



**Figure S1.** Virulence-associated and AMR genes found in O80:H6 and O80:H45 strains.

The results of gene search by using VirulenceFinder and ResFinder are mapped to the ML trees of O80:H6 and O80:H45 (the same trees as shown in Figure 2 in the main text). The presence/absence of each gene is indicated by a filled/open box. Genes found in *E. coli* strain K-12 (No. NC\_000913) are indicated by asterisks. Bar, the mean number of nucleotide substitutions per site.