Electronic Supplementary Material (ESI) for Food & Function.


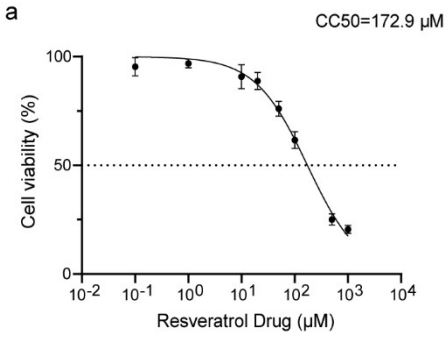


**Figure S1. The safe administration concentrations of the resveratrol**

(a) The CCK8 assay was used to determine the safe administration concentrations of the resveratrol, and the data from the experiments were plotted to extrapolate the CC50 values (n=6).

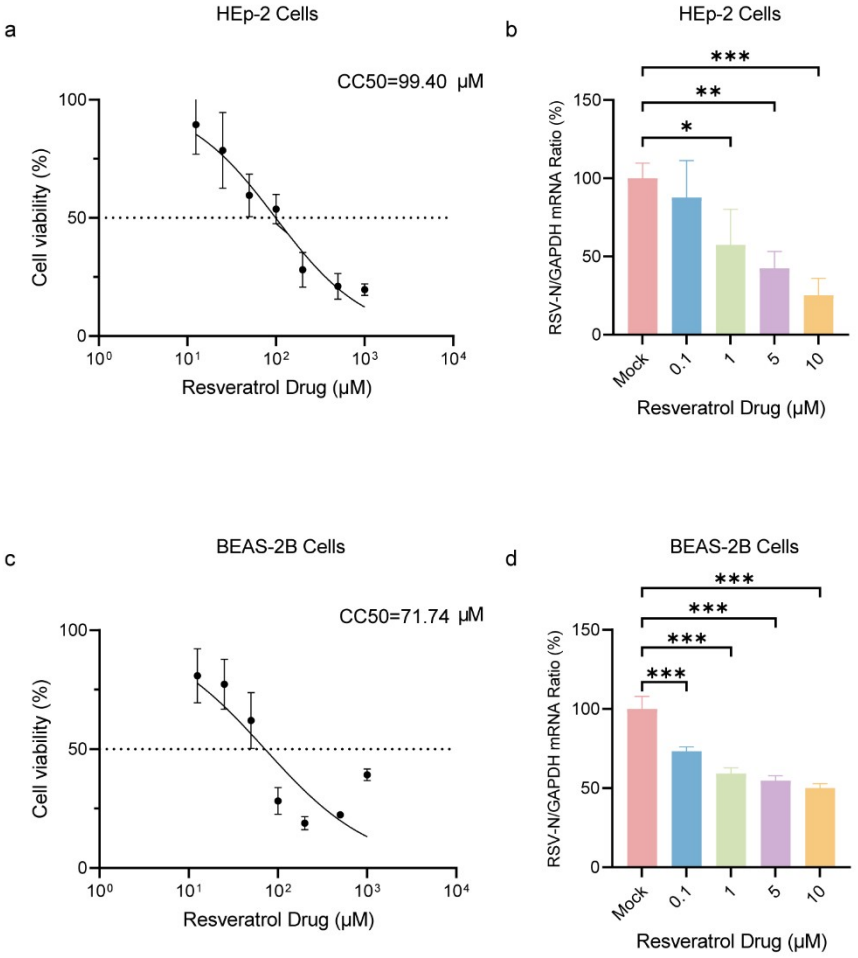


**Figure S2. Antiviral activity of resveratrol against RSV in Hep-2 cells and BEAS-2B cells**

(A) The CCK8 assay was used to determine the safe administration concentrations of the resveratrol in Hep-2 cells (n=6). (B) RSV N protein expression was detected to determine RSV infection by Quantitative Real-time PCR, (n=4). (C) The CCK8 assay was used to determine the safe administration concentrations of the resveratrol in BEAS-2B cells (n=6). (D) RSV N protein expression was detected to determine RSV infection by Quantitative Real-time PCR, (n=4). Data are represented as mean ± SEM. **P<0.05, **P<0.01, ***P<0.001.*

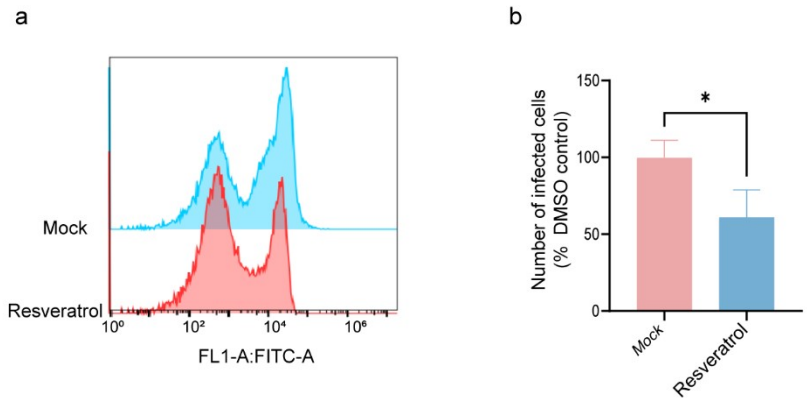


**Figure S3. Antiviral activity of resveratrol against RSV detected by Flow cytometry**

(A and B) RSV G protein expression was detected to determine RSV infection by Flow cytometry (n=4). Data are represented as mean ± SEM. **P<0.05, **P<0.01, ***P<0.001.*

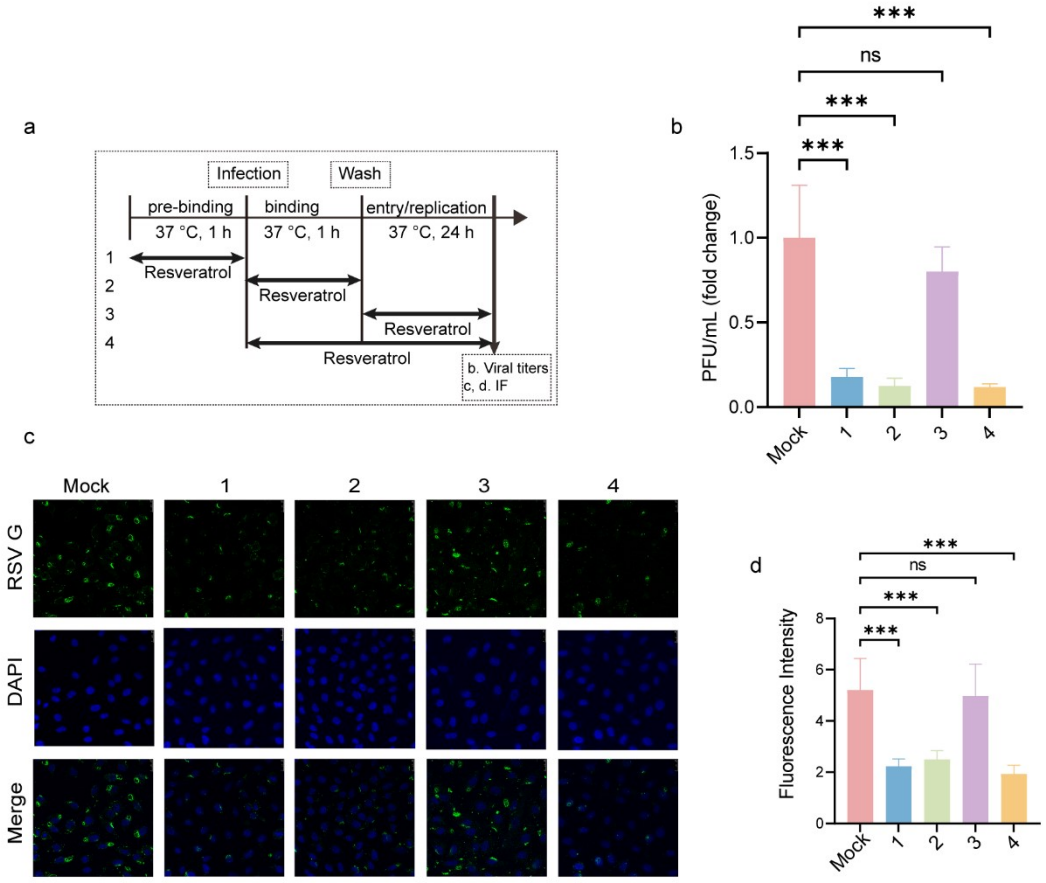


**Figure S4. Time of addition experiment of viral titration on cell culture and immunofluorescence**

(A) Time of-addition assay, and the schematic procedure. (B) Determination of viral titers with TCID50 assay (n=3). (C and D) RSV G protein expression was detected to determine RSV infection by immunofluorescence. Data are represented as mean ± SEM. ∗P<0.05, ∗∗P<0.01, ∗∗∗P<0.001.

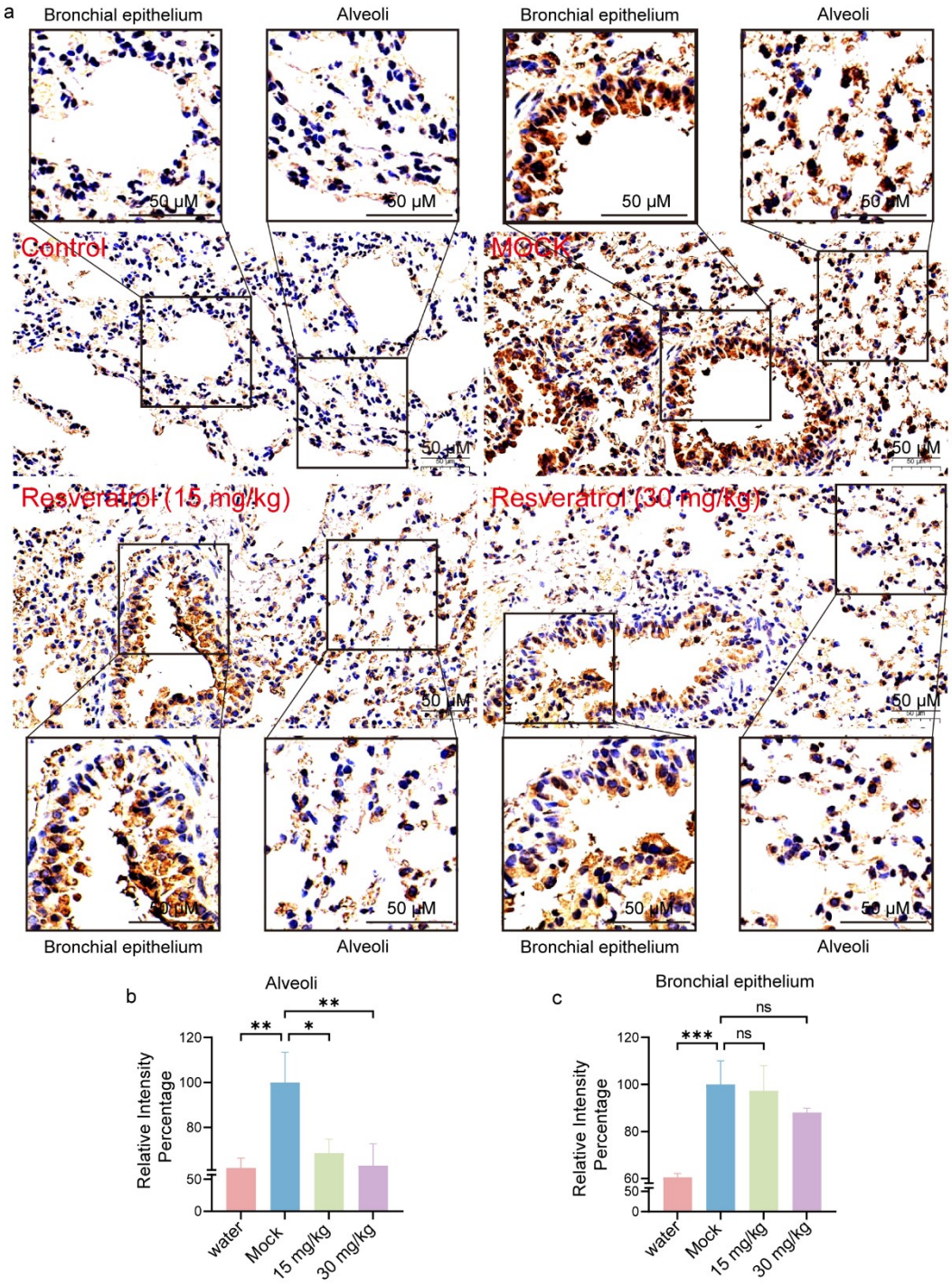


**Figure S5. Resveratrol administration only reduced infected cells in alveoli and not in bronchus**

(A, B and C) Immunohistochemistry of RSV F protein in mouse lung tissue (n=3). Data are represented as mean ± SEM. **P<0.05, **P<0.01, ***P<0.001.*