

from day 21 (**c**) and day 35 (**d**). Immunofluorescence assay was used to detect SARS-CoV-2 N protein expression. Serum dilutions were indicated. Scale bars represented 400 μ m.

e The inhibitory activity of sera from the indicated mouse groups at day 35 against SARS-CoV-2 S-mediated cell-cell fusion. Data are shown as mean $\pm$ sem.

f The amino acid sequence identity among SARS-CoV-2, SARS-CoV, SARSr-CoV WIV1 and SARSr-CoV Rs3367 RBD proteins.

g SARS-CoV RBD-specific IgG endpoint titers in sera from vaccinated mice.

h Neutralization activity of sera from mice immunized with RBD-Fc formulated with the indicated adjuvants against H5N1 PsV at day 35 post-immunization. Data are shown as geometric mean $\pm$ SD from six samples.

i Correlations between SARS-CoV-2 RBD-specific IgG titers and nAb titers against SARS-CoV PsV, SARSr-CoV Rs3367 PsV and SARSr-CoV WIV1 PsV.

j The inhibitory activity of sera from the indicated mouse groups at day 35 against RsSHC014 S-mediated cell-cell fusion. Data are shown as mean $\pm$ sem.

Statistical analyses were performed using one-way ANOVA for (**g**). * $P < 0.05$, ** $P < 0.001$, *** $P < 0.0001$. Spearman rank test was used to perform the correlation analysis.