

Genomic DNA from *Yersinia pestis*, Strain A1122

Catalog No. NR-3040

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Product Description: Genomic DNA was isolated from a preparation of *Yersinia pestis* (*Y. pestis*), strain A1122.

Lot¹: 63815634

Manufacturing Date: 29OCT2015

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 1440 base pairs)	≥ 99% sequence identity to <i>Y. pestis</i> , strain A1122 (GenBank: CP_009840.1)	100% sequence identity to <i>Y. pestis</i> , strain A1122 (GenBank: CP_009840.1)
Presence of Plasmids Containing Virulence Markers by Next Generation Sequencing² pMT1 (110 kilobase) plasmid pCD1 (70 kilobase) plasmid pPCP1 (9.5 kilobase) plasmid	Plasmid present Plasmid absent Plasmid present	Plasmid present Plasmid absent Plasmid present
Presence of Chromosomal Virulence Markers by Next Generation Sequencing² <i>pgm</i> locus	Sequence absent	Sequence absent
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1 µg in 29 µL per vial (0.04 µg/µL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.8
Bacterial Inactivation 10% of total yield plated on agar ³	No viable bacteria detected	No viable bacteria detected

¹The bacterial preparation used for extraction of genomic DNA was produced from NR-636 (Lot 4431717). Genomic DNA was extracted using proprietary technology.

²Genomic DNA was sequenced via the illumina[®] MiSeq platform. *De novo* contig sequences and reference-guided assemblies were generated using CLC Genomics Workbench v7.5.

³An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Date: 20 JUN 2016

Signature:



BEI Resources Authentication

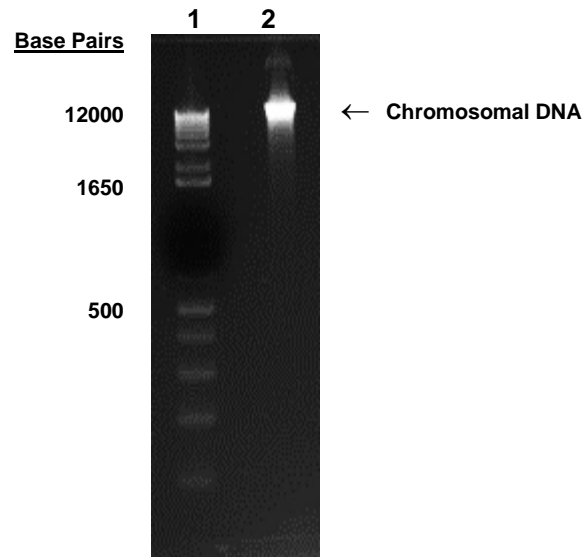
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Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-3040