SUPPORTING INFECTIOUS DISEASE RESEARCH

# Klebsiella pneumoniae, Strain BIDMC 12B

### Catalog No. NR-41929

**Product Description:** *Klebsiella pneumoniae (K. pneumoniae)*, strain BIDMC 12B was isolated in 2010 from a blood culture of a human in Boston, Massachusetts, USA.

#### Lot<sup>1</sup>: 70007987

# Manufacturing Date: 09AUG2017

TEST	SPECIFICATIONS	RESULTS
	SPECIFICATIONS	RESOLIS
Phenotypic Analysis		
Cellular morphology	Gram-negative bacilli	Gram-negative bacilli
Colony morphology <sup>2</sup>	Report results	Circular, convex, entire, smooth and
		grey (Figure 1)
Motility (wet mount)	Report results	Non-motile
VITEK <sup>®</sup> 2 Compact (GN card)	K. pneumoniae (≥ 90%)	K. pneumoniae (99%) <sup>3</sup>
Antibiotic Susceptibility Profile		
VITEK <sup>®</sup> (AST-GN83) <sup>4</sup>		
Ampicillin	Report results	Resistant (≥ 32 µg/mL)
Amoxicillin/clavulanic acid	Report results	Resistant (≥ 32 µg/mL)
Ampicillin/sulbactam	Resistant	Resistant (≥ 32 µg/mL)
Piperacillin/tazobactam	Resistant	Resistant (≥ 128 µg/mL)
Cefazolin	Report results	Resistant (≥ 64 µg/mL)
Cefuroxime	Report results	Resistant (≥ 64 µg/mL)
Cefuroxime axetil	Report results	Resistant <sup>5</sup> (≥ 64 µg/mĹ)
Cefoxitin	Report results	Resistant (≥ 64 µg/mL)
Cefotaxime	Report results	Resistant (= $32 \mu g/mL$ )
Ceftazidime	Report results	Resistant (≥ 64 µg/mL)
Ceftriaxone	Report results	Resistant (≥ 64 µg/mL)
Cefepime	Resistant	Inconclusive <sup>6</sup>
Aztreonam	Report results	Resistant (≥ 64 µg/mL)
Meropenem	Resistant	Resistant (≥ 16 µg/mL)
Amikacin	Report results	Resistant (≥ 64 µg/mL)
Gentamicin	Report results	Sensitive (= 4 $\mu$ g/mL)
Ciprofloxacin	Report results	Resistant (≥ 4 µg/mL)
Nitrofurantoin	Report results	Resistant (= 256 µg/mL)
Trimethoprim/sulfamethoxazole	Report results	Resistant (≥ 320 µg/mL)
Etest <sup>®</sup> antibiotic test strips <sup>7</sup>		
Ceftriaxone	Report results	Resistant (= 48 µg/mL)
Tobramycin	Report results	Intermediate (= 12 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	≥ 99% sequence identity to	99.2% sequence identity to
(~ 770 base pairs)	K. pneumonia, strain BIDMC 12B	K. pneumonia, strain BIDMC 12B
(	(GenBank: JCND01000010.1)	(GenBank: JCND01000010.1) <sup>8</sup>
	Consistent with expected colony	Consistent with expected colony
Purity (post-freeze) <sup>9</sup>	morphology	morphology
Viability (post-freeze) <sup>2</sup>	Growth	Growth
	aited motorial into Truptic Courbrath and group for 1	

<sup>1</sup>NR-41929 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

<sup>21</sup> day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

<sup>3</sup>Percent probabilities above 90% indicate a close match to the typical biochemical pattern for the given organism, with a percent probability of 99% being a perfect match between the test reaction pattern and the unique biochemical pattern of the given organism or organism group. For additional information, please refer to O'Hara, C. M. and J. M. Miller. "Evaluation of the VITEK 2 ID-GNB Assay for Identification of Members of the Family Enterobacteriaceae and Other Nonenteric Gram-Negative Bacilli and Comparison with the VITEK GNI+ Card." J. Clin. Microbiol. 41 (2003): 2096-2101. PubMed: 12734254.

RESOURCES

# **Certificate of Analysis for NR-41929**

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<sup>4</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

<sup>5</sup>MIC interpretation was determined using VITEK<sup>®</sup> 2 software version 07.01 combined with the bioMérieux Advanced Expert System<sup>™</sup> (AES) software using the interpretation standard CLSI M100-S22 (2012) and the interpretation guideline "Natural Resistance." For more information, please refer to Sanders, C. C., et al. "Potential Impact of the VITEK 2 System and the Advanced Expert System on the Clinical Laboratory of a University-Based Hospital." J. Clin. Microbiol. 39 (2001): 2379-2385. PubMed: 11427542.

<sup>6</sup>K. pneumonia, strain BIDMC 12B was deposited as resistant to cefepime. Antibiotic susceptibility testing performed in duplicate determined that for strain BIDMC 12B, the cefepime MICs are 16 μg/mL and 32 μg/mL, which are interpreted as intermediate and resistant, respectively.

<sup>7</sup>1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

<sup>8</sup>Also consistent with other organisms

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<sup>9</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood.



Date: 14 NOV 2017

Signature:

**BEI Resources Authentication** 

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