

## Genomic DNA from *Yersinia pestis*, Strain Yokohama Derivative 10 (D10)

**Catalog No. NR-4716**

**Product Description:** Genomic DNA was isolated from a preparation of *Yersinia pestis* (*Y. pestis*), strain Yokohama derivative 10 (D10).

**Lot<sup>1</sup>: 57665535**

**Manufacturing Date: 24JUL2007**

TEST	SPECIFICATIONS	RESULTS
<b>Sequencing of 16S Ribosomal RNA Gene ( ~ 1420 bp)</b>	Identical to BEI Resources NR-4692 Consistent with <i>Y. pestis</i>	Identical to BEI Resources NR-4692 Consistent with <i>Y. pestis</i> <sup>2</sup>
<b>Presence of Plasmids Confirmed by PCR Amplification</b> pMT1 (pFra; ~ 100 kb plasmid) pCD1 (pYV; ~ 70 kb plasmid) pPCP1 (pPla; ~ 9.5 kb plasmid)	Positive Negative Positive	Positive Negative Positive
<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>	4 to 6 µg in 25 to 100 µL per vial	4.9 µg in 33 µL per vial (150 µg/mL)
<b>Functional Activity by PCR Amplification</b> 16S ribosomal RNA gene Virulence-associated plasmids pMT1 (pFra; ~ 100 kb plasmid) pCD1 (pYV; ~ 70 kb plasmid) pPCP1 (pPla; ~ 9.5 kb plasmid)	~ 1500 bp amplicon  ~ 1200 bp amplicon None detected ~ 400 bp amplicon	~ 1500 bp amplicon  ~ 1200 bp amplicon None detected ~ 400 bp amplicon
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio</b>	1.7 to 1.9	1.9
<b>Bacterial Inactivation</b> 10% of total yield plated on Tryptic Soy Agar <sup>3,4</sup>	No viable bacteria detected	No viable bacteria detected

<sup>1</sup>*Y. pestis*, strain Yokohama(D10) was deposited by Professor Robert R. Brubaker of the Department of Microbiology and Molecular Genetics at Michigan State University, East Lansing, Michigan. The bacterial preparation used for extraction of genomic DNA was produced by broth (Tryptic Soy Broth; BD 211768) culture of the deposited material. After incubation for 48 hours at 28°C and aerobic atmosphere, genomic DNA was extracted using proprietary technology.

<sup>2</sup>Also consistent with other *Yersinia* species

<sup>3</sup>7 days at 28°C in an aerobic atmosphere

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

**Date:** 12 AUG 2008

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

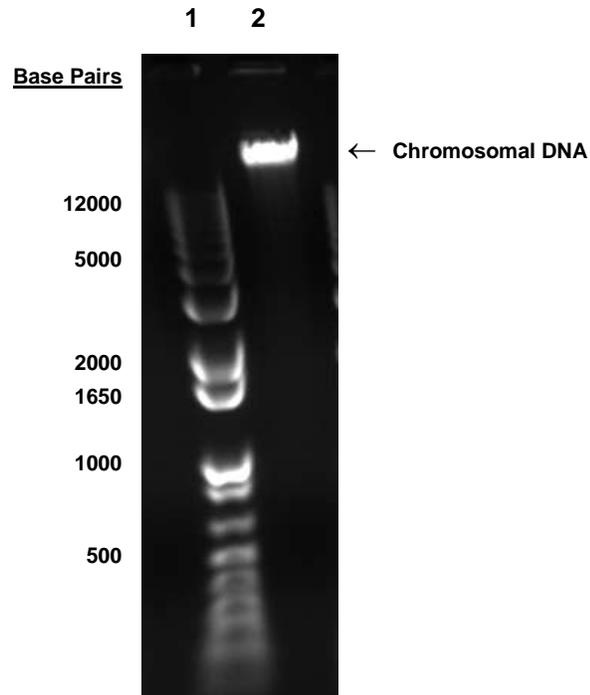
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You are authorized to use this product for research use only. It is not intended for human use.



Figure 1



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder  
Lane 2: 200 ng of NR-4716