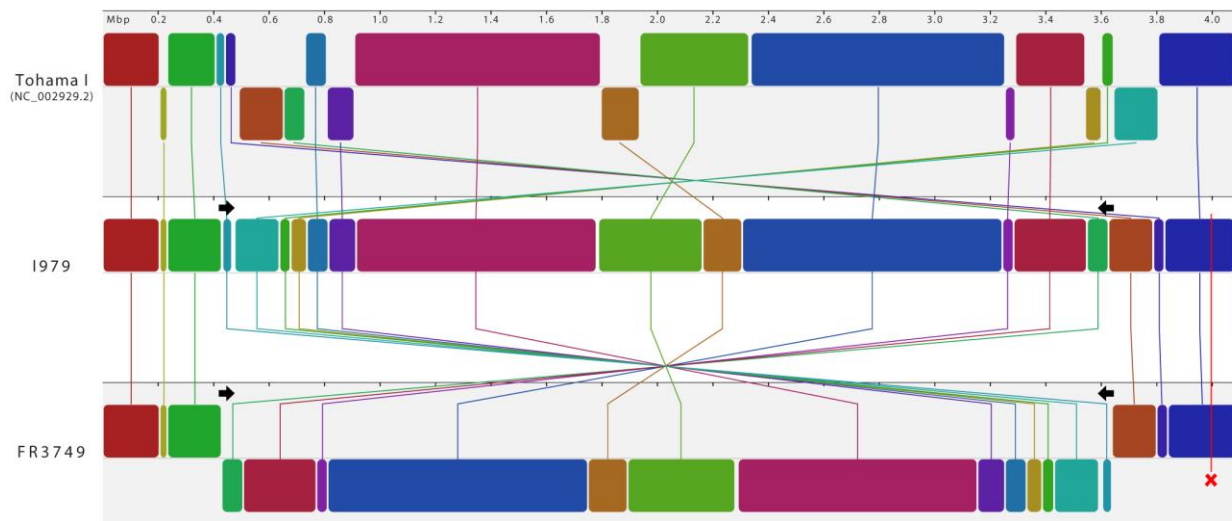


# *Bordetella pertussis* Lacking Pertactin and Pertussis Toxin

## Technical Appendix



**Technical Appendix Figure.** Genomic rearrangement in *Bordetella pertussis* strains I979 and FR3749 compared with vaccine strain Tohama I, aligned in progressiveMauve (<http://darlinglab.org/mauve/user-guide/progressivemauve.html>). I979 and FR3749 differ by 1 large rearrangement. Location of the 28-kb deletion that includes the *ptx/pta* operon is marked by a red vertical line.