

### ***Bacillus samanii*, Strain C1**

#### **Catalog No. NR-4056**

#### **For research use only. Not for human use.**

##### **Contributor:**

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##### **Product Description:**

Bacteria Classification: *Bacillaceae*, *Bacillus*

Species: *Bacillus samanii*

Strain: C1

Original Source: *Bacillus samanii* (*B. samanii*), strain C1 was isolated from soil covered with clean snow in a secluded area of the Massbay College, Wellesley campus grounds in February 2006.<sup>1,2</sup>

*B. samanii* is a newly discovered filamentous Gram-positive, spore-forming bacteria. *B. samanii*, strain C1 is resistant to Trimethoprim and the Penicillin family of antibiotics and produces  $\alpha$ -hemolysin.<sup>1</sup> Sequence analysis of the *B. samanii*, strain C1 16S gene (GenBank: EF036537) indicates that it is related to the *B. cereus* group of organisms (*B. cereus*, *B. anthracis*, *B. mycoides* and *B. thuringiensis*) as well as *B. pseudomycoides*.

##### **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-4056 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 with 5% sheep's blood or equivalent

###### Incubation:

Temperature: 25 to 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 tubes and plate at 25 to 37°C for 18 to 24 hours.

##### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Bacillus samanii*, Strain C1, NR-4056."

##### **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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm).

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##### **References:**

1. S. Saman. Personal Communication.
2. Saman, S., S. Saman and H. Patel. "Isolation, Description, and Sequencing of a Novel Species (of an Established Genus): *Bacillus samanii* sp. nov. from Snow." In: 41<sup>st</sup> Annual Regional Meeting of the Eastern New York, Connecticut Valley, New York City, and Northeast Branches of the American Society for Microbiology; American Society of Microbiology Eastern New York Branch, NY, USA (2006).

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