

**Genomic DNA from *Escherichia coli*, Strain EDL933**

**Catalog No. NR-2648**

**Product Description:** Genomic DNA was isolated 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.

**Lot<sup>1</sup>: 61740159**

**Manufacturing Date: 13MAY2013**

TEST	SPECIFICATIONS	RESULTS
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	Consistent with <i>E. coli</i>	Consistent with <i>E. coli</i> <sup>2,3</sup>
<b>PCR Assay of Extracted DNA</b> 16S ribosomal RNA gene PCR amplification of plasmid markers <sup>4,5</sup> <i>hylA</i> (pO157) <i>elt</i> (pJY11) <i>esth</i> (pCS1) <i>estp</i> (pCS1) EAF (pEAF) <i>bfpA</i> (pEAF) <i>invE</i> (pINV) CVD432 (pAA) <i>aggR</i> (pAA) PCR amplification of chromosomal markers <sup>4,5</sup> <i>eeA</i> <i>stx1</i> <i>stx2</i> <i>astA</i>	~ 1500 base pair amplicon  Positive Negative Negative Negative Negative Negative Negative Negative Negative Negative Negative Positive Report results Report results Report results	~ 1500 base pair amplicon  Positive Negative Negative Negative Negative Negative Negative Negative Negative Negative Negative Positive Positive Positive Negative
<b>Agarose Gel Electrophoresis</b>	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
<b>Concentration by PicoGreen<sup>®</sup> Measurement</b>	0.7 to 1.5 µg in 25 to 100 µL per vial	0.9 µg in 25 µL per vial (0.04 µg/µL)
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio</b>	1.7 to 2.0	2.0
<b>Bacterial Inactivation</b> 10% of total yield plated on Tryptic Soy agar with 5% defibrinated sheep blood <sup>6,7</sup>	No viable bacteria detected	No viable bacteria detected

<sup>1</sup>The bacterial preparation used for extraction of genomic DNA was produced by inoculation of BEI Resources NR-11 lot 3560110. Genomic DNA was extracted using proprietary technology.

<sup>2</sup>Also consistent with *Shigella* species

<sup>3</sup>≥ 99% identical to GenBank: AE005174.2 (*E. coli*, strain EDL933, serotype O157:H7)

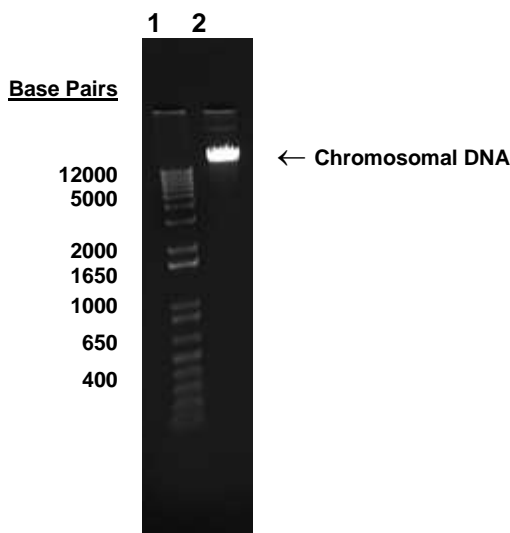
<sup>4</sup>PCR was completed on DNA extracted from NR-11 lot 3560110 for NR-2648 lot 5107305.

<sup>5</sup>Kimata, K., et al. "Rapid Categorization of Pathogenic *Escherichia coli* by Multiplex PCR." *Microbiol. Immunol.* 49 (2005): 485-492. PubMed: 15965295.

<sup>6</sup>7 days at 37°C and aerobic atmosphere

<sup>7</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Figure 1



Lane 1: Invitrogen™ 1Kb DNA Ladder™  
Lane 2: 200 ng of NR-2648

Date: 22 JAN 2014

Signature: 

Title: Technical Manager, BEI Authentication or designee

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