

**Megasphaera sp., Strain DNF00872**

**Catalog No. HM-1083**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Veillonellaceae, Megasphaera*

Genus: *Megasphaera*

Strain: DNF00872

Original Source: *Megasphaera* sp., strain DNF00872 was isolated in 2011 from vaginal fluid collected from a woman that tested positive for bacterial vaginosis in Washington, USA.<sup>1,2</sup>

Comments: *Megasphaera* sp., strain DNF00872 ([HMP ID 1646](#)) 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 *Megasphaera* sp., strain DNF00872 is currently being sequenced at the [J. Craig Venter Institute](#).

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.

*Megasphaera* species are typically Gram-negative, obligately anaerobic, non-motile, non-spore-forming cocci often found in the gastrointestinal and vaginal tracts of mammals (e.g. humans and cattle) and in spoiled beer.<sup>3-5</sup> Little is known of the pathogenic potential of most *Megasphaera* species, as clinical data is scarce for these organisms.<sup>6</sup>

**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-1083 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°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:

Modified Reinforced Clostridial medium or Brain Heart

Infusion broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Brain Heart Infusion agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Anaerobic

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 7 days.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Megasphaera* sp., Strain DNF00872, HM-1083."

**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](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Fredricks, D. N., Personal Communication.
2. [HMP ID 1646](#) (*Megasphaera* sp., strain DNF00872)
3. Rogosa, M. "Transfer of *Peptostreptococcus elsdenii* Gutierrez et al. to a New Genus, *Megasphaera* (*M. elsdenii* (Gutierrez et al.) comb. nov.)." Int. J. Syst. Bacteriol. 21 (1971): 187-189.
4. Marchandin, H., et al. "Phylogenetic Analysis of Some Sporomusa Sub-Branch Members Isolated from Human Clinical Specimens: Description of *Megasphaera micronuciformis* sp. nov." Int. J. Syst. Evol. Microbiol. 53 (2003): 547-553. PubMed: 12710625.
5. Shetty, S. A., et al. "Comparative Genome Analysis of *Megasphaera* sp. Reveals Niche Specialization and Its Potential Role in the Human Gut." PLoS One 8 (2013): e79353. PubMed: 24260205.
6. Zozaya-Hinchliffe, M., D. H. Martin and M. J. Ferris. "Prevalence and Abundance of Uncultivated *Megasphaera*-Like Bacteria in the Human Vaginal Environment." Appl. Environ. Microbiol. 74 (2008): 1656-1659. PubMed: 18203860.

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