

Genomic DNA from *Escherichia coli*, Strain EDL933

Catalog No. NR-2648

Product Description: Genomic DNA was isolated from a preparation of enterohemorrhagic *Escherichia coli* (EHEC) strain EDL933, serotype O157:H7. The bacterial preparation was produced by propagation of BEI Resources NR-11.

Lot¹: 5107305

Manufacturing Date: 07FEB2006

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S rRNA gene (~ 500 bp) PCR amplification of plasmid markers <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 <i>eaeA</i> <i>stx1</i> <i>stx2</i> <i>astA</i>	Identical to NR-11 Consistent with <i>Escherichia coli</i> Positive Negative Negative Negative Negative Negative Negative Negative Negative Negative Positive Report results Report results Report results	Identical to NR-11 Consistent with <i>Escherichia coli</i> ² Positive Negative Negative Negative Negative Negative Negative Negative Negative Negative Positive Positive Positive Negative
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	4 to 6 µg in 25 to 100 µL per vial	5.1 µg in 77 µL per vial (66 µg/mL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene Virulence markers ³ <i>hylA</i> (pO157) <i>eaeA</i> (chromosome) <i>stx1</i> (chromosome) <i>stx2</i> (chromosome)	~ 1500 bp amplicon ~ 3200 bp amplicon ~ 526 bp amplicon ~ 349 bp amplicon ~ 404 bp amplicon	~ 1500 bp amplicon ~ 3200 bp amplicon ~ 526 bp amplicon ~ 349 bp amplicon ~ 404 bp amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	1.9
Bacterial Inactivation 10% of total yield plated on Nutrient Agar and incubated for 7 days at 37°C	No viable bacteria detected	No viable bacteria detected

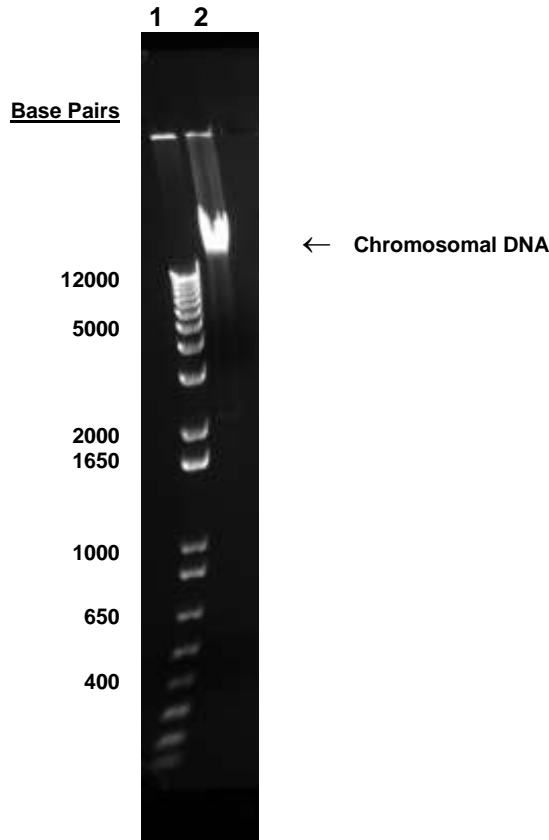
¹The bacterial preparation used for extraction of genomic DNA was produced by inoculation of BEI Resources NR-11 (Lot 3560110) into LB Broth (ATCC® 60-2100). After incubation for 16 hours at 37°C, genomic DNA was extracted using proprietary technology.

²Also consistent with *Shigella* species.

³Kimata, K., et al. "Rapid Categorization of Pathogenic *Escherichia coli* by Multiplex PCR." *Microbiol. Immunol.* 49 (2005): 485–492. PubMed: 15965295.

⁴An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative bacteria.

Figure 1



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

Date: 10 MAR 2008

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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