Supplemental Data

Table S1

Table S1. Genotypes of Human CF Donors		
	Donor ID	**CFTR Genotype**
RNA-seq		
	CFB0219	Δ*F508/3659delC*
	CFB0319	Δ*F508/N1303K*
	CFB0419	Δ*F508/*Δ*F508*
	CFB2518	Δ*F508/1336K*
	CFB2818	Δ*F508/R560T*
	CFB3218	Δ*F508/*Δ*F508*
Other studies		
	CFB0219	Δ*F508/3659delC*
	CFB1419	Δ*F508/3659delC*
	CFB1519	Δ*F508/2184-del-A*
	CFB1719	Δ*F508/N1303K*
	CFB2019	Δ*F508/3849+10kbC>T*
	CFB2219	Δ*F508/*Δ*F508*
	CFB2319	Δ*F508/R75X*
	CFB2419	Δ*F508/E60X*
	CFB2619	Δ*F508/unknown*
	CFB2819	Δ*F508/*Δ*F508*
	CFB2919	Δ*F508/*Δ*F508*
	CFB3019	Δ*F508/G542X*
	CFB3119	Δ*F508/*Δ*F508*
	CFB0420	Δ*F508/*Δ*F508*
	CFB0520	Δ*F508/*Δ*F508*
	CFB0720	Δ*F508/*Δ*F508*

Supplemental Figure S1

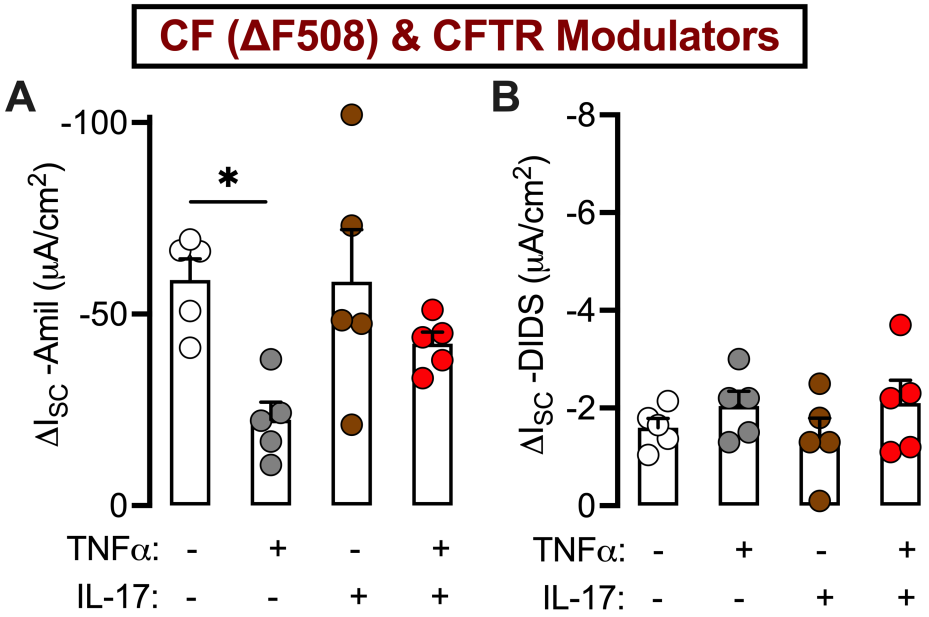

Fig. S1. Effect of TNFα and IL-17 on amiloride-sensitive and DIDS-sensitive I_{SC} in CF airway epithelia. Primary differentiated human CF airway epithelia were treated with TNFα, IL-17, or both for 24 hours. All epithelia were also exposed to a triple combination of CFTR modulators comprising elexacaftor, tezacaftor, and ivacaftor. Epithelia were assayed in Ussing chambers and short-circuit current (I_{SC}) was recorded. **A**) Changes in I_{SC} after addition of apical amiloride. **B**) Changes in I_{SC} after addition of apical DIDS. Each data point represents an epithelium from a different donor. N = 5 different donors. Data are shown as the mean ± SEM. Statistical significance was tested using repeated-measures ANOVA and post-test Tukey's. *P < 0.05. Amil = amiloride; DIDS = 4,4′-diisothiocyano-2,2′-stilbenedisulfonic acid.

Supplemental Figure S2

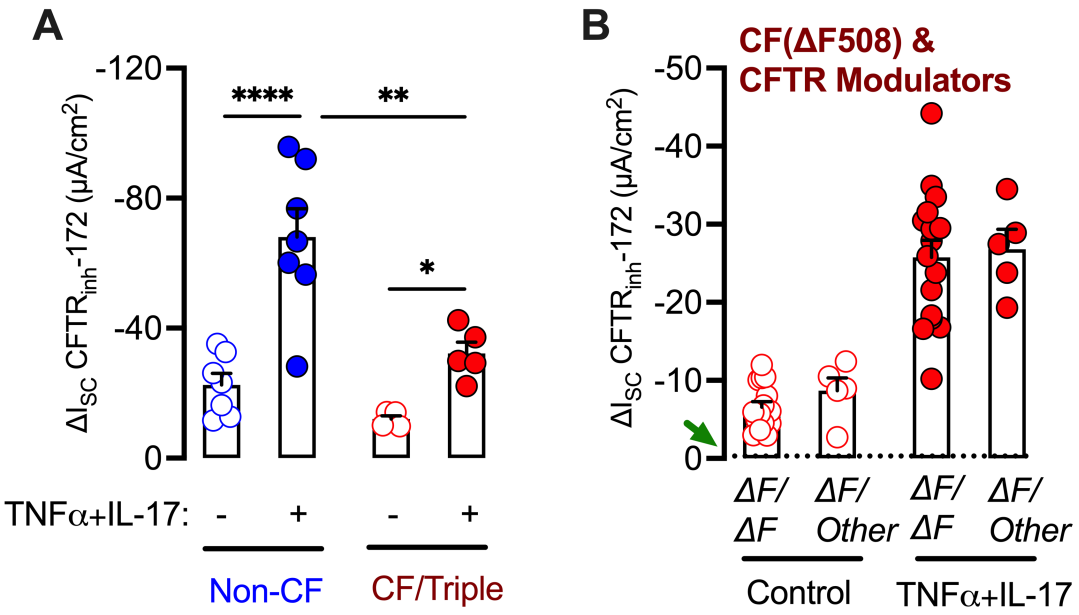

Fig. S2. Effect of genotype on CFTR activity in TNFα+IL-17-treated epithelia. Primary differentiated human airway epithelia were treated with TNFα+IL-17 for 24 hours. CF epithelia were also exposed to a triple combination of CFTR modulators comprising elexacaftor, tezacaftor, and ivacaftor. Epithelia were assayed in Ussing chambers and short-circuit current (I_{SC}) was recorded. **A**) Comparison of CFTR-mediated I_{SC} in non-CF versus CF epithelia exposed to CFTR modulators. N = 7 non-CF, and 5 CF donors. **B**) CFTR-mediated I_{SC} in CF donors either homozygous (Δ*F*/Δ*F*) or heterozygous (Δ*F*/*Other*) for Δ*F508* allele and treated with CFTR modulators. The dotted line marked by green arrow indicates ΔI_{SC} in CF epithelia in the absence of CFTR modulators. N = 16 homozygous, and 5 heterozygous donors. Each data point represents an epithelium from a different donor. Data are shown as the mean ± SEM. Statistical significance was tested using mixed-effects ANOVA and post-test Tukey's. **P* < 0.05; ***P* < 0.01; *****P* < 0.0001.

Supplemental Figure S3

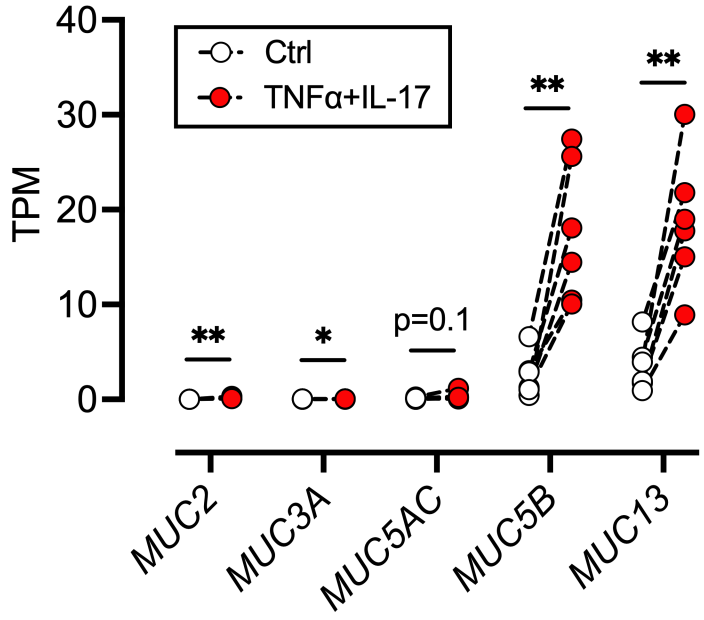

Fig. S3. TNFα+IL-17 increase expression of selected mucin (*MUC*) genes. ΔF508-CF epithelia were exposed to TNFα+IL-17 for 48 hours and RNA-seq was performed. N = 6 different donors. Statistical significance was tested using paired Student's *t* test. **P* < 0.05, ***P* < 0.01. TPM = transcripts per million.