



**S6 Fig.** No single cytochrome oxidase is required to establish infection. (A) Growth over time, measured via optical density (left) or CFU/mL (right), for strains with two cytochrome oxidase-encoding gene loci. The data for *cyd1<sup>+</sup> cta1<sup>+</sup>* can be found in S4A Fig. (B) Bacterial burden over time within the nasal cavity of mice infected with a strain with only the cytochrome oxidase-encoding gene loci conserved in *B. pertussis* (*Bp*-conserved, maroon hexagon), a strain with only *ctaCDFGE1* and *cyoABCD1* (*cta1<sup>+</sup> cyo1<sup>+</sup>*, orange upright triangle), a strain with only *cydAB1* and *cyoABCD1* (*cyd1<sup>+</sup> cyo1<sup>+</sup>*, blue diamond), or a strain with only *cydAB1* and *ctaCDFGE1* (*cyd1<sup>+</sup> cta1<sup>+</sup>*, green upside-down triangle). Samples from 5 mice were collected at each timepoint for each strain. However, due to the natural microbiota of the nasal cavity, *B. bronchiseptica* could not always be enumerated due to contamination. Therefore, n=4 for *cta1<sup>+</sup>* day 3. Each point represents a single mouse. Dashed line represents the limit of detection. Statistical significance was determined using unpaired Student's t-test; p-values are indicated when p < 0.05. Raw data: <https://doi.org/10.15139/S3/X7T09R> (S6A Fig); <https://doi.org/10.15139/S3/MOWIZL> (S6B Fig)