

Description of Additional Supplementary Files

File Name: Supplementary Data file 1.

Description: SRA IDs of the PacBio Bordetella and E. coli data.

File Name: Supplementary Data file 2.

Description: SRA IDs of the ONT K. pneumoniae data.

File Name: Supplementary Data file 3.

Description: SRA IDs of the metagenomic data.

File Name: Supplementary Data file 4.

Description: SRA IDs of the data used to train the context effect model.

File Name: Supplementary Data file 5.

Description: The R2 of cross validation using different parameters to train the context effect model.