

Fig. S1. Generation of *Lin28a-T2A-CreER* mice and observation of Lin28a+ cells in the embryonic limb and adult TA muscle.

(a) The targeting strategy for the generation of *Lin28a-T2A-CreER* mice. The *T2A-CreERT2* gene was inserted between the last exon and the 3'UTR of *Lin28a* after the knock-in.

(b) Genotyping results of *Lin28a-T2A-CreER* mice.

(c) *Lin28a-T2A-CreER;LSL-tdTO* embryos were treated with TMX at E11.5 and harvested at E12.5. White arrows indicate Lin28a+ limb progenitor cells, while yellow arrows indicate Lin28a+ myofibers in the embryonic limb. Scale bar: 500 μm.

(d) Cryosections of the TA muscle of *Lin28a-T2A-CreER; LSL-tdTO* mice at 14 days after cryoinjury. Muscle sections were co-stained for laminin (white), DAPI (blue) and Pax7 or Pax3 (green). Red arrows indicate Lin28a+Pax7+ or Lin28a+Pax3+ cells, and white arrows indicate Lin28a+Pax7- or Lin28a+Pax3- cells. Scale bar: 20µm.