

Product Information Sheet for HM-331

Sporosarcina sp., Strain 2681

Catalog No. HM-331

For research use only. Not for human use.

Contributor:

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Manufacturer: NIH Biodefense and Emerging Infections Research Resource Repository

Product Description:

Bacteria Classification: *Planococcaceae*, *Sporosarcina*

Species: *Sporosarcina* sp.

Strain: 2681

Original Source: *Sporosarcina* sp., strain 2681 was isolated from human blood.¹

Comments: *Sporosarcina* sp., strain 2681 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 *Sporosarcina* sp., strain 2681 is currently being sequenced at the Human Genome Sequencing Center at the [Baylor College of Medicine](#).

Sporosarcina species are typically Gram-positive, endospore-forming, aerobic, rod-shaped or spherical bacteria.² They are widely distributed in sediment and soil, especially in and around ponds, lakes and salt marshes. Isolates from human subjects are rare and nonpathogenic.³ Evidence has found conserved features of the sporulation process and dormant spores between *Bacillus* and *Sporosarcina* species, consistent with the proposed close evolutionary relationship between *Bacillus* and *Sporosarcina* species.^{4,5}

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-331 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% 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 tubes and plate at 37°C for 48 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH as part of the Human Microbiome Project: *Sporosarcina* sp., Strain 2681, HM-331."

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.

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References:

1. [HMP 9372](#) (*Sporosarcina* sp., strain 2681)
2. An, S. Y., et al. "*Sporosarcina saromensis* sp. nov., an Aerobic Endospore-forming Bacterium." *Int. J. Syst. Evol. Microbiol.* 57 (2007): 1868-1871. PubMed: 17684272.
3. Chomarat, M., et al. "Isolation of *Sporosarcina ureae* from a Bronchial Biopsy in a Child with Cystic Fibrosis." *Eur. J. Clin. Microbiol. Infect. Dis.* 9 (1990): 302-303. PubMed: 2351147.
4. Loshon, C. A. and P. Setlow. "Levels of Small Molecules in Dormant Spores of *Sporosarcina* Species and Comparison with Levels in Spores of *Bacillus* and *Clostridium* Species." *Can. J. Microbiol.* 39 (1993): 259-262. PubMed: 8467422.
5. [Todar's Online Textbook of Bacteriology](#)

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