

# Genomic DNA from Escherichia coli, Strain BDMS 770

### Catalog No. NR-3048

**Product Description:** Genomic DNA was isolated from a preparation of enterohemorrhagic *Escherichia coli* (EHEC), strain BDMS 770, serotype O157:H7.

### Lot<sup>1</sup>: 7559646

### Manufacturing Date: 10AUG2006

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 460 bp)	Identical to BEI Resources NR-10 Consistent with Escherichia coli	Identical to BEI Resources NR-10 Consistent with <i>Escherichia coli</i> <sup>2</sup>
Presence of Plasmid Confirmed by PCR Amplification pO157	Confirmed	Confirmed
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen <sup>®</sup> Measurement	4 to 6 $\mu$ g in 25 to 100 $\mu$ L per vial	4.7 μg in 31 μL per vial (151 μg/mL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene Gene-length DNA from pO157 ( <i>hlyA</i> virulence marker) Virulence markers on chromosome <sup>3</sup> stx1 stx2 eaeA	<ul> <li>1500 bp amplicon</li> <li>3200 bp amplicon</li> <li>349 bp amplicon</li> <li>404 bp amplicon</li> <li>526 bp amplicon</li> </ul>	~ 1500 bp amplicon ~ 3200 bp amplicon ~ 349 bp amplicon ~ 404 bp amplicon ~ 526 bp amplicon
OD <sub>260</sub> /OD <sub>280</sub> Ratio	1.7 to 1.9	1.9
Bacterial Inactivation 10% of total yield plated on Tryptic Soy Agar <sup>4,5</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-10 (Lot: 3592828) onto Tryptic Soy Agar. After incubation for 20 hours at 37°C, genomic DNA was extracted using proprietary technology.

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

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

<sup>4</sup>7 days at 37°C in an aerobic atmosphere.

<sup>5</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative bacteria.

Date: 09 July 2008

# Signature: Signature on file

Title:

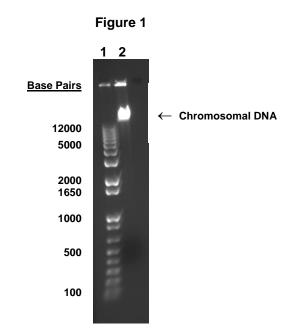
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Lane 1: Invitrogen™ 1 Kb Plus DNA Ladder™ Lane 2: 200 ng of NR-3048

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