A

SRR1655895
7895 bp

- Plasmid replication initiation protein
- Mlp lipoprotein
- Zeta toxin
- hypothetical protein
- RelB antitoxin
- RelE toxin
- RrnaAD-methyltransferase
- CesA

B

SRR1799133
53 557 bp

- diguanylate cyclase/phosphodiesterase
- Sensory box histidine kinase/responseregulator
- hypothetical protein
- Agmatine deiminase
- hypothetical protein
- IncF plasmid conjugative transfer pilinacetyla
- type 1 fimbriae anchoring protein FimD
- IncF plasmid conjugative transfer DNA-nickinga
- Antirestriction protein ArdA
- YcgB
- Chaperone protein fimC precursor
- Chaperone protein fimC precursor
- Error-prone, lesion bypass DNA polymerase V
- Chaperone protein fimC precursor
- ParA
- StbE replicon stabilization toxin
- Invasin
- Resolvase
- hypothetical protein
- Putative outer membrane lipoprotein YmcA
- Polysaccharide export lipoprotein Wza
- VagD
- RepFIB
- Tyrosine-protein kinase Wzc
- Resolvase
- hypothetical protein
- Resolvase
- Mobile element protein
- hypothetical protein
- hypothetical protein
- Glycosyltransferase
- MrfJ
- PapA
- MrfB
- Minor fimbrial subunit StfG
- FIG027785: Fimbriae usher protein StfC
- MrfF
- Periplasmic fimbrial chaperone
- MrfF
- MrfE
- LuxR
- IncF
- ParB
- RelB/StbD
- VagC
- Wzb

C

ERR164661
582 473 bp

Ribonucleotide reductase of class Ia
hypothetical protein
hypothetical protein
putative phage integrase family
ImpK/VasF
FlgC
FliR
IcmJ
IcmL
hypothetical protein
hypothetical protein
LemA protein
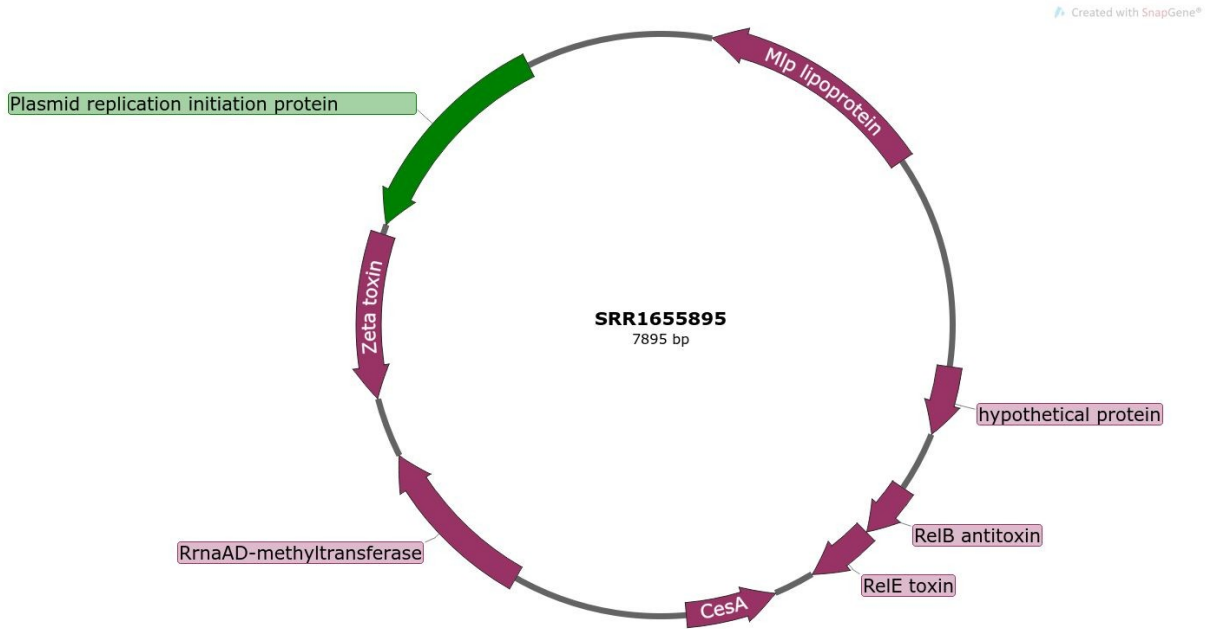hypothetical protein
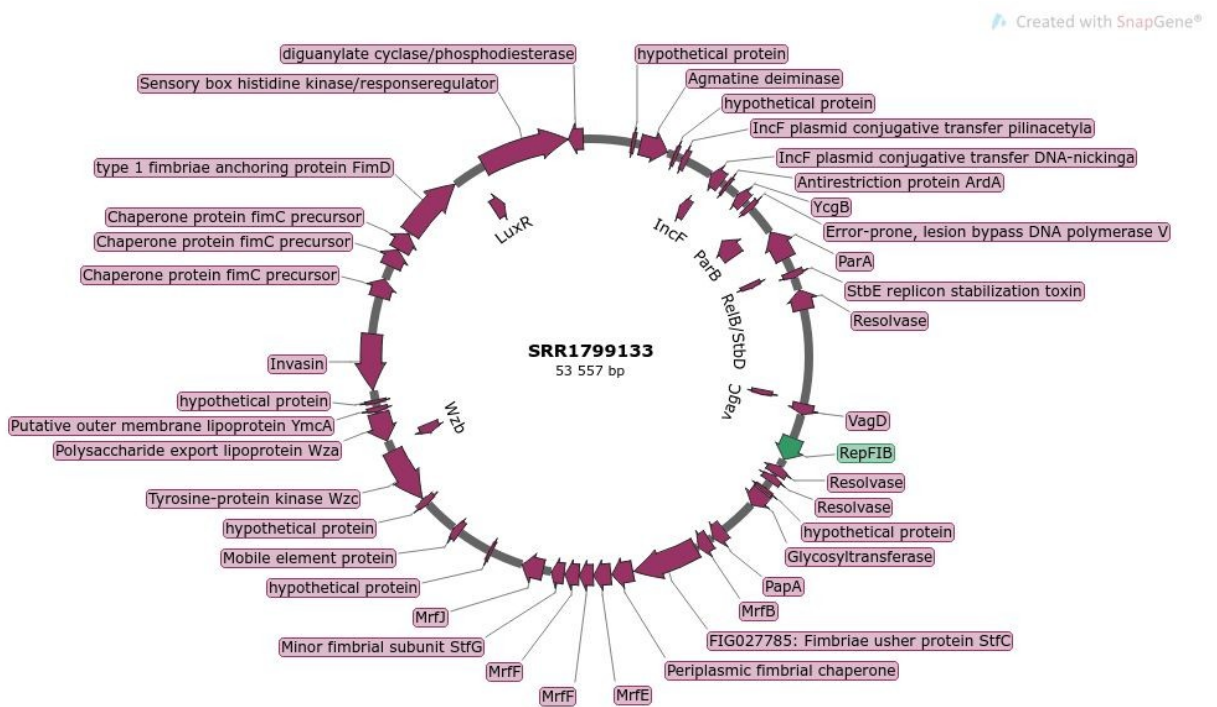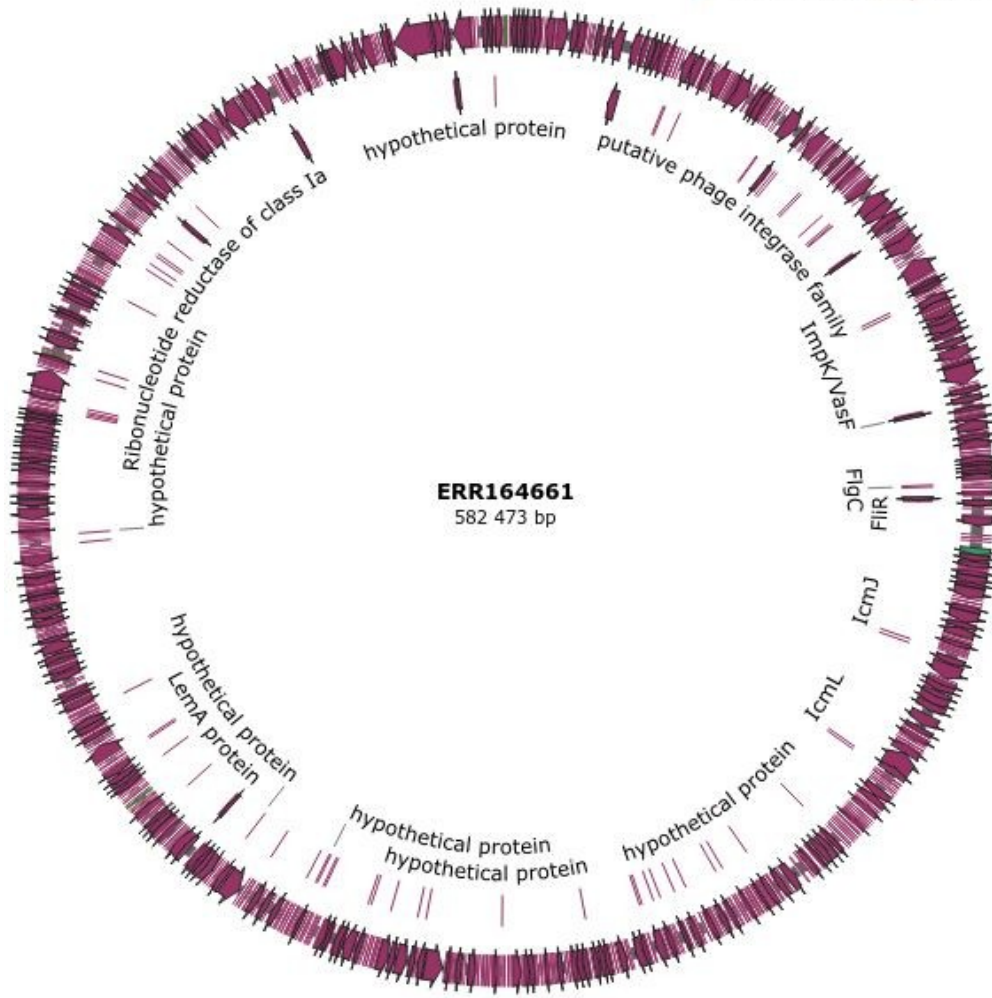hypothetical protein
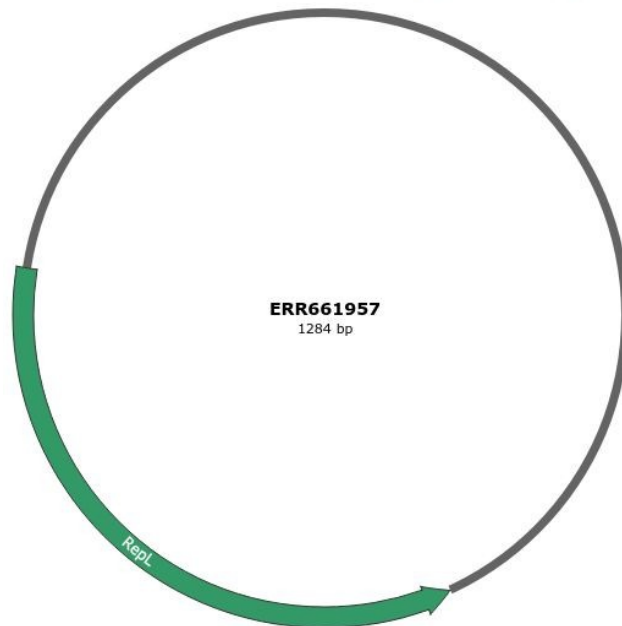hypothetical protein

D

ERR661957
1284 bp

RepL

Figure S1. Maps of the example plasmids from the ISOLATES dataset.
Plasmid replication proteins are highlighted in green. (A) 7,895 bp long plasmid from *Streptococcus pseudopneumoniae* clinical isolate, (B) 53,557 bp long plasmid from *Enterobacter sp.* CC120223-11, (C) 582 kb long plasmid from halophilic marine gammaproteobacteria *Ferrimonas marina*, strain DSM 16917, (D) 1284 bp long plasmid from the fish pathogen *Ca. Ichthyocystis* 2013Ark19i. The maps built with the SnapGene software (GSL Biotech, snapgene.com).