







Fig. S6 Depletion of CD4<sup>+</sup> and CD8<sup>+</sup> T cells from CA4-DelNS1 LAIV immunized mice and virus titers in lungs of mice challenged with H7N9 virus.

Antigen-specific CD4<sup>+</sup> (A) and CD8<sup>+</sup> (B) T cell responses were estimated after *ex vivo* peptide stimulation of splenocytes from CA4-DelNS1-, ca-LAIV (H1N1) or mock-vaccinated mice (6 each group) by intracellular cytokine staining (ICS) and flow cytometric analysis. Number inside the box represents frequency of IFNγ<sup>+</sup> CD4<sup>+</sup> or CD8<sup>+</sup> T cells. (C) Splenic CD4<sup>+</sup> and CD8<sup>+</sup> T cell levels in CA4-DelNS1 LAIV vaccinated mice following T cell depletion were measured by intracellular cytokine staining (ICS) and flow cytometric analysis. Vaccinated mice were injected intraperitoneally (i.p) with 100 μg of anti-CD8α, anti-CD4, both anti-CD8α and anti-CD4 or isotype control (IgG2b) antibodies on days 17, 19 and 21 after immunization and day three after virus challenge. Number inside the box represents frequency of CD4<sup>+</sup> or CD8<sup>+</sup> among total lymphocytes analysed. (D) CA4-DelNS1-vaccinated T cell depleted, and control mice were challenged with H7N9 virus (10 MLD50). After 3 days, mice were sacrificed, and lungs collected to determine virus titer by plaque assay. Percentage of either CD4 or CD8 Lung viral titer data represents mean values ± standard deviation from 3 mice. Statistical analysis between means was performed by Student's t-test: \*\*\* p<0.001, \* p<0.05, NS: not significant.