



**S5 Figure. IgG antibody levels in respiratory mucosal sites and reduced lung inflammatory cytokines in young adult mice with m-cNA-M2e vaccination upon influenza A virus infection.** Young adult mice ( $n=4$  per group, 6-8 weeks old adult mice) were vaccinated with m-cNA-M2e VLP, cN2 VLP, or 5xM2e VLP. **(A and B)** IgG levels (ng/mL) specific for (A) M2e peptide or (B) NA2 protein (A/Brisbane/10/2007 H3N2) in the bronchoalveolar lavage fluid (BALF) and lung lysates harvested on day 6 post infection with A/Phil H3N2 virus. **(C and D)** The levels of IFN- $\gamma$  and IL-6 in BALF and lung extracts by ELISA. Data represented as mean  $\pm$  SEM; statistical significances were performed by one-way ANOVA with Tukey's multiple comparison test and indicated as \*,  $P < 0.05$ ; \*\*,  $P < 0.01$ ; \*\*\*,  $P < 0.001$ ; ns, no significant difference between compared groups.