

Genomic DNA from *Yersinia pestis*, Strain KIM Derivative 2 (D2)

Catalog No. NR-4706

Product Description: Genomic DNA was isolated from a preparation of *Yersinia pestis* (*Y. pestis*), strain KIM Derivative 2 (D2).

Lot¹: 58152458

Manufacturing Date: 18APR2008

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 1440 bp)	Identical to BEI Resources NR-4682 Identical to GenBank AE009952 Consistent with <i>Y. pestis</i>	Identical to BEI Resources NR-4682 Identical to GenBank AE009952 Consistent with <i>Y. pestis</i> ²
Presence of Plasmids Confirmed by PCR Amplification pMT1 (pFra; 110 kb plasmid) pCD1 (pYV; 70 kb plasmid) pPCP1 (pPla; 9.5 kb plasmid)	Positive Negative Positive	Positive Negative Positive
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 33 µL per vial (153 µg/mL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene Virulence-associated plasmids pMT1 (pFra; 110 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
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	1.9
Bacterial Inactivation 10% of total yield plated on Tryptic Soy Agar ^{3,4}	No viable bacteria detected	No viable bacteria detected

¹*Y. pestis*, strain KIM(D2) 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.

²Also consistent with other *Yersinia* species.

³7 days at 28°C in an aerobic atmosphere.

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

Date: 31 JUL 2008

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

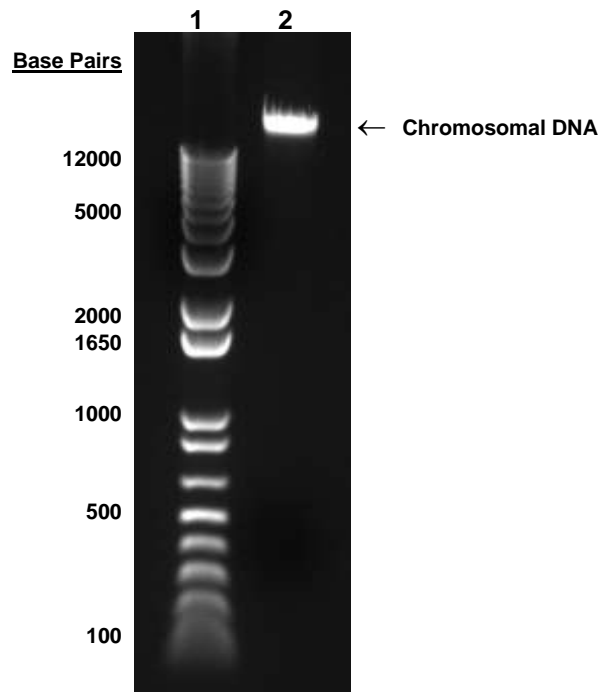
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Figure 1



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-4706