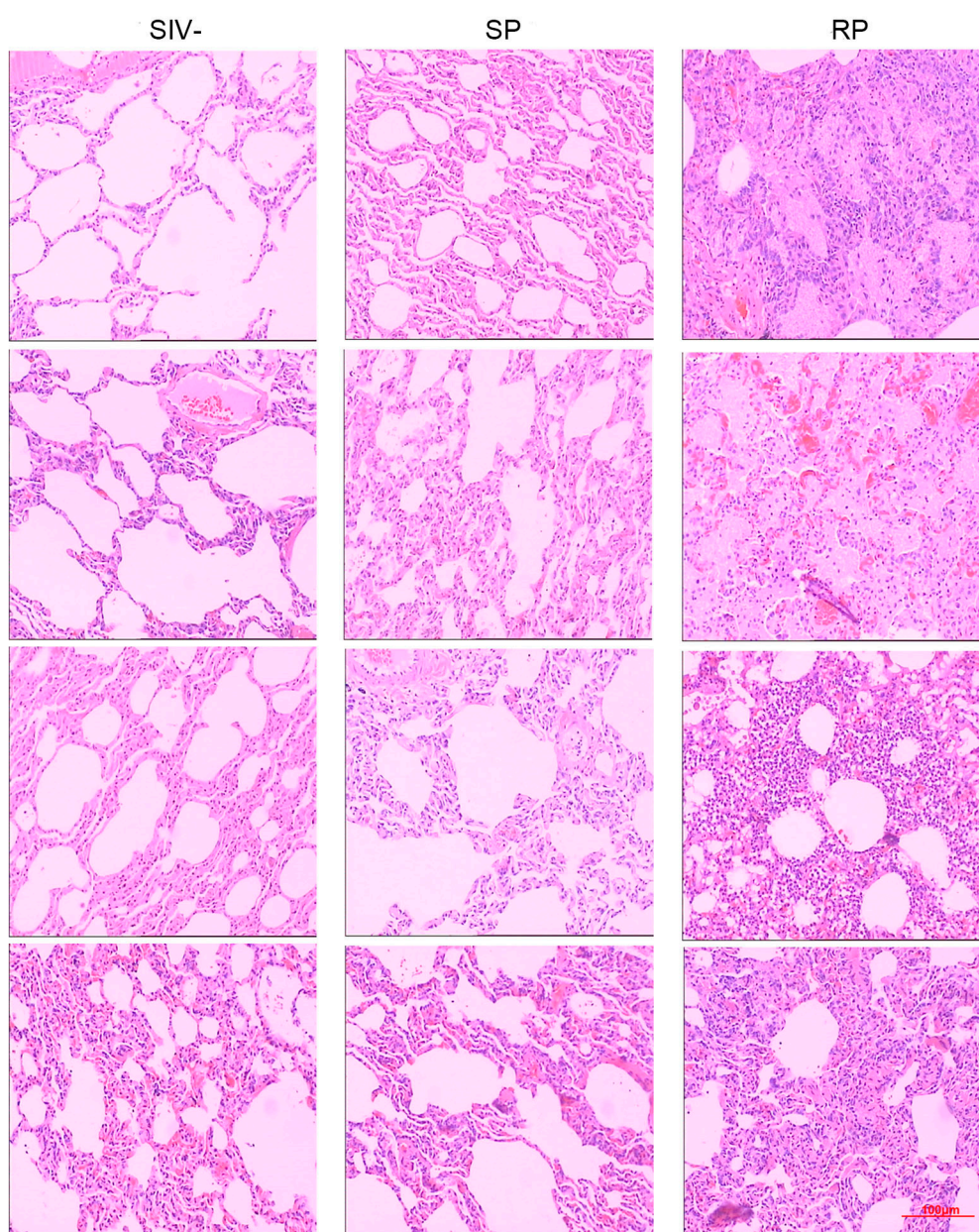
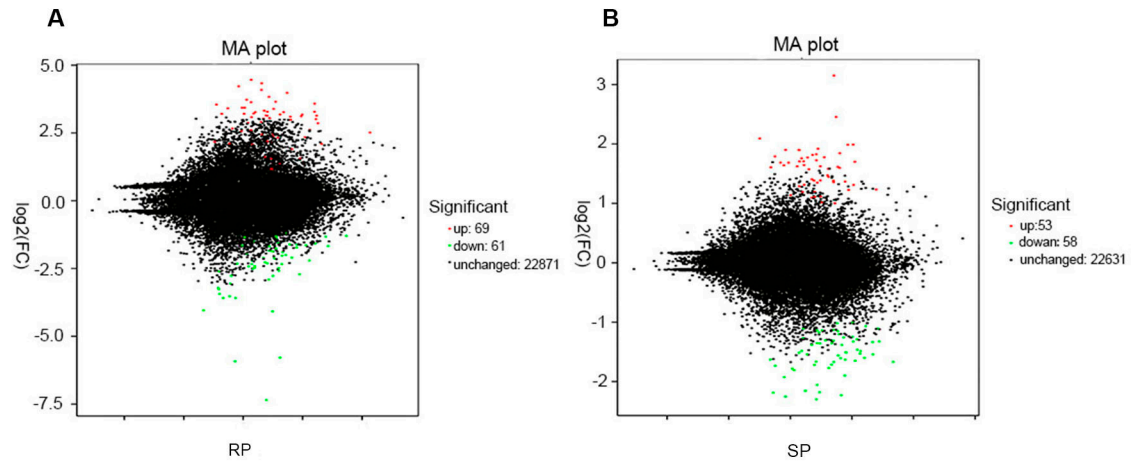


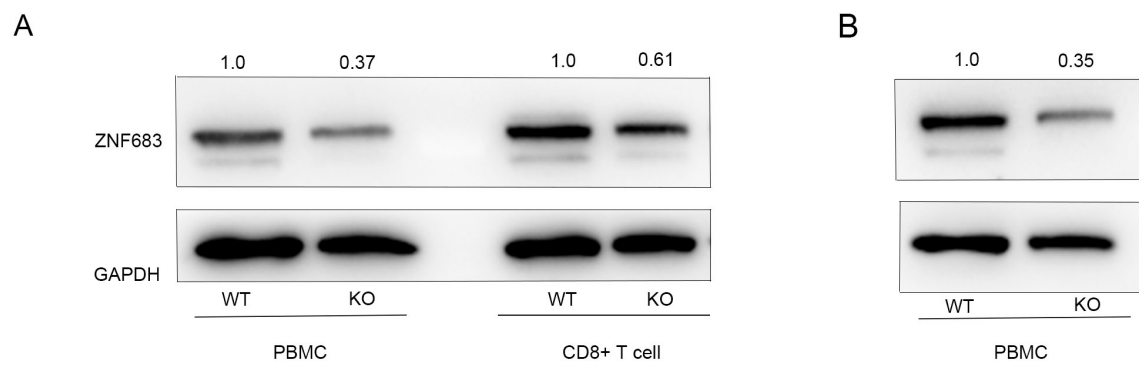
**Figure S1.** Bar graph of the LDA value distribution. The graph shows the species with LDA scores greater than the set value (default setting: 4.0). The length of each bar represents the influence of the species with distribution differences (RP/N: RP, n = 3; SP/S: SP, n = 3; healthy/H: SIV-, n = 4).



**Figure S2.** HE staining of lungs.



**Figure S3.** Overall distribution of differentially expressed genes (DEGs) in the two groups. (A) RP group. (B) SP group. Each point represents a gene. Green dots represent downregulated DEGs, red dots represent upregulated DEGs, and black dots represent non-DEGs. RP: n = 3; SP: n = 3; SIV-: n = 4.



**Figure S4.** Expression of ZNF683 in wild-type human PBMC, wild-type human CD8+ T cells, knockdown human PBMC, and knockdown human CD8+ T cells (A) and in wild-type macaque PBMC and knockout macaque PBMC.

