

Figure S1. The neutralizing antibody titers for different viruses after three types of sequential immunization.

(A) The neutralizing antibody titers against HB02, delta, omicron strains in serum of mice at day7/14/28 with sequential immunization of HB02+Omicron inactivated vaccines.

(B) The neutralizing antibody titers against HB02, delta, omicron strains in serum of mice at day7/14/28 with sequential immunization of HB02+Omicron+Omicron inactivated vaccines.

(C) The neutralizing antibody titers against HB02, delta, omicron strains in serum of mice at day7/14/28 with sequential immunization of HB02+HB02+Omicron inactivated vaccines.

Error bar represents SD from eight independent experiments (*t* test, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$).

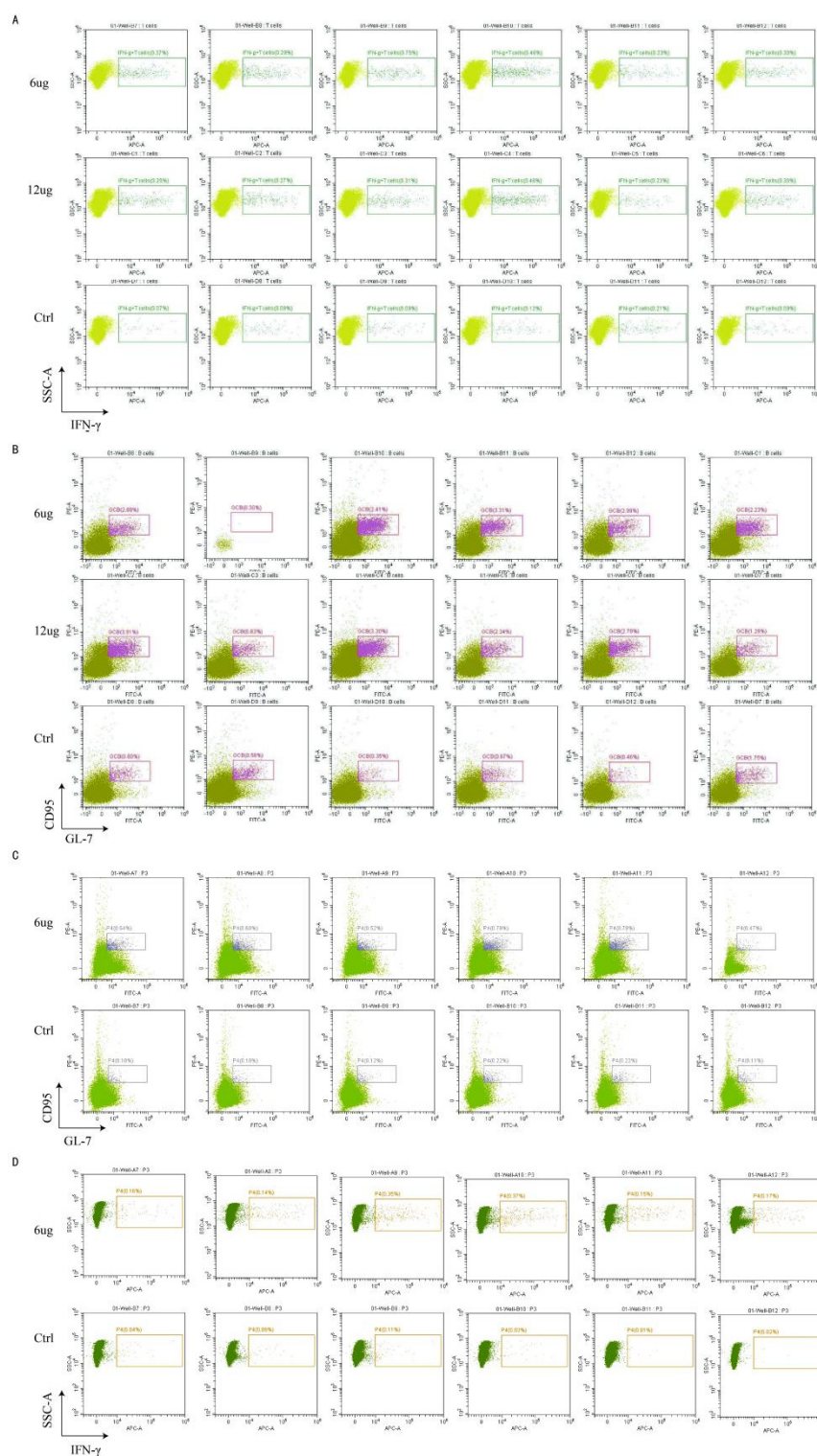


Figure S2. The flow graph of the GCB and IFN- γ + T cells.

(A) The percentage of IFN- γ expressing T cells was analyzed in mice immunized with Omicron vaccine after 28 days. (B) The percentage of GCB cells was analyzed in mice immunized with Omicron vaccine after 28 days. (C) The percentage of GCB cells was analyzed in mice immunized with Omicron vaccine after 42 days. (D) The percentage of IFN- γ expressing T cells was analyzed in mice immunized with Omicron vaccine after 42 days.