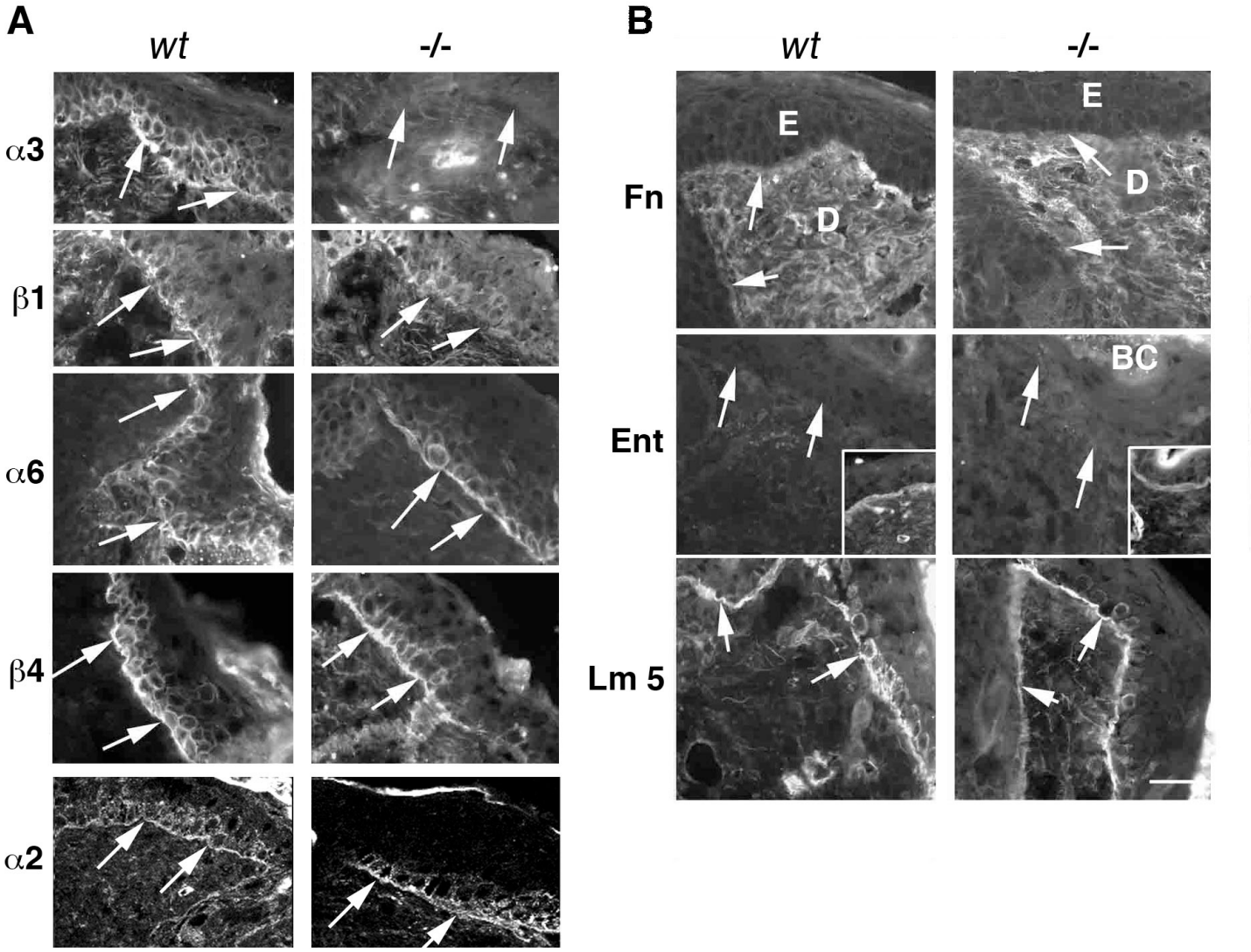
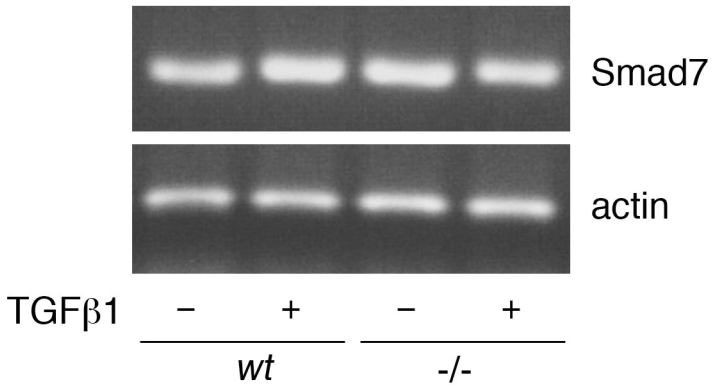
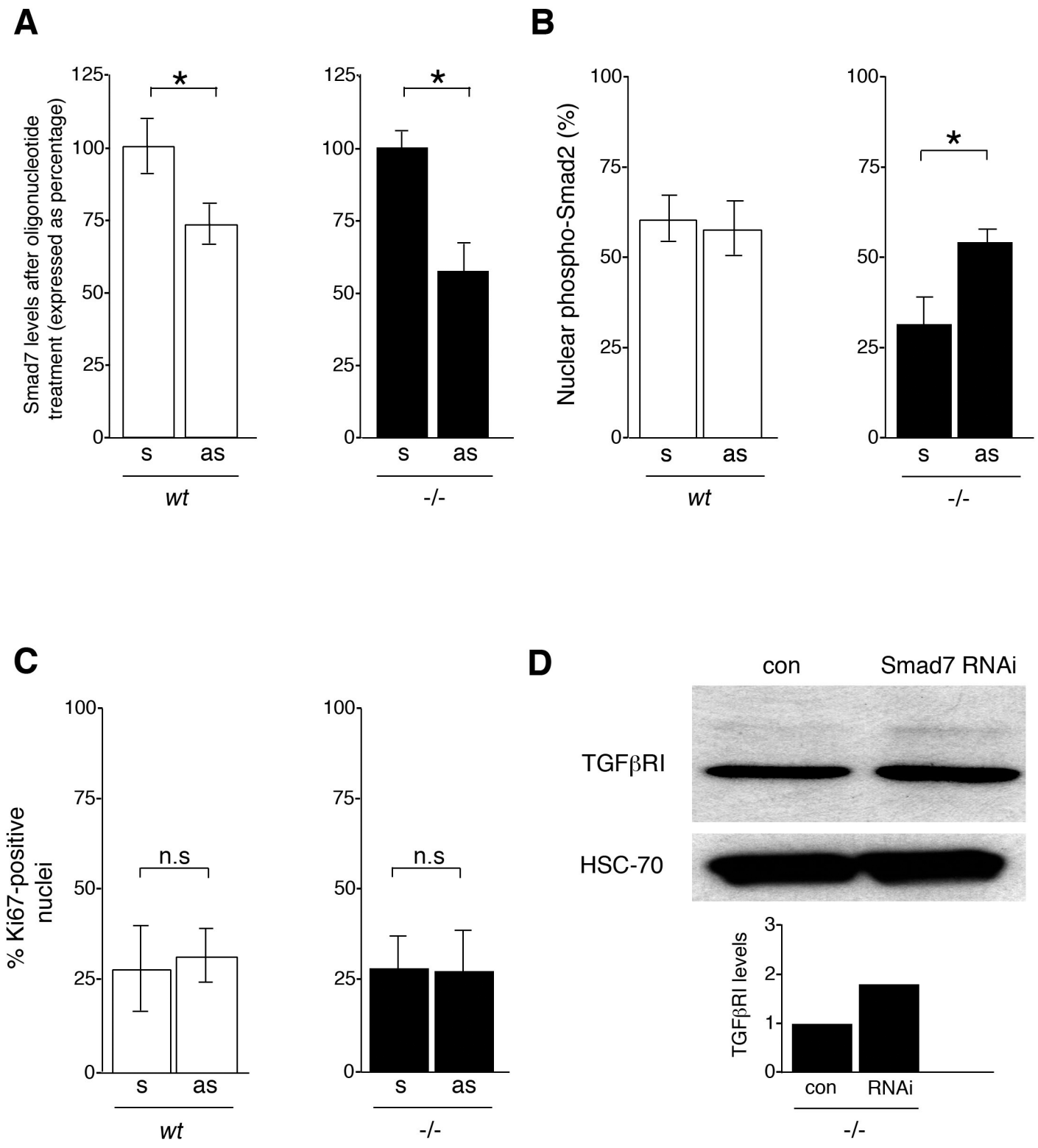
Supplementary Fig. 1



Supplementary Fig. 2



Supplementary Fig. 3



SUPPLEMENTARY INFORMATION

Supplementary Figure 1. α3-integrin deficiency does not affect the expression and distribution of other integrins or ECM molecules during wound healing.

Wt and -/- wounded skin sections taken 2 days post-injury were immunostained for α3-integrin, β1-integrin, α6-integrin, β4-integrin and α2-integrin (**A**), Fn, Ent, and Lm 5 (**B**). (**A**) In wt skin, α3- and β1-integrins were expressed in basal and suprabasal keratinocytes in the migrating epidermis over the wound bed (**A**). As expected, α3-integrin was not detectable in -/- epidermis, and β1-integrin distribution appeared reduced. α6-, β4- and α2-integrins were expressed in basal and suprabasal keratinocytes migrating over the wound bed, with no detectable difference in distribution between *wt* and -/- skin. (**B**) Fn was observed in the neodermis, beneath the migrating epidermis, with no apparent difference between *wt* and -/- skin. Ent was not detectable in the basement membrane immediately below the migrating epithelial lip of either *wt* or -/-wounds. However, Ent was visible in the basement membrane proximal to the newly formed epidermis (insert). In both *wt* and -/- wounded skin, Lm 5 was detected in the basement membrane zone and within the basal keratinocytes of migrating epithelia. Arrows indicate basement membrane zone. BC = blood clot, E = epidermis, D = dermis. Scale bar = 50 μm.

Supplementary Figure 2. Smad7 RNA levels are not changed in wild-type and *α3-null* keratinocytes.

RT-PCR analysis of Smad7 RNA levels in *wt* and -/- keratinocytes treated with TGFβ1 (+) or left untreated (-). Actin provides a loading control. n = 3 separate RNA isolations.

Supplementary Figure 3. Smad7 inhibition decreases Smad7 levels and increases phospho-Smad2 levels in vivo.

Quantitation of the level of inhibition of Smad7 *wt* and -/- wounds treated with Smad7 sense (s) and antisense (as) oligonucleotides (**A**). Quantitation of the number of phospho-Smad2 positive nuclei in *wt* and -/- wounds treated with Smad7 sense (s) and antisense (as) olignucleotides (**B**). Quantitation of the number of Ki67 positive nuclei in sense (s) and antisense (as) Smad7 oligonucleotide treated wounds (**C**). TGFβRI levels in -/- keratinocytes after Smad7 RNAi treatment (**D**). Results in **A** represent the percentage decrease in Smad7 levels relative to sense treated wounds ($\pm$ SEM). n = 4-5/genotype/treatment. *P < 0.007-0.08. n.s = no significant difference. HSC-70 was used as a loading control.