

***Klebsiella pneumoniae*, Strain BIDMC 1**

Catalog No. NR-41915

For research use only. Not for human use.

Contributor:

Andrew B. Onderdonk, Ph.D., Director, Clinical Microbiology, Department of Pathology, Brigham and Women's Hospital, Boston, Massachusetts, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Klebsiella*

Species: *Klebsiella pneumoniae*

Strain: BIDMC 1

Original Source: *Klebsiella pneumoniae* (*K. pneumoniae*), strain BIDMC 1 was isolated in 2010 from human toe bone tissue in Boston, Massachusetts, USA.^{1,2}

Comments: *K. pneumoniae*, strain BIDMC 1 was deposited as a carbapenem-resistant strain and is part of a [Carbapenem-Resistant Enterobacteriaceae \(CRE\) Sequencing Project](#) at the Broad Institute.^{1,2} Strain BIDMC 1 was deposited as resistant to meropenem, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, piperacillin/tazobactam and trimethoprim/sulfamethoxazole, intermediately susceptible to tobramycin, susceptible to amikacin, positive for *bla*_{KPC-3}, MLST sequence type (ST) 258 and capsular polysaccharide (*cps*) clade II.² The complete genome of *K. pneumoniae*, strain BIDMC 1 has been sequenced (GenBank: [JCNK00000000](#)).

K. pneumoniae is a Gram-negative enterobacterium that is a major cause of nosocomial infections of the urinary and respiratory tracts. Due to the extensive spread of antibiotic-resistant strains, especially of extended-spectrum β -lactamase (ESBL)-producing strains, there has been renewed interest in *Klebsiella* infections.³

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-41915 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Media:

Tryptic Soy broth or Nutrient broth or equivalent
Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or Nutrient agar or equivalent

Incubation:

Temperature: 37°C
Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 1 day.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Klebsiella pneumoniae*, Strain BIDMC 1, NR-41915."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither the ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Onderdonk, A. B., Personal Communication.
2. Cerqueira, G. C., et al. "Multi-Institute Analysis of Carbapenem Resistance Reveals Remarkable Diversity, Unexplained Mechanisms, and Clonal Outbreaks." Proc. Natl. Acad. Sci. USA 114 (2017): 1135-1140. PubMed: 28096418.
3. Podschun, R. and U. Ullmann. "*Klebsiella* spp. as Nosocomial Pathogens: Epidemiology, Taxonomy, Typing Methods, and Pathogenicity Factors." Clin. Microbiol. Rev. 11 (1998): 589-603. PubMed: 9767057.

ATCC® is a trademark of the American Type Culture Collection.

