SUPPLEMENTARY FIGURE





Supplementary Figure S1. LRP5 mediates age-dependent decline in alveolar epithelial morphogenesis in the **mouse lungs.** (A) Immunofluorescence micrographs showing β -catenin expression and distribution in ECs isolated from 24M old mouse lungs treated with lentivirus overexpressing LRP5 (top, scale bar, 10 μ m). Graph showing the quantification of β catenin expression in ECs isolated from 24M old mouse lungs treated with lentivirus overexpressing LRP5 (n=4, mean±s.e.m., *p<0.05). (B) Graphs showing quantification of AQP5- (top) and SPB- (bottom) positive epithelial cell area in the gel implanted on the 2M vs. 24M old mouse lungs or in combination with LRP5 overexpression for 7 days (n=7, mean ± s.e.m., *, p<0.05). (C) Gel image showing LRP5 mRNA expression in CD31⁺, VE-cadherin⁺, CD45⁻ ECs (*lane 1*), EpCAM⁺ alveolar epithelial cells (*lane* 2), and immune cells (lane 3) isolated from 2M old mouse lungs. (D) Graph showing the Lrp5 mRNA levels in CD31⁺, VEcadherin⁺, CD45⁻ ECs, EpCAM⁺ alveolar epithelial cells, and immune cells (BAL) isolated from 2M old mouse lungs treated with LRP5 DNA (n=4, *, mean ± s.e.m., *, p<0.05). (E) Graph showing the % of BrdU-positive CD31⁺, VE-cadherin⁺, CD45⁻ ECs (top) and EpCAM⁺ alveolar epithelial cells (bottom) isolated from 2M vs. 24M old mouse lungs after PNX or in combination with treatment with LRP5 DNA for 7 days (n=5, *, mean ± s.e.m., *, p<0.05).