

***Burkholderia multivorans*, Strain CGD2**

Catalog No. NR-20534

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Burkholderiaceae*, *Burkholderia*

Species: *Burkholderia multivorans*

Strain: CGD2

Original Source: *Burkholderia multivorans* (*B. multivorans*), strain CGD2 was isolated prior to 2007 from a human respiratory sample from a patient with chronic granulomatous disease (CGD) in Maryland, USA.¹

Comment: *B. multivorans*, strain CGD2 is a CGD-associated strain. It is virulent in the CGD mouse model and presents a mucoid phenotype. The complete genome sequence of *B. multivorans*, strain CGD2 has been determined (GenBank: [ACFC000000000](https://www.ncbi.nlm.nih.gov/nuccore/ACFC000000000)).²

B. multivorans is a motile, Gram-negative bacterium primarily isolated from cystic fibrosis patients and clinical settings, but can also be isolated in nature.³ It is frequently associated with respiratory infections in people with cystic fibrosis (CF) and chronic granulomatous disease (CGD).² *B. multivorans* is one of the species within the *B. cepacia* complex (BCC), a group of closely related bacteria comprising at least 9 species that can cause human infections.⁴⁻⁶ In contrast to *B. cenocepacia*, transmissibility and mortality associated with *B. multivorans* has been minimal. Recovery from water environments, industrial products and human infection suggests that environmental sources may be an important reservoir for infection with *B. multivorans*.^{7,8}

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-20534 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°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 Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use; thaw slowly.
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 to 3 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Burkholderia multivorans*, Strain CGD2, NR-20534."

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.

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References:

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8. Turton, J. F., et al. "Molecular Comparison of Isolates of *Burkholderia multivorans* from Patients with Cystic Fibrosis in the United Kingdom." J. Clin. Microbiol. 41 (2003): 5750-5754. PubMed: 14662975.
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