

Enterobacter aerogenes, Strain UCI 15

Catalog No. NR-48555

Product Description: *Enterobacter aerogenes* (*E. aerogenes*), strain UCI 15 was isolated in 2013 from aspirate taken from a patient in intensive care in Irvine, California, USA. *E. aerogenes*, strain UCI 15 was deposited as a carbapenem resistant strain and is part of a Carbapenem Resistant Enterobacteriaceae (CRE) Sequencing Project at the Broad Institute. Strain UCI 15 was also deposited as resistant to ampicillin, ampicillin/sulbactam, meropenem and ceftoxitin and sensitive to amikacin.

Lot¹: 70005950

Manufacturing Date: 22JUN2017

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) VITEK [®] 2 (GN card)	Gram-negative rods Report results Motile ≥ 90% probability of being <i>E. aerogenes</i>	Gram-negative rods Circular, convex, entire, smooth, mucoid and gray (Figure 1) Motile <i>E. aerogenes</i> (99% probability) ³
Antibiotic Susceptibility Profile VITEK [®] (AST-GN69 Card) ⁴⁻⁶ Amoxicillin/Clavulanic Acid Piperacillin/Tazobactam Cefazolin Ceftazidime Ceftriaxone Cefepime Ertapenem Imipenem Gentamicin Tobramycin Ciprofloxacin Levofloxacin Nitrofurantoin Trimethoprim/Sulfamethoxazole	Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Intermediate Resistant Intermediate Sensitive Sensitive Resistant Resistant	Resistant (≥ 32 µg/mL) Resistant (≥ 128 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (2 µg/mL) ⁷ Resistant (4 µg/mL) ⁸ Sensitive (1 µg/mL) ⁹ Resistant (≥ 16 µg/mL) Intermediate (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.12 µg/mL) Resistant (256 µg/mL) Resistant (≥ 320 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 760 base pairs)	≥ 99% sequence identity to <i>E. aerogenes</i> , strain UCI 15 (GenBank: JCKZ01000009.1)	99.9% sequence identity to <i>E. aerogenes</i> , strain UCI 15 (GenBank: JCKZ01000009.1)
Purity (post-freeze)¹⁰	Consistent with expected colony morphology	Consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

¹Lot 70005950 of NR-48555 was produced by inoculation of BEI Resources NRS-48555 (Lot: 63445873) 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

³Percent 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.

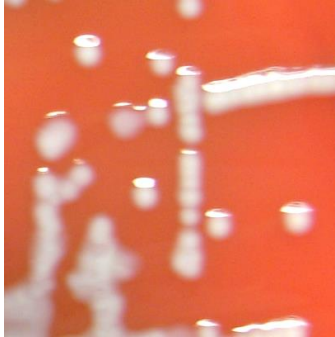
⁴Specificantons are based on the results of antibiotic susceptibility testing for NR-48555 lot 63445872.

⁵Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

⁶No results were obtained for ampicillin, ampicillin/sulbactam and Extended-Spectrum Beta-Lactamases (ESBLs) from the VITEK[®] (AST-GN69 Card) analysis. Alternative methods of testing are recommended by the manufacturer.

- ⁷*E. aerogenes*, strain UCI 15 was deposited as having intermediate susceptibility to cefepime. Because this isolate is not a confirmed ESBL-producer, the CLSI recommends utilization of the interpretation without subjugation to modifications based on the susceptibilities of other antibiotics in the same class. However, while this strain appears sensitive *in vitro*, there is a possibility that it is intermediately susceptible or resistant *in vivo*.
- ⁸*E. aerogenes*, strain UCI 15 was deposited as having intermediate susceptibility to ertapenem.
- ⁹*E. aerogenes*, strain UCI 15 was deposited as resistant to imipenem. Antibiotic susceptibility testing of NR-48555 lot 63445872 determined that strain UCI 15 was intermediately susceptible to imipenem.
- ¹⁰Purity of this lot was assessed for 7 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: 25 JUL 2017

Signature:

BEI Resources Authentication

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