

***Burkholderia cenocepacia*, Strain LMG 16656**

Catalog No. NR-701

(Derived from ATCC® BAA-245™)

For research only. Not for human use.

Contributor:

ATCC®

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Burkholderiaceae*, *Burkholderia*

Species: *Burkholderia cenocepacia* (formerly *Burkholderia cepacia* genomovar III, as indicated on the label)

Strain: Type strain, LMG 16656 (J2315, NCTC 13227, CCM 4899, CF5610)

Original Source: *Burkholderia cenocepacia* (*B. cenocepacia*), strain LMG 16656 was isolated in 1989 in Edinburgh, United Kingdom, from the sputum of a cystic fibrosis patient.¹

Comment: *B. cenocepacia*, strain LMG 16656, was deposited at the ATCC® in 2001 by Dr. D. Janssens from BCCM/LMG Bacteria Collection, Ghent University, K. L. Ledeganckstraat 35, B-9000 Ghent, Belgium. The *Burkholderia cenocepacia*, strain LMG 16656 genome is available from the Sanger Institute (http://www.sanger.ac.uk/Projects/B_cenocepacia/).²

B. cenocepacia is a Gram-negative bacterium that is found ubiquitously throughout the environment. It was known historically as a plant pathogen but has also emerged as an opportunistic pathogen that preferentially attacks the lungs of those with cystic fibrosis.¹ Virulence factors include cable pilus that is involved in adhesion and colonization of the respiratory tract and a haemolysin that induces cell death.² This organism also produces a variety of cytotoxins and antibiotic resistance genes.³

Material Provided:

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

Packaging/Storage:

NR-701 was packaged aseptically, in screw-capped plastic 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 equivalent

Tryptic Soy Agar or equivalent

Incubation:

Temperature: 30°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 30°C for 24 to 48 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Burkholderia cenocepacia*, Strain LMG 16656, NR-701."

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 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. Vandamme, P., et al. "*Burkholderia cenocepacia* sp. nov.- a New Twist to an Old Story." Res. Microbiol. 154 (2003): 91-96. PubMed: 12648723.
2. Miller, D. A. and E. Mahenthiralingam. "Sequencing of the *Pseudomonas aeruginosa* and *Burkholderia cepacia* Genomes and their Applications in Relation to Cystic Fibrosis." J. R. Soc. Med. 96 Suppl 43 (2003): 57-65. PubMed: 12906327.
3. Lipuma, J. J. "Update of the *Burkholderia cepacia* Complex." Curr. Opin. Pulm. Med. 11 (2005): 528-533. PubMed: 16217180.

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

