

SUPPLEMENTARY INFORMATION

S1. Table 1. Primers used in qPCR.

S2. qPCR: Assymetrical values for the indicated genes using the $2^{-\Delta\Delta C_t}$ method.

S3. Negative control for $\alpha 11$ protein expression in SV40 MEFs within attached gels. Cells in attached collagen gels were collected as described in materials and methods at 24 and 96h. Cell lysates were subjected to western blots using $\alpha 11$ polyclonal antibody to $\alpha 11$ or the corresponding preimmune serum, both used at the same concentration (1:500) and under the same conditions. The blots for $\alpha 11$ was exposed for longer time to better appreciate its up-regulation.

S4. Luciferase activity in SV40 MEFs stably transfected with the TGF- β responsive element. Stable Transfection of the TGF- β responsive element was carried out as described in materials and methods. Luciferase activities were measured in cells seeded monolayer (in the presence or absence of recombinant TGF- $\beta 1$ or activin A) or in cells extracted from collagen gels as described in materials and methods. Values are calibrated to the luciferase activity produced by exogenous addition of 0.5 ng/ml of recombinant TGF- $\beta 1$.

S5. Positive control for TGF- β monoclonal antibody. Cells either remained unstimulated, were treated with 5 ng/ml of recombinant TGF- $\beta 1$ alone, or were treated with 5 ng/ml of TGF- $\beta 1$ that had been previously preincubated with 10 μ g/ml of anti-TGF- β in serum-free DMEM at 37°C for 30 min. Serum was removed prior to the addition of TGF- $\beta 1$ with or without its blocking antibody.

S6. Induction of $\alpha 11$ and α -SMA by activin A in corneal fibroblasts grown on collagen I monolayers (longer exposure). The upregulation of $\alpha 11$ and α -SMA caused by activin A was less prominent from that produced by TGF- β in corneal fibroblasts. In order to clearly appreciate such upregulation, membranes with the corresponding samples had to be exposed for a longer period.

S7. Immunolocalization of α -SMA in corneal fibroblasts grown on collagen I (lower magnification). Cells remained untreated (upper left), were stimulated with 5 ng/ml of TGF- $\beta 1$ only (upper right) or treated with 5 ng/ml of TGF- $\beta 1$ and siRNA (100 nM) to $\alpha 11$ (lower right) or an off-target siRNA (negative control, NC; lower left). The exposure time when taking pictures was identical in all conditions.

Supplementary information 1 (S1).

Sequences of primers used for qPCR.

Target gene	Forward (5'-3')	Reverse (5'-3')	Annealing T (°C)
TGF-β1	ACAATTCCTGGCGTTACCTT	G TTCAGCCACTGCCGTACAAC	55
Activin βA	TGAAGAAGAGACCCGATGTCA	GCTTTCTGATCGCGTTGAG	55
ALK4	TGCTGCCCGTCTGACA	TGCCCAGGTTCTTTGTGTAGG	54
ALK5	AGCATTGGCAAAGGTCGG	ATCTCTGCCTCTCGGAACCAT	54
α11	GACAGCACCGCAGACGAT	GCTGTTTGCCTTGACCTCGAA	58
GAPDH	CGAGACCCCACTAACATCAA	TTCACACCCATCACAAACAT	58

Supplementary information 2 (S2).

qPCR: Assymetrical error values for the indicated genes

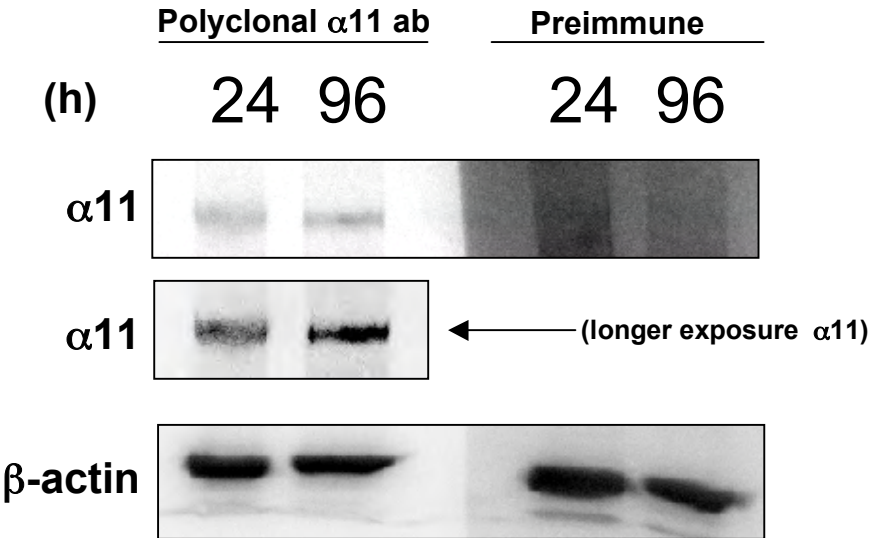
Negative error bar values

	$\alpha 11$	TGF- $\beta 1$	Act βA	ALK5	ALK4
24 h attached	0,536616	0,522505	0,13494	0,503166	0,387565
48 h attached	0,44143	0,486055	0,129567	0,341399	0,356489
72 h attached	0,642768	0,426852	0,114066	0,348133	0,312786
96 h attached	0,355672	0,431622	0,15991	0,14596	0,271712
Monolayer	0,081049	0,090772	0,302756	0,077886	-0,21198
2h floating	0,102495	0,158988	0,065923	0,101382	0,093065
8h floating	0,053125	0,233605	0,065096	0,220634	0,168509
24h floating	0,223843	0,975517	0,111938	1,096156	0,86358
48h floating	0,078019	0,220806	0,098038	0,679024	0,122768

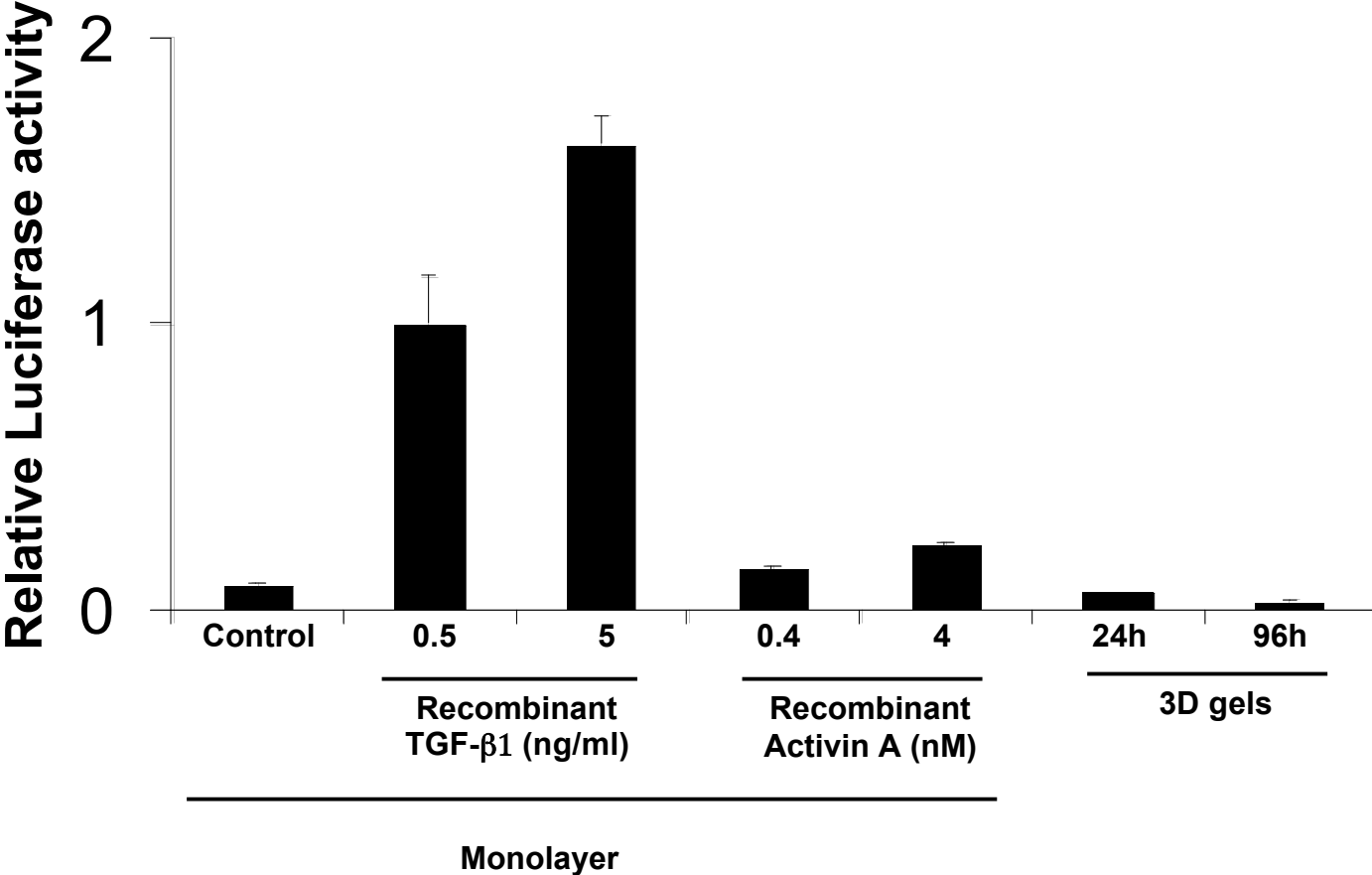
Positive error bar values

	$\alpha 11$	TGF- $\beta 1$	Act βA	ALK5	ALK4
24 h attached	0,639905	0,585214	0,176895	0,579094	3,511046
48 h attached	0,499287	0,540049	0,16767	0,369269	3,762373
72 h attached	0,731121	0,473477	0,15109	0,377193	3,663334
96 h attached	0,397	0,493093	0,242716	0,150585	3,432427
Monolayer	0,088198	0,099834	0,434219	0,084465	0,519373
2h floating	0,118022	0,178477	0,087105	0,110271	0,944097
8h floating	0,058802	0,275206	0,087377	0,249379	1,384833
24h floating	0,384774	1,681832	0,20305	1,931775	4,932162
48h floating	0,088202	0,243077	0,129011	0,762664	4,923919

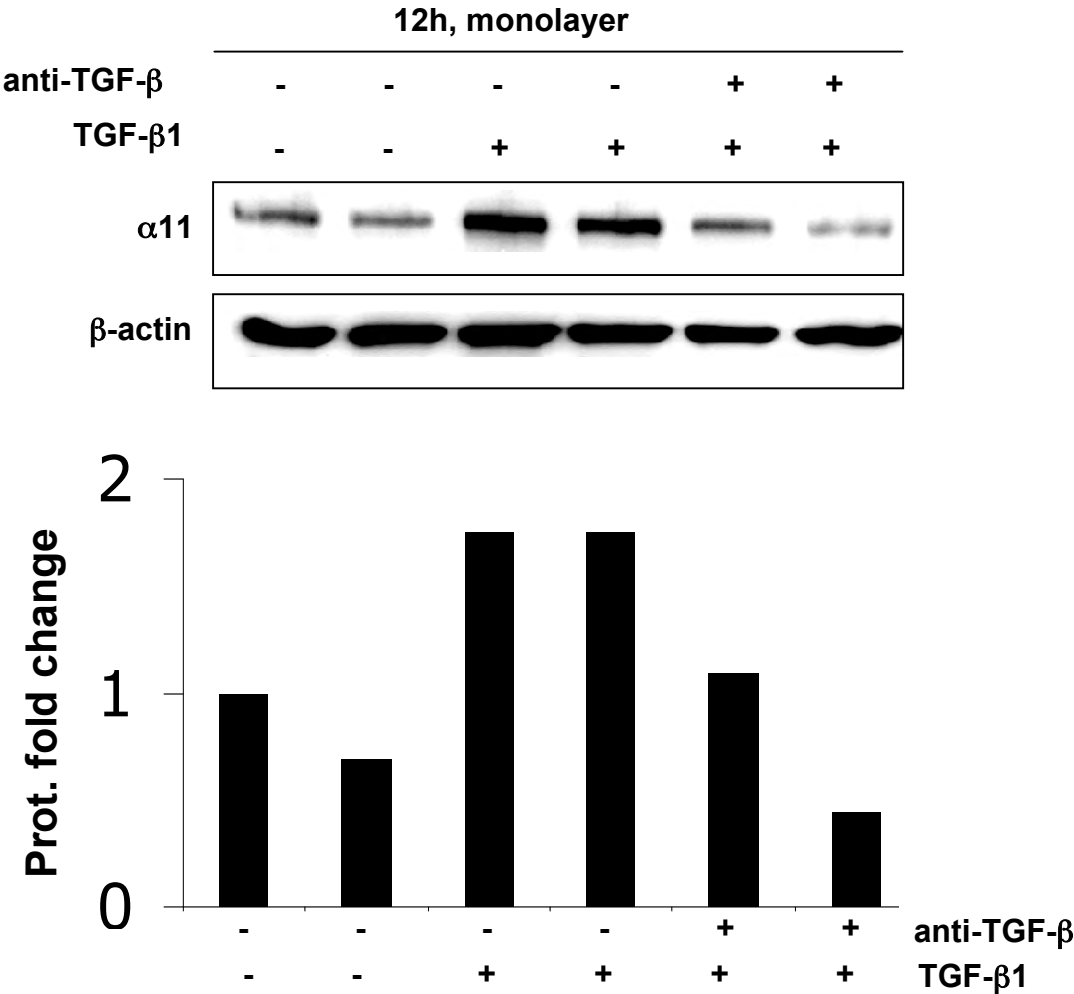
Supplementary information 3 (S3).



Supplementary information 4 (S4).



Supplementary information 5 (S5).



Supplementary information 6 (S6).

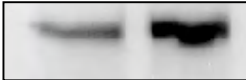
Longer exposure

72h, monolayer

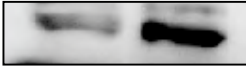
Act A

- +

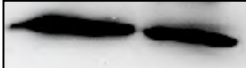
α 11



α -SMA

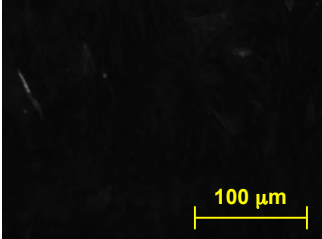


GAPDH

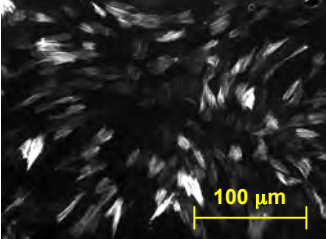


Supplementary information 7 (S7).

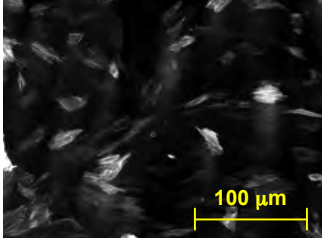
Untreated



TGF- β1



TGF- β1 + NC siRNA



TGF- β1 + α11siRNA

