

Figure S1

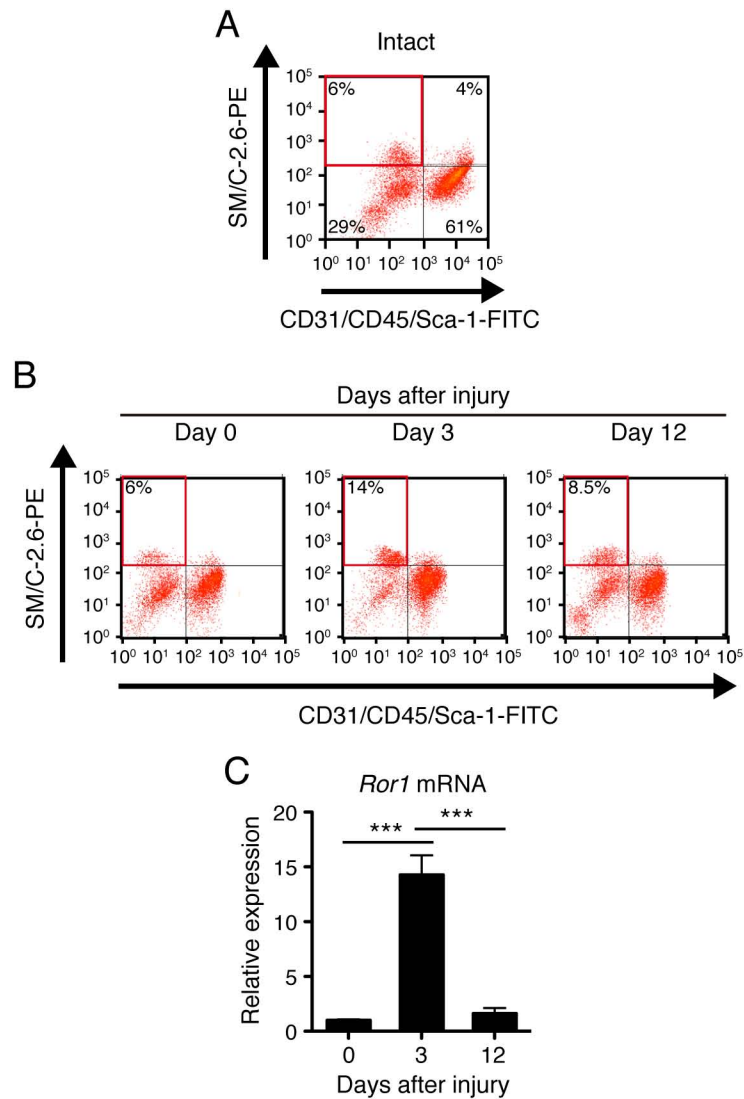


Figure S1. Expression of *Ror1* is induced in the SC-populations during skeletal muscle regeneration. (A) A proportion of SCs from the intact skeletal muscles were examined by FACS analysis using anti-CD31, anti-CD45, anti-Sca-1 and SM/C-2.6 antibodies. SCs can be characterized as CD31-, CD45-, Sca-1- and SM/C-2.6+ cells (see Experimental procedures). SC-populations in dot plot panels were indicated by the surrounding lines in red. (B) Cells were separated from the CTX-treated skeletal muscles at the indicated time points during skeletal muscle regeneration by FACS. (C) Expression levels of *Ror1* mRNA in SCs from the CTX-treated skeletal muscles were measured by qRT-PCR at the indicated time points during muscle regeneration. Relative expression values were determined by defining expression level of *Ror1* at day 0 as 1. Data are expressed as mean \pm SD (n=3 animals) (***) P <0.001, Bonferroni's post-hoc test).

Figure S2

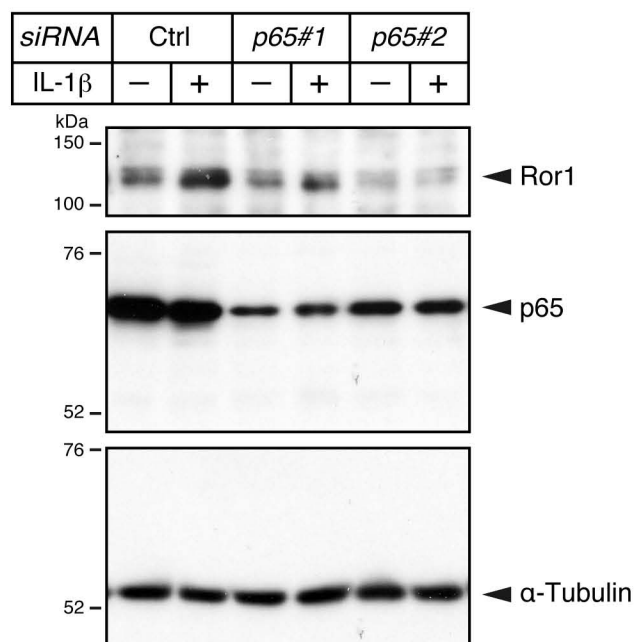


Figure S2. Expression of Ror1 induced by IL-1 β is mediated by NF- κ B pathway. Ror1, p65 and α -tubulin proteins in cell lysates (10 μ g proteins in total) from C2C12 cells transiently transfected with either *p65 siRNAs* or control *siRNA* after stimulation with IL-1 β (final concentration of 20 ng/ml) or vehicle alone (-) for 24 hrs were measured by Western blotting with anti-Ror1, anti-p65 or anti- α -tubulin antibodies, respectively.

Figure S3

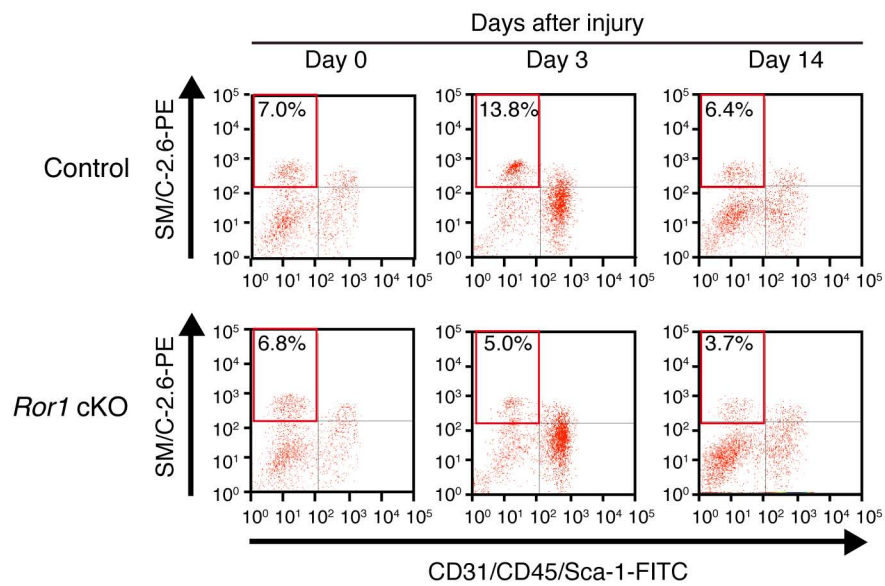


Figure S3. *Ror1* deficiency in SCs suppresses injury-induced increase in the proportion of SCs. Proportion of SCs in control and *Ror1* cKO mice during regeneration of the skeletal muscles damaged by CTX. Cells were separated from the CTX-treated skeletal muscles at the indicated time points during their regeneration by FACS. SC-populations in dot plot panels were indicated by the surrounding lines in red.

Figure S4

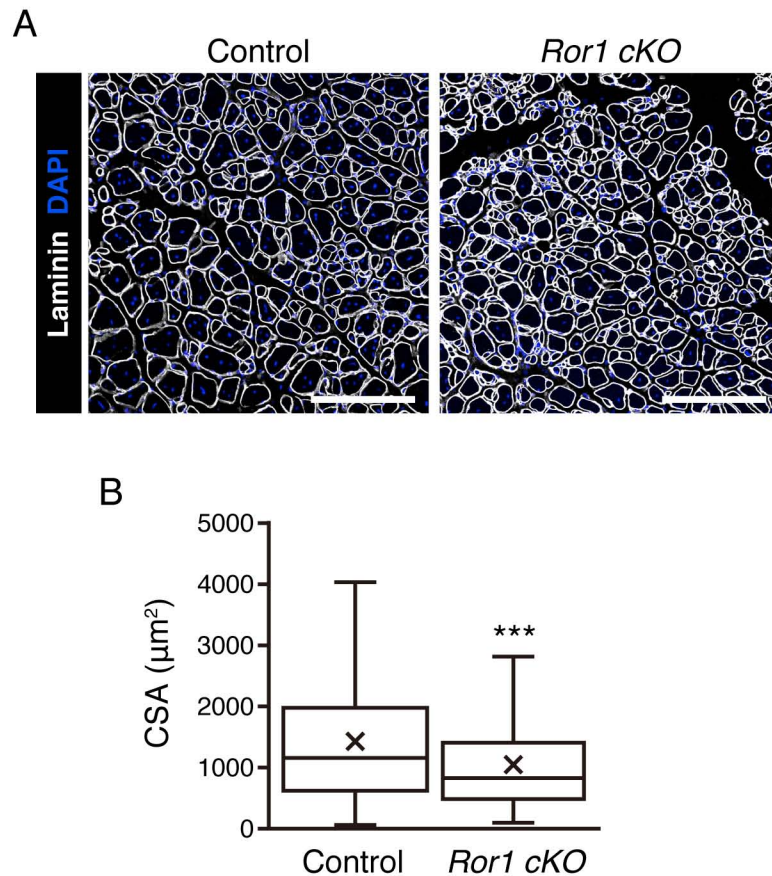


Figure S4. *Ror1* deficiency in SCs decreases myofiber size during skeletal muscle regeneration.

(A) Representative images of TA muscle cross sections from control mice (*Ror1^{flox/flox}*) and *Ror1* cKO mice (*Ror1^{flox/flox}, Pax7^{creERT2/+}*) at 14 days post-CTX injury. Scale bar is 200 μm . (B) Quantification of cross-sectional area (CSA) of myofibers from control mice (*Ror1^{flox/flox}*) and *Ror1* cKO mice (*Ror1^{flox/flox}, Pax7^{creERT2/+}*) at 14 days post-CTX injury. Data are presented as box-and-whisker plots with average values (\times) [control mice; 2542 fibers, *Ror1* cKO mice; 3088 fibers] (***) ($P < 0.001$, *t*-test).