

***Bacillus smithii*, Strain 7_3_47FAA**

Catalog No. HM-229

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Bacillaceae*, *Bacillus*

Species: *Bacillus smithii*

Strain: 7_3_47FAA

Original Source: *Bacillus smithii* (*B. smithii*), strain 7_3_47FAA was isolated in 2007 from an inflamed sigmoid colon biopsy specimen taken from a 25-year-old female patient with Crohn's disease in Calgary, Alberta, Canada.¹

Comments: *B. smithii*, strain 7_3_47FAA ([HMP ID 1015](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *B. smithii*, strain 7_3_47FAA was sequenced at the [Broad Institute](#) (GenBank: [ACWF00000000](#)).

Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

B. smithii is a Gram-positive, motile, sporulating, facultative anaerobic and thermophilic, rod-shaped bacterium often isolated from canned foods, cheese, evaporated milk and sugar beet juice.¹

Material Provided:

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

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

Packaging/Storage:

HM-229 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 equivalent

Tryptic Soy Agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂

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 72 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Bacillus smithii*, Strain 7_3_47FAA, HM-229."

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:

1. [HMP ID 1015](#) (*Bacillus smithii*, strain 7_3_47FAA)
2. Nakamura, L. K., I. Blumenstock, and D. Claus. "Taxonomic Study of *Bacillus coagulans* Hammer 1915 with a Proposal for *Bacillus smithii* sp. nov." *Int. J. Syst. Bacteriol.* 38 (1988): 63-73.
3. Jögi, E., et al. "Protective Effect by *Bacillus smithii* TBMI12 Spores of *Salmonella* Serotype Enteritidis in Mice." *Benef. Microbes* 1 (2010): 37-42. PubMed: 21840796.

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