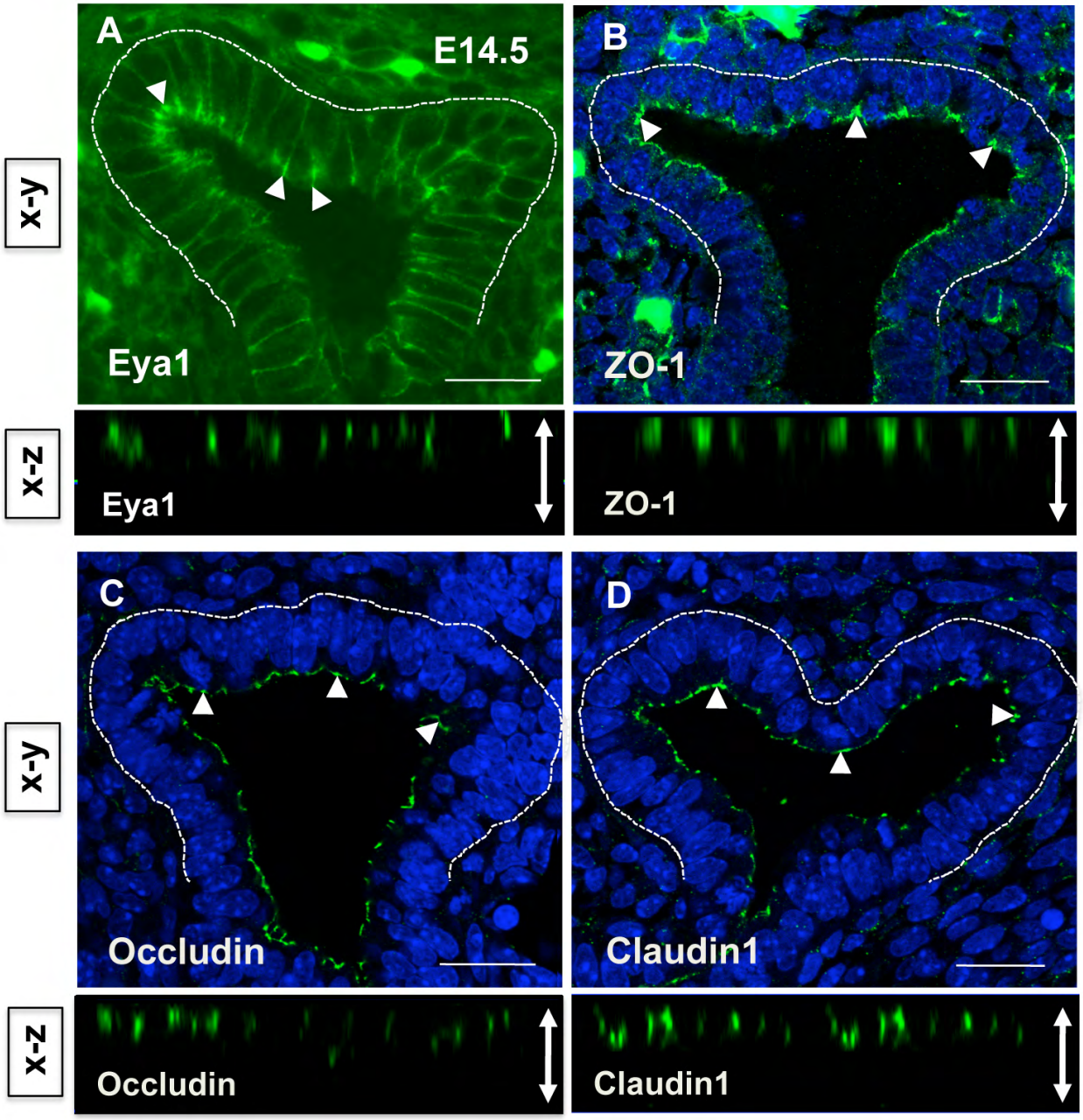

Fig. S1. Eya1 and TJ proteins are expressed in the lung**.** Representative x-y sections and transverse x-z views obtained in E14.5 distal lung epithelial cells labeled with either Eya1 (**A**), ZO-1 (**B**), occludin (**C**) or claudin1 (**D**) antibodies. Note the localization of Eya1 at areas of intercellular contact (A; arrowheads) similar to TJ proteins that had a belt-like pattern of membrane immunostaining (B,C,D; arrowheads). Scale bars: 50 μm. Arrows in x-z images indicate the thickness of the epithelium. Bars: 10 μm. Broken line represents the collagen IV-stained basement membrane.

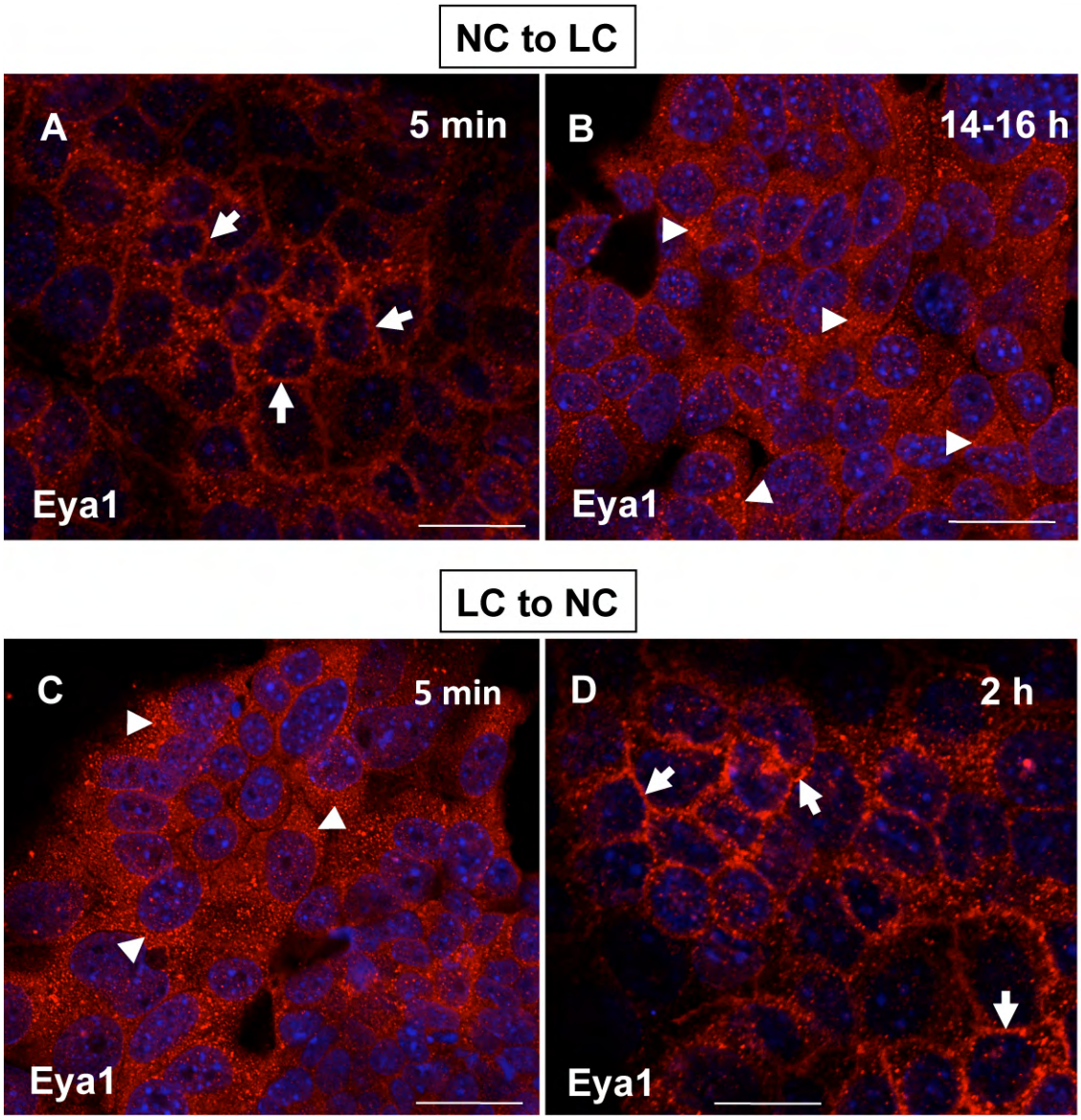

Fig. S2. (**A-D**) Immunocytochemistry with Eya1 antibody shows that the sub-cellular localization of Eya1 protein in MLE15 cells is Ca^{2+} dependent. (**A**) The Eya1 expression domain (arrows) is strongly visualized at the periphery of MLE15 cells grown in NC medium. (B) Ca^{2+}-deprived MLE15 cells show an apparent disappearance of the peripheral membrane staining for Eya1 that localizes to the cytosol (arrowheads). (C,D) Ca^{2+} starvation of cells overnight before switching to NC medium for 5 min (C) or 2 h (D) in order to induce junction biogenesis results in gradual re-concentration of Eya1 protein at sites of cell-cell contact (arrows in D). Scale bars: 50 μm.

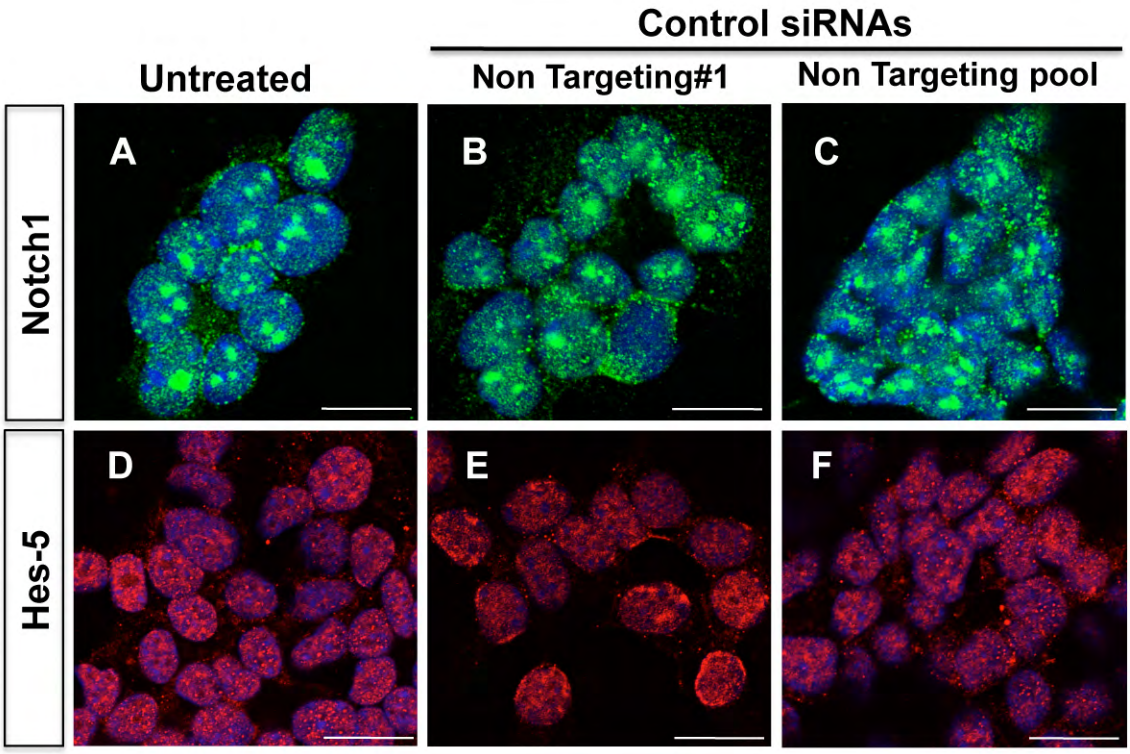

Fig. S3. (**A-F**) Immunostaining of MLE15 cells grown in culture with specific antibodies after transfection for 3 days with the indicated control siRNAs, used at 20 nM. Note that nonspecific siRNAs displayed no apparent effect on Notch1 and Hes-5 expression levels. Scale bars: 50 μm.