



**SUPPLEMENTARY FIG. S7.** In 3D Matrigel epithelial cysts are generated by single EpCAM<sup>pos</sup> cells that undergo proliferation at day 3–7 after plating in culture. (A) Epithelial cells were isolated from trachea, airways and the distal lung of transgenic EGFP and RFP-expressing mice using magnetic microbeads, and co-cultured with wild-type lung fibroblasts. Representative images of cysts at 18 days after plating. (B) Kinetics of apoptosis and proliferation of lung epithelial cells represented as percentage of GFP<sup>pos</sup> TUNEL<sup>pos</sup> (gray line) and GFP<sup>pos</sup> nuclear PCNA<sup>pos</sup> (red line) cells at days 0–7 in culture;  $n=3$  independent experiments. Scale bar, 100  $\mu\text{m}$ .