

Supplementary Figure 1. TNF-\alpha and IL-6 levels in the lungs. CF and non-CF mice were subjected to PA instillation twice. At 6 hours after the second instillation, lungs were obtained and subjected to homogenization followed by TNF- α and IL-6 measurement. Data were shown as mean +/- S.D. of 4 samples per group. One-way ANOVA with *post hoc* Bonferroni analysis was performed. *** p< 0.001.



Supplementary Figure 2. Single cell RNA sequencing analysis of lung NK cells

- (a) Heatmap of lung NK cell differentially expressed genes (DEGs).
- (b) The number of up- and down-regulated DEGs.





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Non-CF lung post PA x2



Supplementary Figure 3. Single cell RNA sequencing analysis of lung B cells (a) Heatmap of lung B cell differentially expressed genes (DEGs). (b) The number of upand down-regulated DEGs. (c) Upregulated DEGs in CF and non-CF lung B cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps. (d) Downregulated DEGs in CF and non-CF lung B cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps.





Upregulated DEGDownregulated DEG



Non-CF lung post PA x 2



Supplementary Figure 4. Single cell RNA sequencing analysis of lung T cells (a) Heatmap of lung T cell differentially expressed genes (DECs) (b) The number of up, and down

genes (DEGs). (b) The number of up- and downregulated DEGs. (c) Upregulated DEGs in CF and non-CF lung T cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps. (d) Downregulated DEGs in CF and non-CF lung T cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps.



(a) Heatmap of lung AT cell differentially expressed genes (DEGs). (b) The number of up- and downregulated DEGs. (c) Upregulated DEGs in CF and non-CF lung AT cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps. (d) Downregulated DEGs in CF and non-CF lung AT cells were subjected to KEGG pathway analysis and presented as bubble enrichment maps.