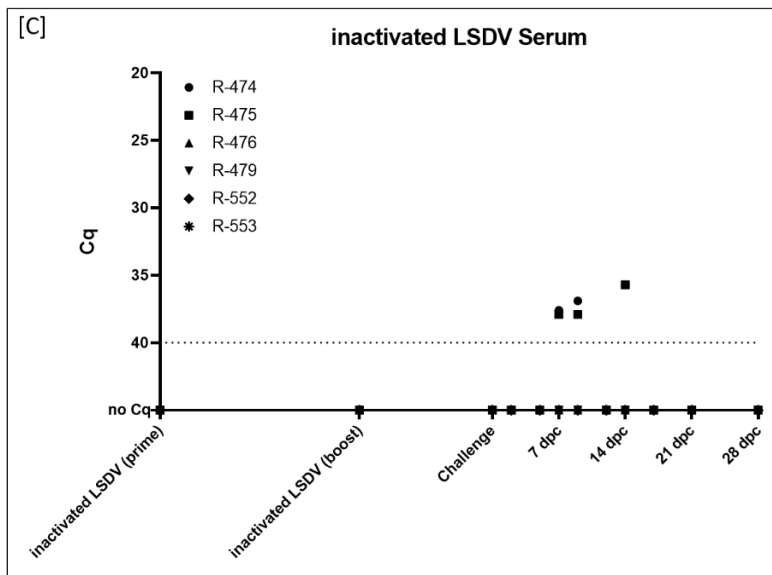
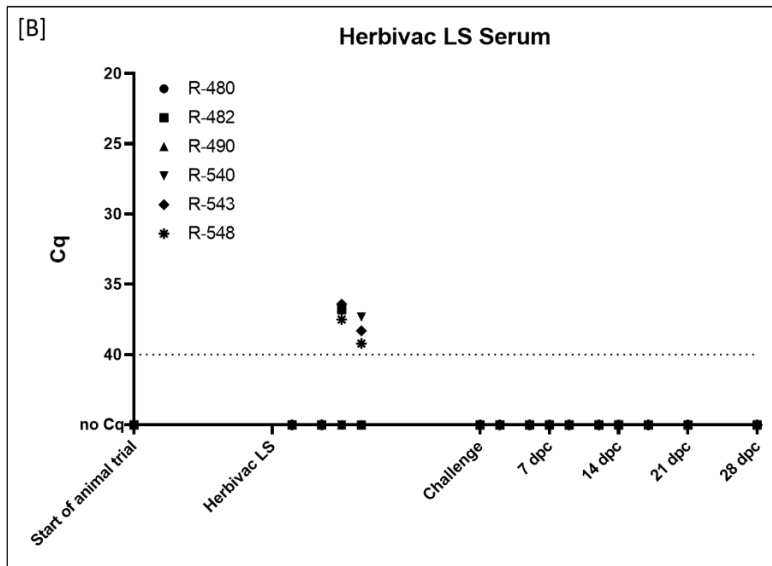
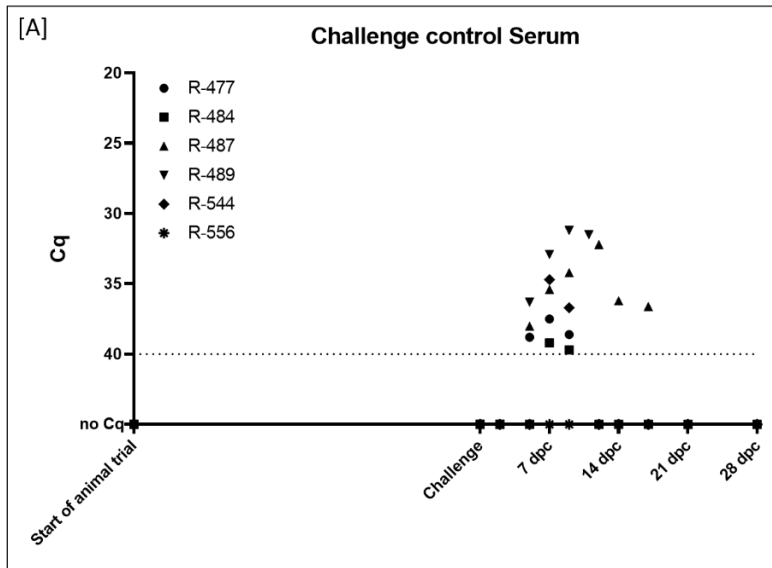
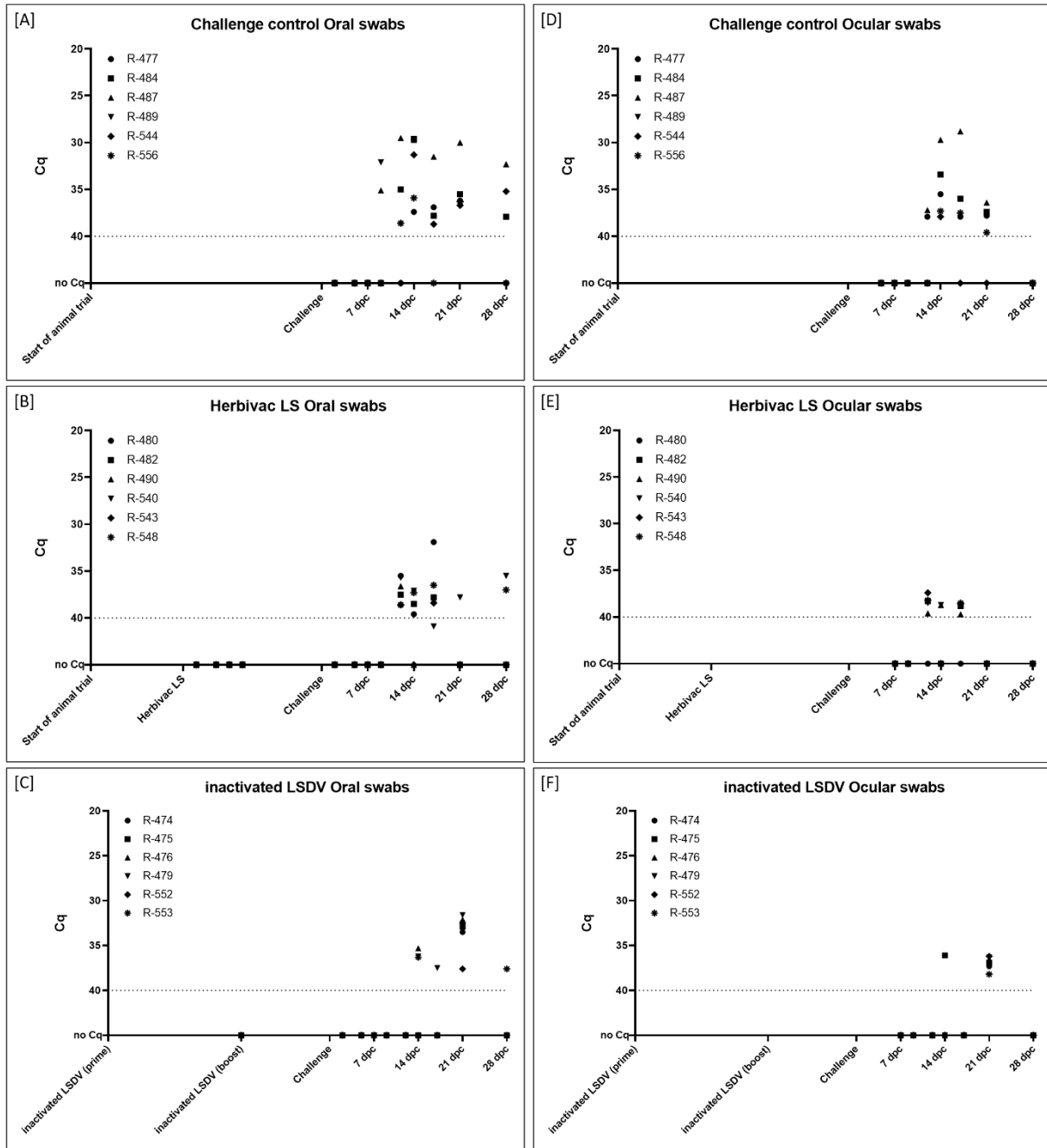


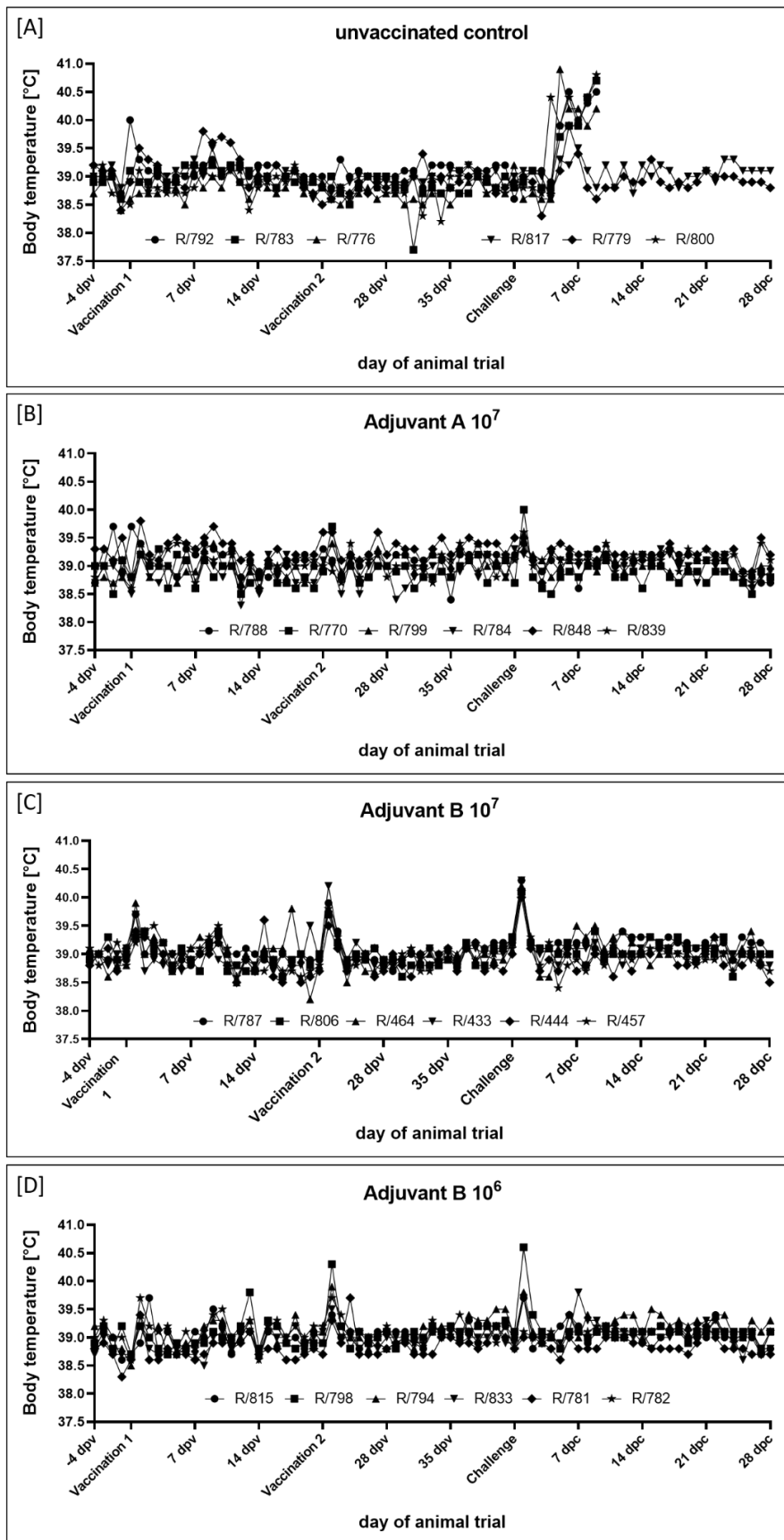
**Supplemental Figure S1.** Body temperature of the cattle during the proof-of-concept animal trial. Body temperature was measured daily starting a few days before first vaccination with inactivated LSDV until 28 dpc. **(A)** Cattle of Group 1A were left unvaccinated and served as challenge control group. **(B)** Cattle of Group 1B received the commercially available life-attenuated vaccine “Herbivac LS”, and **(C)** cattle of Group 1C were vaccinated with an inactivated vaccine prototype on basis of LSDV-“Neethling vaccine” strain.



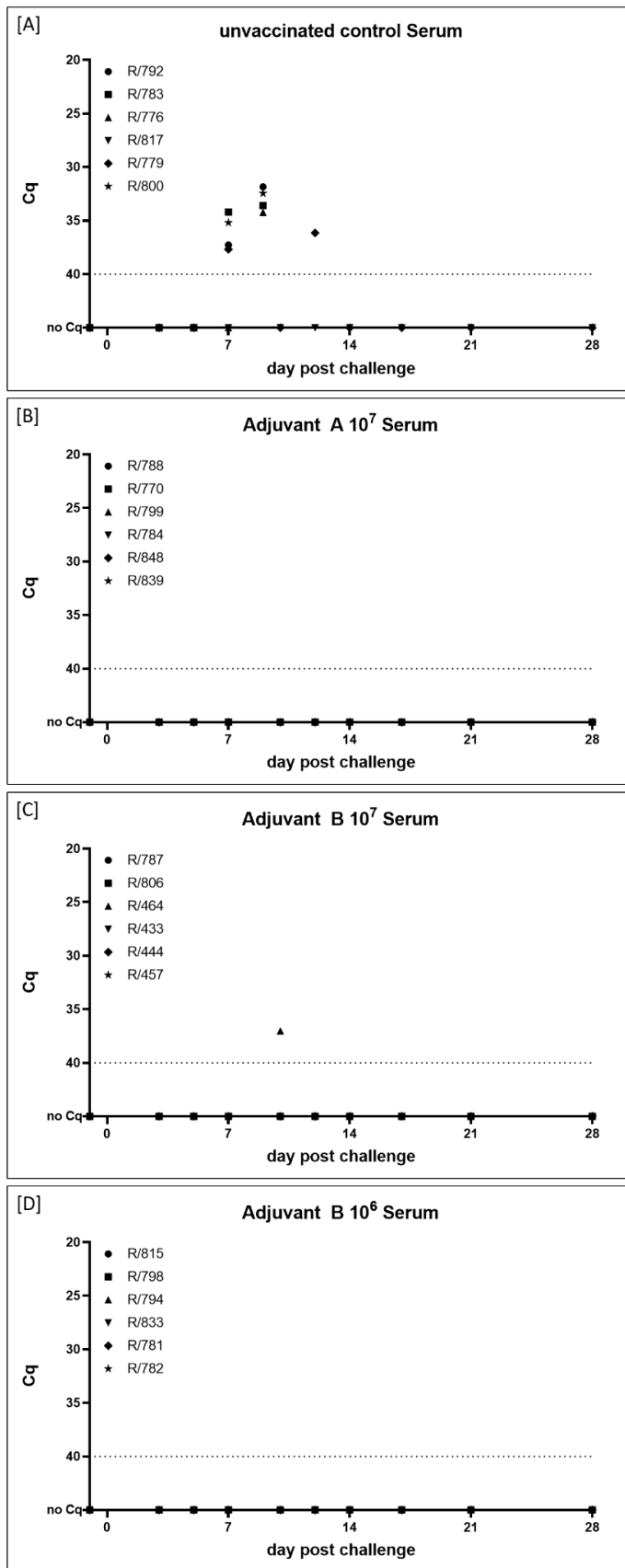
**Supplemental Figure S2.** Viral genome load in serum samples taken during the proof-of-concept study. (A) Cattle of Group 1A were left unvaccinated and served as challenge control group. (B) Cattle of Group 1B received the commercially available life-attenuated vaccine “Herbivac LS”, and (C) cattle of Group 1C were vaccinated with an inactivated vaccine prototype on basis of LSDV-“Neethling vaccine” strain. Samples were taken at defined time points during the animal trial and analyzed regarding their viral genome load. Cut-off was defined at Cq 40.0.



**Supplemental Figure S3.** Viral genome load in (A-C) oral and (D-F) ocular swab samples taken during the proof-of-concept study. (A+D) Cattle of Group 1A were left unvaccinated and served as challenge control group. (B+E) Cattle of Group 1B received the commercially available life-attenuated vaccine “Herbivac LS”, and (C+F) cattle of Group 1C were vaccinated with an inactivated vaccine prototype on basis of LSDV-“Neethling vaccine” strain. Samples were taken at defined time points during the animal trial and analyzed regarding their viral genome load. Cut-off was defined at Cq 40.0.



**Supplemental Figure S4.** Body temperature of the cattle during the vaccine-efficacy study. (A) Cattle of Group 2A serve as mock-control and received PBS. Animals of the other groups were immunized with inactivated LSDV-“Serbia” field strain using different adjuvants and virus titers before inactivation. (B) Cattle of Group 2B were vaccinated with Adjuvant A  $10^7$ , (C) cattle of Group 2C received Adjuvant B  $10^7$ , and (D) animals of Group 2D were immunized with Adjuvant B  $10^6$  prototype vaccine. Body temperature was measured daily from -4 dpv until 28 dpc.



**Supplemental Figure S5.** Viral genome load in serum samples taken during the vaccine-efficacy animal trial. **(A)** Cattle of Group 2A serve as mock-control and received PBS. Animals of the other groups were immunized with inactivated LSDV-“Serbia” field strain using different adjuvants and virus titers before inactivation. **(B)** Cattle of Group 2B were vaccinated with Adjuvant A 10<sup>7</sup>, **(C)** cattle of Group 2C received Adjuvant B 10<sup>7</sup>, and **(D)** animals of Group 2D were immunized with Adjuvant B 10<sup>6</sup> prototype vaccine. The samples were taken at certain time points during the animal trial and analyzed regarding the viral genome load. Cut-off was set at Cq 40.0.