

**SUPPLEMENTARY FIG. S4.** Fibroblasts from CF patients with the  $\Delta$ F508 mutation make a mature distal lung epithelium. (A) Immuncytochemistry showing fibroblasts from  $\Delta$ F508 patients reprogrammed and express pluripotency genes (NANOG, POU5F1, SOX2, and TRA-1-60). (B)  $\Delta$ F508 lung endoderm does not express markers of the thyroid lineage (PAX9, TG, and PAX8), the forebrain (PAX6), or the more mature airway epithelium (SFTPC, ABCA3, and MUC5AC). (C) Mature distal airway epithelium expressing the  $\Delta$ F508 CFTR continues to express distal airway epithelial genes while remaining negative for thyroid (PAX8, PAX9, and TG), forebrain markers (PAX6), and proximal airway lineages (FOXJ1, SOX2, and SOX17). *White bars* = 100 µM. \*\* $P \le 0.01$ , \*\*\* $P \le 0.001$ , \*\*\* $P \le 0.0001$ . FL, human foetal lung control; AL, adult lung control; C, undifferentiated hESC control;  $\Delta$ f508, airway epithelium from CF patients cultured for 25 days; CF, cystic fibrosis.