

Genomic DNA from *Klebsiella pneumoniae*, Isolate 3

Catalog No. NR-15466

Product Description:

Genomic DNA was extracted from a preparation of *Klebsiella pneumoniae* (*K. pneumoniae*), isolate 3. *K. pneumoniae*, isolate 3 contains the β -lactamase *K. pneumoniae* carbapenemase (*bla*_{KPC}) gene. The bacterial preparation used for extraction of genomic DNA was produced by the culture of BEI Resources NR-15412 lot 58855073 using proprietary technology and vialled in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8).

Lot: 70066208

Manufacturing Date: 14FEB2024

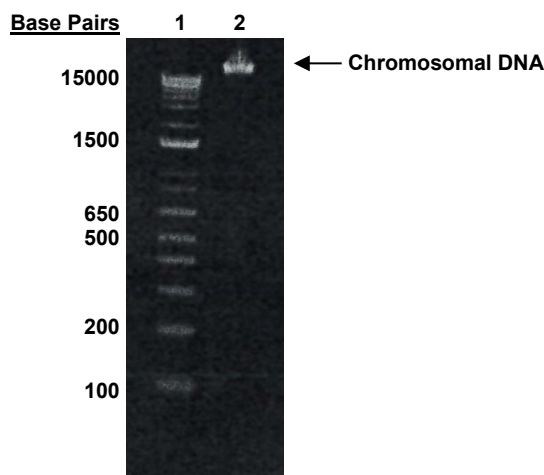
TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1420 base pairs)	$\geq 99\%$ sequence identity to <i>K. pneumoniae</i> type strain (GenBank: Y17656.1)	99.6% sequence identity to <i>K. pneumoniae</i> type strain (GenBank: Y17656.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	0.7 to 1.5 μ g in 25 to 100 μ L per vial	0.9 μ g in 33 μ L per vial (28 μ g/mL)
Amount per Vial	0.7 to 1.5 μ g	0.9 μ g
Functional Activity by PCR Amplification 16S ribosomal RNA gene Presence of β -lactamase (<i>bla</i> _{KPC}) gene ¹	~ 1500 base pair amplicon ~ 1000 base pair amplicon	~ 1500 base pair amplicon ~ 1000 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.8
Bacterial Inactivation 10% of total yield inoculated in Tryptic Soy agar incubated for 14 days at 37°C in an ambient atmosphere ²	No viable bacteria detected	No viable bacteria detected

¹Yigit, H. et al. "Novel Carbapenem-Hydrolyzing β -Lactamase, KPC-1, from a Carbapenem-Resistant Strain of *Klebsiella pneumoniae*." *Antimicrob. Agents Chemother.* 45 (2001): 1151-1161. PubMed: 11257029.

²An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Certificate of Analysis for NR-15466

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-15466

/Sonia Bjorum Brower/

Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

11 APR 2024

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