

Actinomyces graevenitzii, Strain C83

Catalog No. HM-236

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Actinomycetaceae*, *Actinomyces*

Species: *Actinomyces graevenitzii*

Strain: C83

Original Source: *Actinomyces graevenitzii* (*A. graevenitzii*), strain C83 was isolated from expectorated sputum from a 31-year-old male patient with cystic fibrosis in February 2006.^{1,2}

Comments: *A. graevenitzii*, strain C83 ([HMP_ID_0045](#)) 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 *A. graevenitzii*, strain C83 is currently being sequenced at the [Broad Institute](#) (GenBank: [ACRN000000000](#)).

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.

A. graevenitzii is a Gram-positive, facultatively anaerobic, rod-shaped bacterium isolated almost exclusively from oral and respiratory sites.³ Although little is known about its pathogenic potential, there are rare cases which demonstrate the potential for *A. graevenitzii* to cause invasive disease.^{4,5}

Material Provided:

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

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

Packaging/Storage:

HM-236 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:

Actinomyces Broth ([ATCC medium 7](#)) 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 24 to 48 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Actinomyces graevenitzii*, Strain C83, HM-236."

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/bmb15/index.htm.

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References:

1. Professor M. G. Surette, personal communication.
2. [HMP ID 0045](#) (*Actinomyces graevenitzii*, strain C83)
3. Ramos, C. P., et al. "*Actinomyces graevenitzii* sp. nov., Isolated from Human Clinical Specimens." Int. J. Syst. Bacteriol. 47 (1997): 885-888. PubMed: 9226924.
4. Hwang, S. S., et al. "*Actinomyces graevenitzii* Bacteremia in a Patient with Alcoholic Liver Cirrhosis." Anaerobe 17 (2011): 87-89. PubMed: 21421069.
5. Hall, V. "Actinomyces—Gathering Evidence of Human Colonization and Infection." Anaerobe 14 (2008): 1-7. PubMed: 18222714.
6. Smith, A. J., et al. "Antimicrobial Susceptibility Testing of *Actinomyces* Species with 12 Antimicrobial Agents." J. Antimicrob. Chemother. 56 (2005): 407-409. PubMed: 15972310.

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