
4175	35	F	dcSSc	10	1	NA	NA
4189	31	F	lcSSc	1	0	0	1
4198	48	F	dcSSc	20	1	NA	NA
4224	44	F	dcSSc	39	0	0	1
4226	37	F	dcSSc	24	0	NA	1
4378	51	F	lcSSc	7	1	NA	NA

Subjects providing serum for tenascin-C determination (validation Cohort) (all female). dcSSc, diffuse cutaneous SSc; lcSSc, limited cutaneous SSc; M, male, F, female. MRSS, modified Rodnan skin score (1-51). 0 represents antibody not present, 1 represents antibody present, NA, not available. Controls were healthy subjects (90% female; median age, 38 years; range, 18 to 54 years).

Supplementary Table 3 (Cohort 5)

Subject Code	Age	Gender	Subtype	MRSS	Positive ANA	scl-70	ACA	RNA pol III
GC-01-SN	NA	M	dcSSc	19	1	0	NA	NA
GC-02-SN	NA	F	dcSSc	31	1	0	NA	NA
GC-04-SN	NA	F	dcSSc	26	1	0	NA	NA
GC-05-SN	NA	M	dcSSc	39	1	0	NA	NA
GC-08-SN	NA	F	dcSSc	23	1	0	NA	NA
GC-09-SN	NA	M	dcSSc	39	1	1	NA	NA
SR1002	34	F	dcSSc	32	1	1	0	NA
SR1010	60	F	dcSSc	30	1	0	0	1
SR1024	56	F	dcSSc	31	1	0	0	0
SR1038	63	F	dcSSc	32	1	0	0	
SR1042	48	F	dcSSc	8	1	1	0	0
SR1067	58	F	dcSSc	12	1	0	0	0
SR1080	56	F	dcSSc	22	1	0	0	1
SR1094	54	F	dcSSc	15	1	0	1	
SR1107	50	M	dcSSc	4	1	0	0	0
SR1121	47	F	dcSSc	26	1	0	0	1
SR1157	52	F	dcSSc	18	1	0	0	0
SR1209	54	F	dcSSc	32	1	0	0	1
SR1213	30	F	lcSSc	10	1	1	0	0
SR1241	55	M	dcSSc	19	1	0	0	1
SR1366	55	F	dcSSc	23	1	0	0	2
SR1381	69	F	dcSSc	12	1	1	0	0
SR1393	41	F	dcSSc	14	1	0	0	0
SR1420	49	F	dcSSc	28	1	0	0	1
SR1430	44	F	dcSSc	4	0	0	0	0
S-Y0-164	NA	F	dcSSc	3	1	1	NA	NA
S-Y0-187	NA	M	dcSSc	15	1	0	NA	NA
S-Y0-208	NA	M	dcSSc	20	1	1	NA	NA
S-Y0-220	NA	F	dcSSc		1	1	NA	NA
S-Y0-235	NA	F	dcSSc	16	1	1	NA	NA

S-Y0-257	NA	F	dcSSc	22	1	NA	NA	NA
S-Y0-261	NA	F	dcSSc	33	1	0	NA	NA
S-Y1-088	NA	F	dcSSc	37	1	0	NA	NA
S-Y1-176	NA	F	dcSSc	11	1	1	NA	NA
S-Y1-179	NA	M	dcSSc	28	1	0	NA	NA
S-Y1-183	NA	F	dcSSc	40	1	NA	NA	NA
S-Y1-25	NA	M	dcSSc	26	1	NA	NA	NA
S-Y1-79		F	dcSSc	32		NA	NA	NA

Subjects providing serum for tenascin-C determination (validation Cohort). dcSSc, diffuse cutaneous SSc; lcSSc, limited cutaneous SSc; M, male, F, female. MRSS, modified Rodnan skin score (1-51). 0 represents antibody not present, 1 represents antibody present, NA, not available. Controls were healthy subjects (90% female; median age, 38 years; range, 18 to 54 years).

Supplementary Table 4A.

Top 30 genes up-regulated by TGF- β in normal fibroblasts

Gene name	Abbreviation	Fold-induction	p value	
ASNS	asparagine synthetase (glutamine-hydrolyzing)	2.99	1.07E-13	
PSAT1	phosphoserine aminotransferase 1	2.69	1.05E-11	
COMP	cartilage oligomeric matrix protein	16.3	2.32E-11	
INHBE	inhibin, beta E	4.94	3.32E-11	
LTBP2	latent transforming growth factor beta binding protein 2	3.03	3.86E-11	
CNN1	calponin 1, basic, smooth muscle	3.43	5.79E-11	
HSD17B6	hydroxysteroid (17-beta) dehydrogenase 6 homolog (mouse)	2.78	1.20E-10	
BHLHE40	basic helix-loop-helix family, member e40	3.53	2.74E-10	
ACTG2	actin, gamma 2, smooth muscle, enteric	2.54	6.89E-10	
KCNMB1	potassium large conductance calcium-activated channel, subfamily M, beta member 1	2.59	7.48E-10	
KRT7	keratin 7	3.87	9.31E-10	
MGP	matrix Gla protein	3.3	3.68E-09	
TPM1	tropomyosin 1 (alpha)	2.48	6.08E-09	
ITGA11	integrin, alpha 11	2.96	1.17E-08	
CDH2	cadherin 2, type 1, N-cadherin (neuronal)	2.39	2.46E-08	
MTHFD2	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase	2.62	2.74E-08	
NOX4	NADPH oxidase 4	3.9	2.91E-08	
PI16	peptidase inhibitor 16	4.51	3.01E-08	
TRIB3	tribbles homolog 3 (Drosophila)	3.69	4.56E-08	
NUAK1	NUAK family, SNF1-like kinase, 1	2.63	4.82E-08	
CTPS	CTP synthase	2.41	9.39E-08	
TN-C	tenascin-C	2.59	9.70E-08	
ALDH1B1	aldehyde dehydrogenase 1 family, member B1	2.49	1.68E-07	
SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	2.52	2.23E-07	
SLC7A5	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5	2.82	3.17E-07	
ELN	elastin	3.98	1.03E-06	
WFDC1	WAP four-disulfide core domain 1	2.5	1.29E-05	
SLC2A5	solute carrier family 2 (facilitated glucose/fructose transporter), member 5	2.65	0.000026	
PMEPA1	prostate transmembrane protein, androgen induced 1	2.54	3.66E-05	
KANK4	KN motif and ankyrin repeat domains 4	COMP	3.03	0.000122
ACTC1	actin, alpha, cardiac muscle 1	2.7	0.000277	

Supplementary Table 4B.**Top 30 genes down-regulated by TGF- β in normal fibroblasts**

Gene name	Abbreviation	Fold-induction	p value
APCDD1	adenomatosis polyposis coli down-regulated 1	-3.43	1.80E-11
SLC7A14	solute carrier family 7 (cationic amino acid transporter, y+ system), member 14	-2.58	3.13E-11
NOV	nephroblastoma overexpressed gene	-4.36	5.07E-11
ADH1A	alcohol dehydrogenase 1A (class I), alpha polypeptide	-2.04	2.04E-10
RAB38	RAB38, member RAS oncogene family	-2.16	2.88E-10
MMP1	matrix metalloproteinase 1 (interstitial collagenase)	-3.06	5.96E-10
TYMS	thymidylate synthetase	-2.12	1.13E-09
NPTX1	neuronal pentraxin I	-5.97	2.16E-09
GPM6B	glycoprotein M6B	-2.28	2.20E-09
PDGFRL	platelet-derived growth factor receptor-like	-2.29	2.55E-09
PCOLCE2	procollagen C-endopeptidase enhancer 2	-2.61	3.28E-09
CLEC3B	C-type lectin domain family 3, member B	-3.51	5.84E-09
HSD17B2	hydroxysteroid (17-beta) dehydrogenase 2	-2.4	1.17E-08
TNFRSF19	tumor necrosis factor receptor superfamily, member 19	-2.02	2.18E-08
COLEC12	collectin sub-family member 12	-2.27	2.56E-08
ANGPTL4	angiopoietin-like 4	-2.03	4.72E-08
PDGFD	platelet derived growth factor D	-2.46	6.75E-08
OLFML2A	olfactomedin-like 2A	-2	3.17E-07
OLFML1	olfactomedin-like 1	-2.09	6.53E-07
OAF	OAF homolog (Drosophila)	-2.17	7.93E-07
BMP4	bone morphogenetic protein 4	-2.12	9.29E-07
SNHG7	small nucleolar RNA host gene 7 (non-protein coding)	-2.01	1.23E-06
CLDN11	claudin 11	-2.79	1.25E-06
NFIA	nuclear factor I/A	-2.01	2.41E-06
RSPO3	R-spondin 3 homolog (Xenopus laevis)	-2	2.84E-06
TGFBR3	transforming growth factor, beta receptor III	-2.18	3.99E-06
CCRL1	chemokine (C-C motif) receptor-like 1	-2.32	4.46E-06
NTN4	netrin 4	-2.06	3.43E-05
APOD	apolipoprotein D	-2.26	3.98E-05
RGS2	regulator of G-protein signaling 2, 24kDa	-2.19	1.07E-04
LUM	Lumican	-2.3	3.51E-03

Dermal fibroblasts were incubated with TGF- β for 24 h, and RNA was isolated and hybridized to Illumina human HT-12 v4 Expression Microarray Chips. The -fold change of gene expression compared with the average in control samples are shown.

Supplementary Table 5

Modulation of lung mechanics by bleomycin

Lung mechanics were evaluated on day 24 in wildtype and $TNC^{-/-}$ mice injected with s.c. PBS or bleomycin. Results represent means \pm s.d. from at least eight mice/group E, dynamic elastance; C, dynamic compliance; R, dynamic resistance; Rn, Newtonian resistance; G, tissue damping; H, tissue elastance; eta, tissue hysteresivity; Area, area enclosed by pressure volume loop. * $p < 0.05$.

	Wildtype mice PBS	Wildtype mice Bleo	$TNC^{-/-}$ mice PBS	$TNC^{-/-}$ mice Bleo	p
C cmH ₂ O/mL	0.024 \pm 0.001	0.016 \pm 0.004	0.024 \pm 0.003	0.021 \pm 0.002	0.0059*
E cmH ₂ O.s/mL	41.41 \pm 1.76	71.35 \pm 41.98	41.58 \pm 6.08	47.19 \pm 5.77	0.072
R cmH ₂ O.s/mL	0.90 \pm 0.05	1.25 \pm 0.67	0.94 \pm 0.16	0.98 \pm 0.12	0.30
Rn cmH ₂ O.s/mL	0.34 \pm 0.14	0.35 \pm 0.17	0.34 \pm 0.15	0.35 \pm 0.13	0.99
G cmH ₂ O/mL	7.76 \pm 0.57	11.94 \pm 7.21	8.07 \pm 1.07	8.45 \pm 1.03	0.16
H cmH ₂ O/mL	44.46 \pm 3.15	74.65 \pm 42.03	41.79 \pm 6.46	46.35 \pm 5.93	0.028*
Eta	0.17 \pm 0.017	0.16 \pm 0.023	0.190 \pm 0.02	0.18 \pm 0.01	0.031*
Area cmH ₂ O.mL	2.55 \pm 1.39	4.19 \pm 1.56	2.71 \pm 1.03	2.62 \pm 0.94	0.023*

Supplementary Table 6

Primer sequences used for qPCR analysis

Human:		
hCOL1A1	Forward	5'-TGGTGTGCAAGGTCCC-3'
	Reverse	5'-CATTCCCTGAAGGCCAG-3'
hCOL1A2	Forward	5'-CGGACGACCTGGTGAGAGA-3'
	Reverse	5'-CATTGTGTCCCCTAATGCCTT-3'
h-SMA	Forward	5'-CAGGGCTGTTTTCCCATCCAT-3'
	Reverse	5'-GCCATGTTCTATCGGGTACTTC-3'
hIL6	Forward	5'-AAATTCGGTACATCCTCGACGG-3'
	Reverse	5'-GGAAGGTTTCAGGTTGTTTTCTGC-3'
hTNC1	Forward	5'-ACCGCTACCGCCTCAATTAC-3'
	Reverse	5'-GGTCCGTCCACAGTTACCA-3'
hTNC1	Forward	5'-ACCGCTACCGCCTCAATTAC-3'
	Reverse	5'-GGTCCGTCCACAGTTACCA-3'
hTNC2	Forward	5'-ACTGTGGACGGAACCAAGAC-3'
	Reverse	5'-TGTGGTGAATGACCCTGAGA3'-3'
hGAPDH	Forward	5'-CATGAGAAGTATGACAACAGCCT-3'
	Reverse	5'-AGTCCTTCCACGATACCAAAGT-3'
Mouse:		
mCOL1A1	Forward	5'-AGCCGCAAAGAGTCTACATG-3'
	Reverse	5'-CTTAGGCCATTGTGTATGCAG-3'
mCOL1A2	Forward	5'-CCGTGCTTCTCAGAACATCA-3'
	Reverse	5'-CTTGCCCCATTCATTTGTCT-3'

m α SMA	Forward	5'-ATGCAGAAGGAGATCACAGC-3'
	Reverse	5'-GTATTCCTGTTTGCTGATCCAC-3'
mFn-EDA	Forward	5'-AGTCAGTGTGGTTGCCTTG-3'
	Reverse	5'-CTGAACACTGGGTGCTATCC-3'
mTGF- β 1	Forward	5'-TACAGCAAGGTCCTTGCCCT-3'
	Reverse	5'-GCAGCACGGTGACGCC-3'
mIL-6	Forward	5'-GTACTCCAGAAGACCAGAGG-3'
	Reverse	5'-TGCTGGTGACAACCACGGCC-3'
mGAPDH	Forward	5'-ATCTTCTTGTGCAGTGCCAGC-3'
	Reverse	5'-GTTGATGGCAACAATCTCCAC-3'