



Figure S1. Serum antibody responses are induced by AS03-adjuvanted receptor binding domain (RBD)-nanoparticle vaccination. (A and B) Binding IgG (A) and neutralizing antibody (B) responses against the Beta variant in the RBD-Wu/RBD-Wu/RBD-Wu group are shown. AU/ml, Arbitrary Units per ml; IC_{50} , half maximal inhibitory concentration; nAb, neutralizing antibody. **(C and D)** Binding IgG (C) and neutralizing antibody (D) responses against the Beta variant in the RBD-Wu/RBD-Wu/RBD- β (blue) and /HexaPro/RBD- β groups (red) are shown. The numbers indicate geometric mean titers. **(E)** Antibody titers were measured in the animals immunized with RBD-Wu/RBD-Wu/RBD-Wu (black, n = 5) or RBD-Wu/RBD-Wu/RBD- β (blue, n = 5). Horizontal bars indicate Median. **(F)** Spearman's correlations between Spike protein-binding IgG, pseudovirus nAb, and live-virus nAb titers are shown. **(G)** Pseudovirus neutralizing antibody responses against the ancestral strain and the Omicron subvariant BA.2 are shown. Each dot represents an animal (RBD-Wu/RBD-Wu/RBD-Wu (black), RBD-Wu/RBD-Wu/RBD- β (blue) and HexaPro/HexaPro/RBD- β groups (red)). Data are presented as box plots in which the boxes show median and 25th to 75th percentiles and the whiskers show the range.