

SUPPLEMENTARY MATERIALS

SUPPLEMENTARY FIGURES

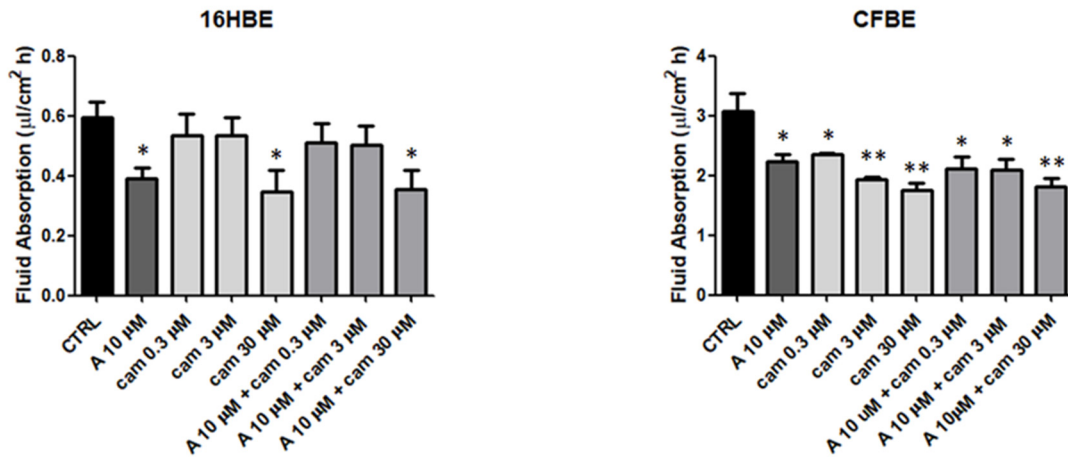


Figure S1 – Combined effect of amiloride and camostat on fluid absorption in 16HBE and CFBE cells.

Statistical significance of differences was evaluated by ANOVA followed by Bonferroni's post test: * $P < 0.05$; ** $P < 0.01$, (all for each condition vs untreated cells (CTRL)). A = amiloride; cam = camostat.

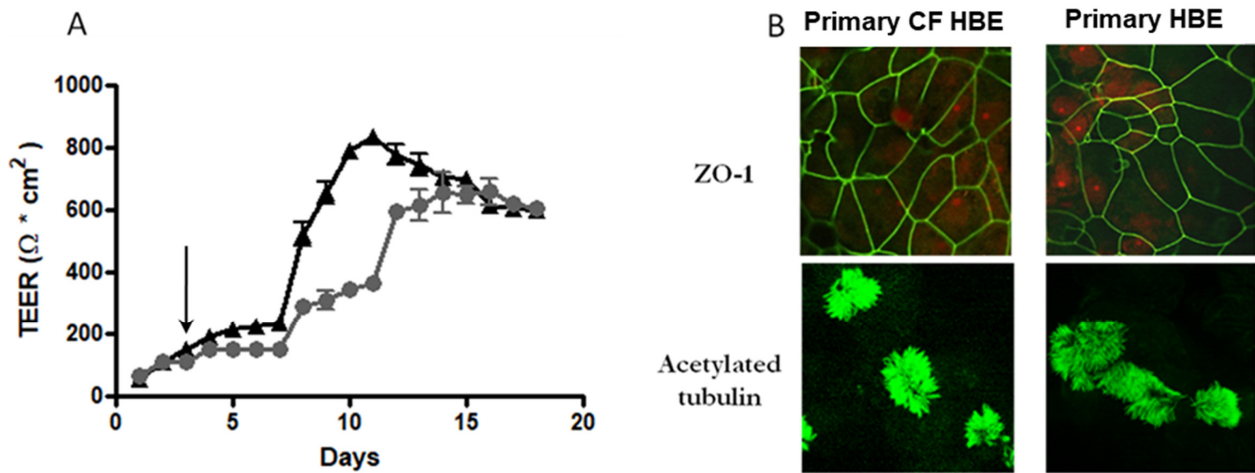


Figure S2 - Epithelial differentiation assessment. Primary airway epithelial cells were cultured at the air-liquid interface (ALI) and evaluated for transepithelial electrical resistance (TEER) and zonula occludens 1 (ZO-1) protein and acetylated tubulin expression. **A**) TEER of primary cells grown on Snapwells was measured daily. From day 3 of culture (indicated by an arrow), cells were grown on ALI condition. Black triangles = wild type primary cells. Grey circles = CF primary cells. **B**) Primary cells were stained for ZO-1 and acetylated tubulin after 15 days of culture on ALI condition on Snapwells (overall 18 days of culture). Both primary cells showed a typical chicken-wire pattern of ZO-1 expression (green signal, top panels) and expression of acetylated tubulin (green signal, bottom panels), a marker of ciliated cells differentiation. For the ZO-1 staining, nuclei were counterstained with propidium iodide. Images were obtained with an original magnification of 60X.

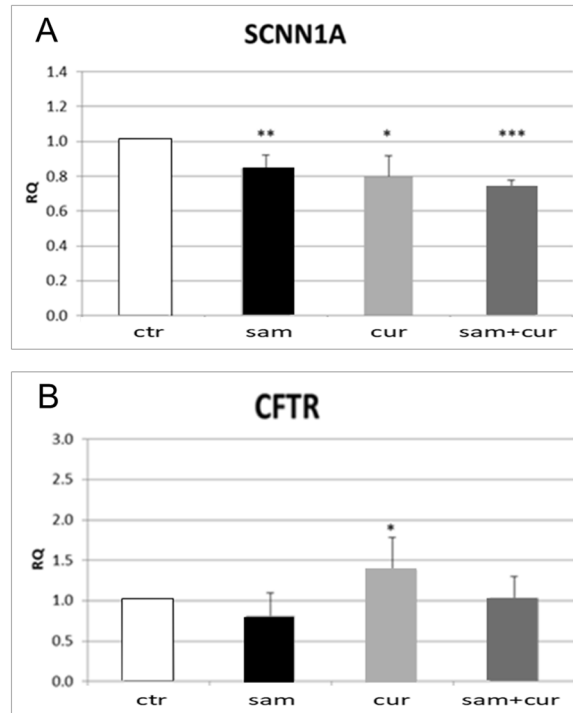


Figure S3 – Effect of SAM and curcumin on ENaC and CFTR gene expression in 16HBE cells.

Statistical significance of differences was evaluated by ANOVA followed by Bonferroni's post test: * $P < 0.05$; ** $P < 0.01$; *** $P < 0.005$ (all for each condition vs untreated cells (ctr)). sam = S-adenosyl methionine, cur = curcumin, RQ = relative quantification.

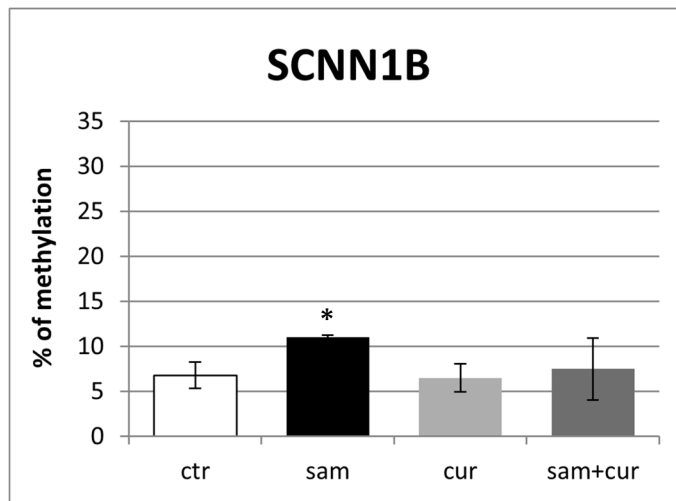


Figure S4 – Overall (CpG + non-CpG) DNA methylation of SCNN1B gene in CFBE cells, with the effect of SAM and curcumin on pre-island and island zones taken together.

Statistical significance of differences was evaluated by ANOVA followed by Bonferroni's post test: *P<0.05 (for sam vs untreated cells (ctr)). sam = S-adenosyl methionine, cur = curcumin.

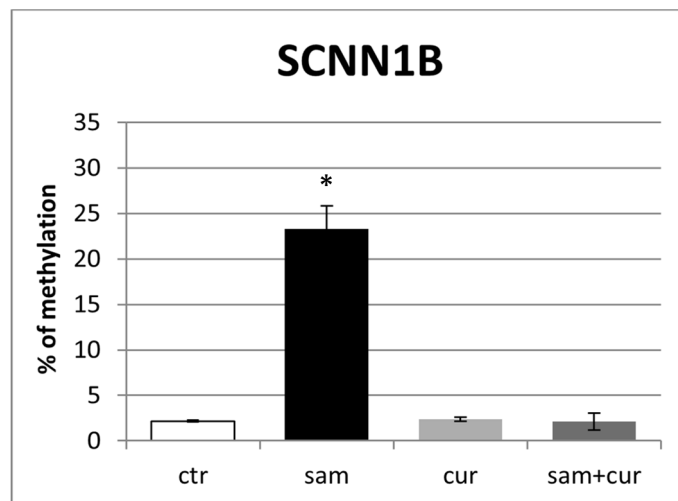


Figure S5 – Overall (CpG + non-CpG) DNA methylation of SCNN1B gene in CF primary bronchial epithelial cells, with the effect of SAM and curcumin on the pre-island and island zones taken together.

Statistical significance of differences was evaluated by ANOVA followed by Bonferroni's post test: *P<0.001 (for sam vs untreated cells (ctr)). sam = S-adenosyl methionine, cur = curcumin.