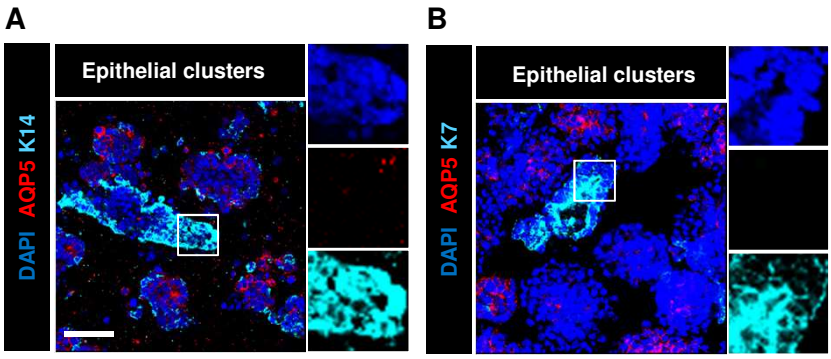

Figure S1. K14 and K7 localization in E16 epithelial clusters before culture. ICC and confocal imaging revealed that K7 localizes in AQP5^{-} ducts and K14 localized in AQP5^{-} ducts and at the periphery of AQP5^{+} acinar structures in E16 epithelial clusters that were fixed immediately after processing, as indicated with the markers AQP5 (proacinar/acinar, red) and DAPI (nuclei, blue) with **(A)** cytokeratin 14 (cyan) and **(B)** cytokeratin 7 (cyan). Scale bar = 50 µm. N = 3 experiments

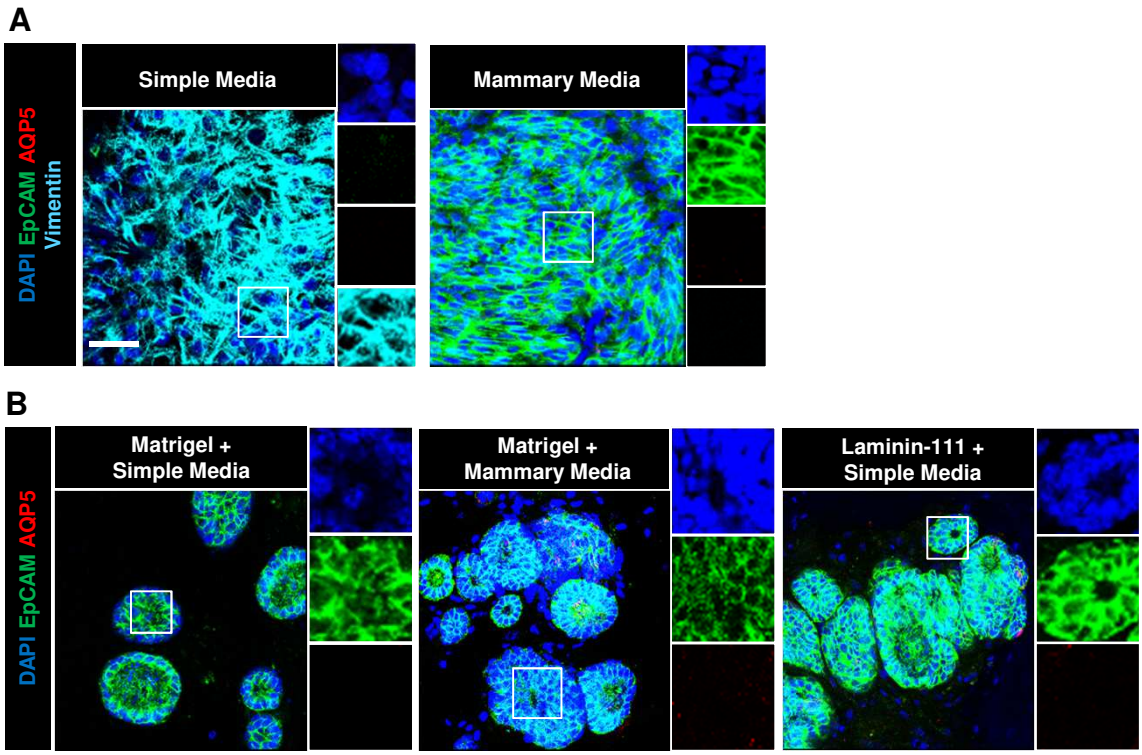

Figure S2: Soluble factors and basement membrane extract preserve the epithelial phenotype but not the proacinar phenotype of primary salivary epithelial cells. Epithelial clusters were cultured in **(A)** simple media or mammary media alone, or **(B)** embedded in Matrigel or laminin-111 and cultured for 7 days. ICC and confocal imaging revealed a loss of EpCAM and an increase in vimentin levels in cells cultured in simple media with retention of EpCAM in flattened epithelium in mammary media without basement membrane. In basement membrane extracts, EpCAM+ epithelium was retained but AQP5 expression was lost in all conditions, as shown with the markers EpCAM (epithelium, green), AQP5 (proacinar/acinar cells, red), and vimentin (mesenchyme, cyan) together with DAPI (blue) to detect nuclei. N=3 experiments. Scale bar = 50 μm.