Fig.S1

a

b

Fig.S1 The immunogenicity of JS1-beta in mice. a Schematic of JS1-beta genome. b HEK293 cells were infected with JS1-beta and were cultured for 72 hours. The cell lysate and supernatant were collected and mixed to detect the expression of S protein by ELISA. c-e 6-week-old BALB/c mice (n=5 per group) were vaccinated with JS1-beta or the same volume of PBS using the indicated dosage by the IN or IM route at day 0. The titers of S-RBD-specific IgG, B.1.351 PNAAb and the cross-protection against the indicated SARS-COV-2 strains at week 2 were detected by ELISA and luciferase assay, respectively.