

Product Information Sheet for HM-1098

Clostridiales bacterium, Strain S5-A14a

Catalog No. HM-1098

For research use only. Not for human use.

Contributor:

Maria V. Sizova, Department of Biology, Northeastern University, Boston, Massachusetts, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: unclassified Clostridiales Family XIII *Incertae Sedis* **Note:** The label on the vial for lot 70012281 is incorrect; the correct nomenclature is Family XIII *Incertae Sedis*

Order: Clostridiales

Strain: S5-A14a

Original Source: Clostridiales bacterium, strain S5-A14a was isolated in 2012 from the vagina of a woman with bacterial vaginosis in Washington, USA.^{1,2}

Comments: Clostridiales bacterium, strain S5-A14a ([HMP ID 1635](#)) 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 Clostridiales bacterium, strain S5-A14a was sequenced at the [J. Craig Venter Institute](#) (GenBank: [JRNA01000000](#)).

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.

Clostridiales bacteria are generally Gram-positive, rod-shaped, obligate anaerobes that are ubiquitous in virtually all anoxic habitats where organic compounds are found, especially soils, aquatic sediments and the intestinal tracts of animals and humans. Bacteria of the order Clostridiales have a Gram-positive cell wall but may stain Gram-variable or Gram-negative.³⁻⁵ Most species have the ability to form spores^{6,7} and a few are pathogenic, producing very potent biological toxins known to affect humans.⁸

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy Yeast Extract broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-1098 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 Yeast Extract broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Tryptic Soy Yeast Extract 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 4 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: Clostridiales bacterium, Strain S5-A14a, HM-1098."

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.

Disclaimers:

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References:

1. Izard, J., Personal Communication.
2. [HMP ID 1635](#) (Clostridiales bacterium, strain S5-A14a)
3. Lawson, P. A., et al. "Anaerobes: A Piece in the Puzzle for Alternative Biofuels." *Anaerobe* 17 (2011): 206-210. PubMed: 21699990.
4. Ueki, A., et al. "*Aminipila butyrlica* gen. nov., sp. nov., a Strictly Anaerobic, Arginine-Decomposing Bacterium Isolated from a Methanogenic Reactor of Cattle Waste." *Int. J. Syst. Evol. Microbiol.* 68 (2018): 443-448. PubMed: 29235979.
5. Bernard, K., et al. "Characterization of Isolates of *Eisenbergiella tayi*, a Strictly Anaerobic Gram-Stain Variable Bacillus Recovered from Human Clinical Materials in Canada." *Anaerobe* 44 (2017): 128-132. PubMed: 28279858.
6. Mallozzi, M., V. K. Viswanathan and G. Vedantam. "Spore-forming Bacilli and Clostridia in Human Disease." *Future Microbiol.* 5 (2010): 1109-1123. PubMed: 20632809.
7. Paredes-Sabja, D., P. Setlow and M. R. Sarker. "Germination of Spores of *Bacillales* and *Clostridiales* Species: Mechanisms and Proteins Involved." *Trends Microbiol.* 19 (2011): 85-94. PubMed: 21112786.
8. Popoff, M. R. and P. Bouvet. "Clostridial Toxins." *Future Microbiol.* 4 (2009): 1021-1064. PubMed: 19824793.

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