

***Klebsiella pneumoniae*, Strain UCI 20**

Catalog No. NR-48560

Product Description: *Klebsiella pneumoniae* (*K. pneumoniae*), strain UCI 20 was isolated in 2013 from the urine of a non-ICU human patient in Irvine, California, USA. *K. pneumoniae*, strain UCI 20 is part of Carbapenem-Resistant Enterobacteriaceae (CRE) Sequencing Project at the Broad Institute.

Lot¹: 70006297

Manufacturing Date: 09JUN2017

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphologies ^{2,3} Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative rods Report results Report results <i>K. pneumoniae</i>	Gram-negative rods Colony type 1: Circular, convex, entire, smooth and cream (Figure 1) Colony type 2: Circular, convex, entire, smooth and white (Figure 1) Non-motile <i>K. pneumoniae</i> (99.9%)
Antibiotic Susceptibility Profile VITEK® (AST-GN69) ⁴ ESBL ^{5,6} 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 Sensitive Report results Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Negative Resistant ≥ 32 µg/mL Sensitive (≤ 2 µg/mL) Sensitive (= 4 µg/mL) Sensitive (≤ 4 µg/mL) Sensitive (≤ 4 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 16 µg/mL) Sensitive (≤ 20 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 770 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain UCI 20 (GenBank: JCMJ01000015.1)	99.4% sequence identity to <i>K. pneumoniae</i> , strain UCI 20 (GenBank: JCLZ01000015.1) ⁷
Purity (post-freeze)⁸	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

¹NR-48560 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 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

³Two colony types were observed. Plating of the individual colony types showed that they did not revert to the mixed colony type. VITEK® MS (MALDI-TOF) analysis identified cells from both colony types as *K. pneumoniae*.

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

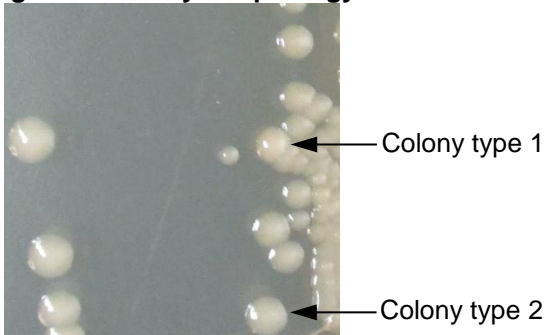
⁵The VITEK® 2 ESBL Test is a confirmatory test for Extended-Spectrum Beta-Lactamases (ESBLs) inhibited by clavulanic acid and utilizes cefepime, cefotaxime and ceftazidime, with and without clavulanic acid, to determine a positive or negative result.

⁶A 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.

⁷Also consistent with other organisms

⁸Purity of this lot was assessed for 8 days at 37°C in an aerobic atmosphere with 5% CO₂ on Tryptic soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 21 NOV 2017

Signature:

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