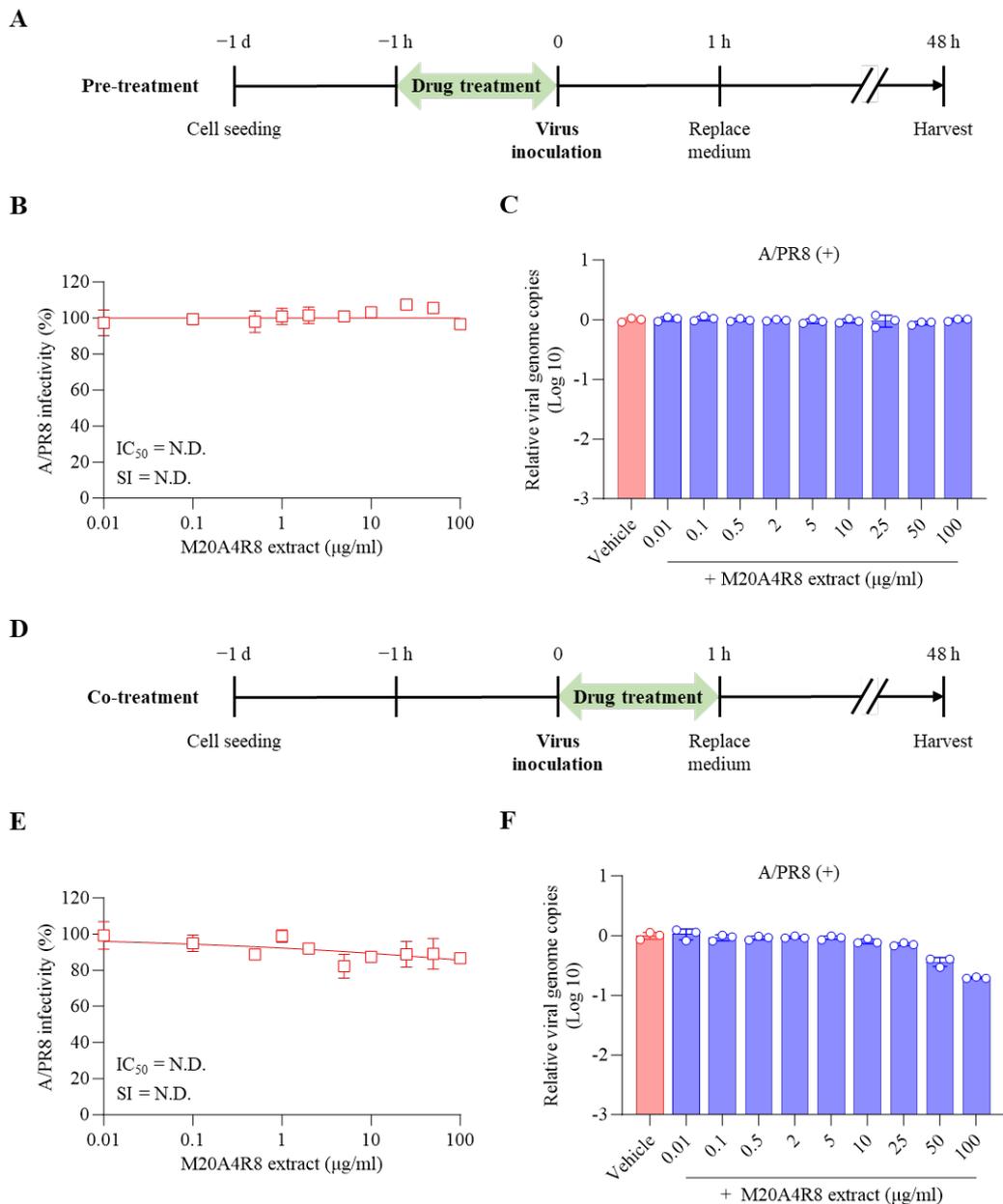
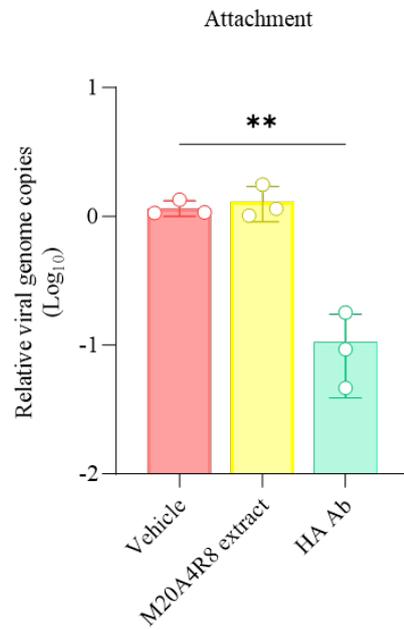
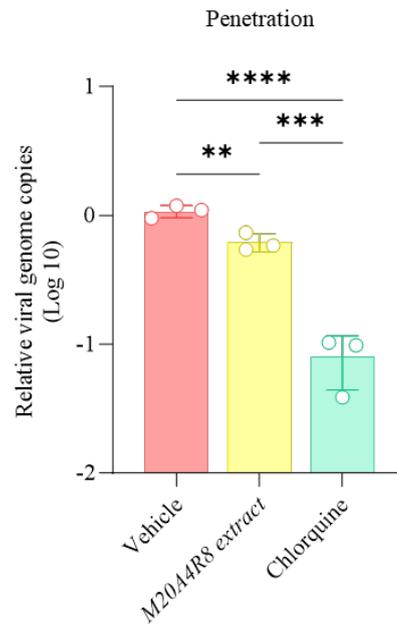


## Supplementary Materials

### Supplementary Figures



**Supplementary Figure S1.** Antiviral effect of M20A4R8 extract by pre-treatment (A–C) and co-treatment (D–F) against A/PR8 strain in MDCK cell. (A) Schematic diagram of virus inoculation and extract treatment. (B) IC<sub>50</sub> and SI of M20A4R8 extract measured by CPE-inhibition assay. (C) Viral genome copies detected by RT-qPCR. (D) Schematic diagram of virus inoculation and extract treatment. (E) IC<sub>50</sub> and SI of M20A4R8 extract measured by CPE-inhibition assay. (F) Viral genome copies detected by RT-qPCR. All data in the graphs are presented as arithmetic means ± S.D. from 3 independent experiments. N.D., not determined.

**A****B**

**Supplementary FigureS2.** Viral genome copies measured at 20 h of incubation after virus attachment and penetration assays along with the treatment of M20A4R8 extract (50 µg/mL). (A) The extract was pre-treated before the viral binding to the MDCK cells at 4 °C for 1 h, followed by infection with A/PR8 strain (1 MOI). (B) After binding the A/PR8 strain (1 MOI) to the host cells, the extract was absorbed at 37 °C for 1 h. Viral genome copies were measured by RT-qPCR using a pair of primer-detecting IAV PB1. All data in the graphs are presented as arithmetic means ± S.D. from 3 independent experiments. HA, hemagglutinin. \*\*,  $p < 0.01$ ; \*\*\*\*,  $p < 0.0001$ .