

Genomic DNA from *Escherichia coli*, Strain EDL933

Catalog No. NR-2648

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Genomic DNA was extracted from a preparation of *Escherichia coli* (*E. coli*), strain EDL933, serotype O157:H7. The enterohemorrhagic *E. coli* (EHEC), strain EDL933 was isolated from raw hamburger meat implicated in a multi-state outbreak of hemorrhagic colitis in the United States in 1982.¹

E. coli, strain EDL933 carries two plasmids, pO157 and pEDL933. Virulence-associated genes are located on both the chromosomal and plasmid DNA. The complete genome and pO157 sequences of *E. coli*, strain EDL933 are available (GenBank: [NC_002655](#) and [AF074613](#)). The presence of plasmid pO157 and EHEC virulence markers in NR-2648 have been confirmed by PCR amplification.

NR-2648 has been qualified for PCR applications by amplification of approximately 1500 base pairs of the 16S ribosomal RNA gene.

Material Provided:

Each vial contains 0.7 µg to 1.5 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH ~ 8.0). Lot 5107305 contains approximately 4 µg to 6 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH ~ 7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-2648 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from *Escherichia coli*, Strain EDL933, NR-2648."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and

Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Riley, L. W., et al. "Hemorrhagic Colitis Associated with a Rare *Escherichia coli* Serotype." [N. Engl. J. Med.](#) 308 (1983): 681-685. PubMed: 6338386.
2. Perna, N. T., et al. "Genome Sequence of Enterohaemorrhagic *Escherichia coli* O157:H7." [Nature](#) 409 (2001): 529-533. PubMed: 11206551
3. Burland, V., et al. "The Complete DNA Sequence and Analysis of the Large Virulence Plasmid of *Escherichia coli* O157:H7." [Nucleic Acids Res.](#) 26 (1998): 4196-4204. PubMed: 9722640.

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