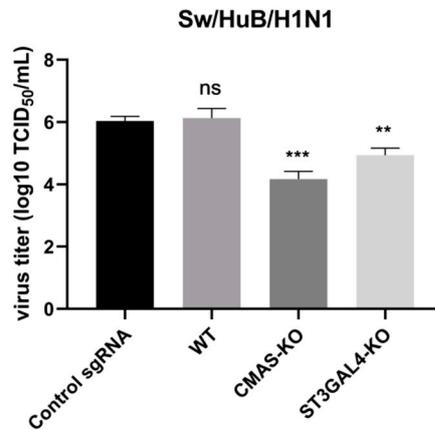


**Figure S1.** Validation of *CMAS* and *ST3GAL4* knockout in NPTr cells. (A) Detection of *CMAS* knockout efficiency by western blotting. WT NPTr cells and *CMAS*-KO NPTr cells were collected and lysed for western blot assay using the rabbit anti-*CMAS* antibody and the anti-GAPDH antibody. GAPDH was used as the loading control. (B) WT NPTr cells and *ST3GAL4*-KO NPTr cell lines were infected with the Sw/HuB/H1N1 strain, and the supernatants were collected at 36 hpi to detect the virus titer (Data from three independent experiments, mean  $\pm$  SD; \*,  $P < 0.05$ ; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; ns represented no significance; two-tailed Student's t test).



**Figure S2.** Determination of virus titer. NPTr cells infected with control sgRNA lentivirus, Cas9 expressing NPTr cells and KO cells were infected with the Sw/HuB/H1N1 strain, and the supernatants were collected at 36 hpi to detect the virus titer (Data from three independent experiments, mean  $\pm$  SD; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; ns represented no significance; two-tailed Student's t test).