

***Rothia dentocariosa*, Strain M567**

Catalog No. HM-245

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Micrococcaceae*, *Rothia*

Species: *Rothia dentocariosa*

Strain: M567

Original Source: *Rothia dentocariosa* (*R. dentocariosa*), strain M567 was isolated from expectorated sputum from a 32-year-old male patient with cystic fibrosis in January 2008.^{1,2}

Comments: *R. dentocariosa*, strain M567 ([HMP ID 0734](#)) 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 *R. dentocariosa*, strain M567 was sequenced at the [Broad Institute](#) (GenBank: [ADDW00000000](#)).

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.

R. dentocariosa is a Gram-positive, aerobic to microaerophilic, pleomorphic, filamentous, rod-shaped bacterium isolated almost exclusively from oral and respiratory sites.^{3,4} It is a normal commensal of the human oral cavity and is often associated with dental caries and periodontal disease.⁵ *R. dentocariosa* is considered to be an organism of low virulence; however, rare clinical infections do occur with this opportunistic pathogen.^{6,7,8}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion Broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-245 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:

Brain Heart Infusion broth or equivalent

Tryptic Soy agar with 5% sheep blood or equivalent

Incubation:

Temperature: 37°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 37°C for 1 to 2 days.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Rothia dentocariosa*, Strain M567, HM-245.”

Biosafety Level: 1

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](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Surette, M. G., Personal Communication.
2. [HMP ID 0734](#) (*Rothia dentocariosa*, strain M567)
3. Georg, L. K. and J. M. Brown. "*Rothia* gen. nov., an Aerobic Genus of the Family *Actinomycetaceae*." *Int. J. Syst. Bacteriol.* 17 (1967): 79-88.
4. Daneshvar, M. I., et al. "Identification of Some Charcoal-Black-Pigmented CDC Fermentative Coryneform Group 4 Isolates as *Rothia dentocariosa* and Some as *Corynebacterium aurimucosum*: Proposal of *Rothia dentocariosa* emend. Georg and Brown 1967, *Corynebacterium aurimucosum* emend. Yassin et al. 2002, and *Corynebacterium nigricans* Shukla et al. 2003 pro synon. *Corynebacterium aurimucosum*." *J. Clin. Microbiol.* 42 (2004): 4189-4198. PubMed: 15365010.
5. Brown, J. M., L. K. Georg and L. C. Waters. "Laboratory Identification of *Rothia dentocariosa* and Its Occurrence in Human Clinical Materials." *Appl. Microbiol.* 17 (1969): 150-156. PubMed: 4886858.
6. Shakoor, S., et al. "*Rothia dentocariosa* Endocarditis with Mitral Valve Prolapse: Case Report and Brief Review." *Infection* 39 (2011): 177-179. PubMed: 21311946.
7. Yang, C.-Y., et al. "*Rothia dentocariosa* Bacteremia in Children: Report of Two Cases and Review of the Literature." *J. Formos. Med. Assoc.* 106 (2007): S33-S38. PubMed: 17493907.
8. Boudewijns, M., et al. "*Rothia dentocariosa*, Endocarditis and Mycotic Aneurysms: Case Report and Review of the Literature." *Clin. Microbiol. Infect.* 9 (2003): 222-229. PubMed: 12667255.

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