

***Desulfovibrio* sp., Strain 3_1_syn3**

Catalog No. HM-66

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Desulfovibrionaceae*, *Desulfovibrio*

Species: *Desulfovibrio* sp.

Strain: 3_1_syn3

Original Source: *Desulfovibrio* sp., strain 3_1_syn3 was isolated in 2007 from healthy biopsy tissue taken from the colon of a 60-year-old woman undergoing a colon cancer screen procedure in Calgary, Alberta, Canada.^{1,2}

Comments: *Desulfovibrio* sp., strain 3_1_syn3 ([HMP_ID 0326](#)) 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 *Desulfovibrio* sp., strain 3_1_syn3 was sequenced at the [Broad Institute](#) (GenBank: [ADDR00000000](#)).

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.

Desulfovibrio species are sulfate-reducing, obligately anaerobic, non-sporulating, Gram-negative rods with polar flagella.^{3,4} They are typically isolated from environmental sources, but are also present in the gastrointestinal microflora of humans and animals. On rare occasions, *Desulfovibrio* species are involved in human infections.⁵

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Modified Chopped Meat Medium supplemented with 10% glycerol.

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

Packaging/Storage:

HM-66 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:

Note: Growth on agar is not recommended.

Modified Baar's Medium for Sulfate Reducers ([ATCC medium 1249](#)) or equivalent

Incubation:

Temperature: 30°C

Atmosphere: Anaerobic (80% N₂:10% CO₂:10% H₂)

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 additional broth tubes.
4. Incubate cultures at 30°C for 2 to 4 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Desulfovibrio* sp., Strain 3_1_syn3, HM-66."

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. Professor Emma Allen-Vercoe, personal communication
2. [HMP ID 0326](#) (*Desulfovibrio* sp., strain 3_1_syn3)
3. Postgate, J. R. and L. L. Campbell. "Classification of *Desulfovibrio* Species, the Nonsporulating Sulfate-Reducing Bacteria." Bacteriol. Rev. 30 (1966): 732-738. PubMed: 5342518.
4. Loubinoux, J., et al. "Reclassification of the Only Species of the Genus *Desulfomonas*, *Desulfomonas pigra*, as *Desulfovibrio piger* comb. nov." Int. J. Syst. Evol. Microbiol. 52 (2002): 1305-1308. PubMed: 12148644.
5. Goldstein E. J., et al. "*Desulfovibrio desulfuricans* Bacteremia and Review of Human *Desulfovibrio* Infections." J. Clin. Microbiol. 41 (2003): 2752-2754. PubMed: 12791922.

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