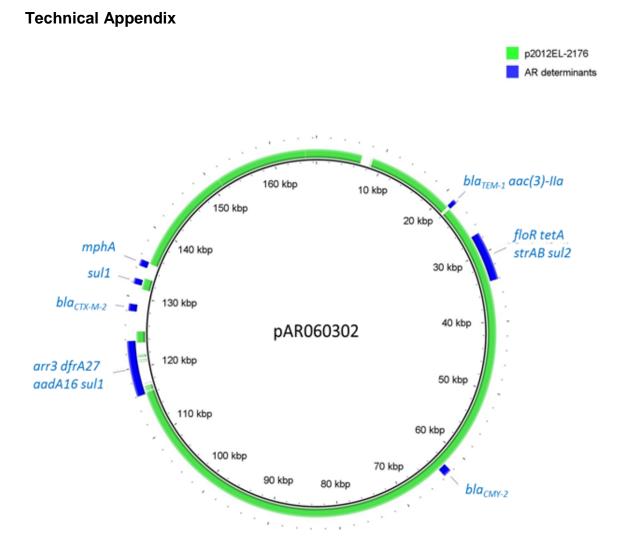
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Multidrug-Resistant IncA/C Plasmid in Vibrio cholerae from Haiti



Technical Appendix Figure. Comparative analysis of plasmid p2012EL-2176 to plasmid pAR060302. The genome was sequenced by using NexteraXT library kits, paired-end, 150-bp reads using a MiSeq (Illumina, San Diego, CA, USA) (GenBank accession nos. CP007634 and CP007635) and on 4 SMRT cells on the Pacific Biosciences *RS* (Pacific Biosciences, Menlo Park, CA, USA) and assembled with the HGAP1 protocol (P_PreAssembler for error correction, Celera Assembler for assembly of corrected reads). A 35× long-read cutoff (8,855 bp) was used in the P_PreAssembler, and the longest (15.3×) of the corrected reads were assembled by Celera. The assembly yielded 1 plasmid contig (GenBank accession

no. CP007636). A BLAST comparison was performed by using BLASTN with a cutoff value of 70% identity and pAR060302 as the reference sequence. The green circle shows the regions of p2012EL-2176 with identity to pAR060302. The blue inserts show regions of p2012EL-2176 containing antimicrobial-drug resistance (AR) genes. The circular plot was generated by using BLAST Ring Image Generator (BRIG) software (1).

Additional methods:

The conjugation experiment used *V. cholerae* 2012EL-2176 as the donor and *E. coli* J53 (sodium azide R) as the recipient (2).

The 3 resistance regions on IncA/C-cmy plasmids are described in this publication (3).

References

- Alikhan NF, Petty NK, Ben Zakour NL, Beatson SA. BLAST Ring Image Generator (BRIG): simple prokaryote genome comparisons. BMC Genomics. 2011.12:402. <u>http://dx.doi.or/10.1186/1471-2164-12-402</u>
- Martínez L, Pascual A, Jacoby GA. Quinolone resistance from a transferable plasmid. Lancet. 1998;351:797–9. <u>PubMed http://dx.doi.org/10.1016/S0140-6736(97)07322-4</u>
- Johnson TJ, Lang KS. IncA/C plasmids: An emerging threat to human and animal health? Mob Genet Elements. 2012;2:55–8. <u>PubMed http://dx.doi.org/10.4161/mge.19626</u>