

***Klebsiella pneumoniae*, Strain UCI 41**

Catalog No. NR-48561

Product Description: *Klebsiella pneumoniae* (*K. pneumoniae*), strain UCI 41 was isolated in 2013 from the urine of a non-ICU human patient in Irvine, California, USA. *K. pneumoniae*, strain UCI 41 was deposited as a carbapenem resistant strain and is part of a Carbapenem Resistant Enterobacteriaceae (CRE) Sequencing Project at the Broad Institute. Strain UCI 41 was also deposited as resistant to amikacin, meropenem and cefoxitin.

Lot¹: 63445876

Manufacturing Date: 15APR2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) VITEK [®] MS (MALDI-TOF)	Gram-negative rods Report results Report results Consistent with <i>K. pneumoniae</i>	Gram-negative rods Circular, low convex, entire, smooth, mucoid and gray (Figure 1) Non-motile Consistent with <i>K. pneumoniae</i>
Antibiotic Susceptibility Profile VITEK [®] (AST-GN69) ³ ESBL ^{4,5} Ampicillin Amoxicillin/Clavulanic Acid Ampicillin/Sulbactam Piperacillin/Tazobactam Cefazolin Ceftazidime Ceftriaxone Cefepime Ertapenem Imipenem Gentamicin Tobramycin Ciprofloxacin Levofloxacin Nitrofurantoin Trimethoprim/Sulfamethoxazole	Report results Resistant Report results Resistant Report results Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Report results Resistant Resistant Resistant Sensitive	Negative Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 128 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (= 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 512 µg/mL) Sensitive (≤ 20 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1450 base pairs)	Consistent with <i>K. pneumoniae</i>	Consistent with <i>K. pneumoniae</i> ^{6,7}
Purity (post-freeze)⁸	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

¹NR-48561 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.

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

³Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

⁴The VITEK[®]2 ESBL Test is a confirmatory test for Extended-Spectrum Beta-Lactamases (ESBLs) inhibited by clavulanic acid and utilizes cefepime, cefotaxime and ceftazidime, with and without clavulanic acid, to determine a positive or negative result.

⁵A negative ESBL test does not rule out the presence of an ESBL as there are many types of ESBL that may not be covered with this card. Furthermore, the ESBL phenotype may be masked by an AmpC β-lactamase. For more information, refer to Gniadkowski, M. "Evolution and Epidemiology of Extended-Spectrum β-Lactamases (ESBLs) and ESBL-Producing Microorganisms." *Clin. Microbiol. Infect.* 7 (2001): 597-608. PubMed: 11737084.

⁶Also consistent with other *Klebsiella* species

⁷≥ 99% identical to *K. pneumoniae*, strain UCI 41 (GenBank: JCMSA01000001.1)

⁸Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 23 NOV 2015

Signature:

A handwritten signature in black ink, which appears to read "David C. Archer".

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