

***Lactobacillus gasseri*, Strain 224-1**

Catalog No. HM-647

For research use only. Not for human use.

Contributor:

Yang Liu, Ph.D., Senior Scientist & Group Leader, Osel Inc., Santa Clara, California

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Lactobacillaceae*, *Lactobacillus*

Species: *Lactobacillus gasseri*

Strain: 224-1

Original Source: *Lactobacillus gasseri* (*L. gasseri*), strain 224-1 was isolated in 2007 from human vaginal mucosa.^{1,2}

Comments: *L. gasseri*, strain 224-1 ([HMP ID 9209](#)) 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 *L. gasseri*, strain 224-1 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [ADFT00000000](#)).

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.

L. gasseri is a Gram-positive, mesophilic, non-motile facultative anaerobe bacterium that is commonly found in the normal human gastrointestinal tract. It is commonly used in the production of yogurt and other dairy products and has also been shown to be an effective probiotic in suppressing *Helicobacter pylori* infections in humans.³

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Lactobacilli MRS Broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-647 was packaged aseptically, in screw-capped plastic 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:

Lactobacilli MRS broth and/or agar ([ATCC medium 416](#))

Incubation:

Temperature: 35°C to 37°C

Atmosphere: Aerobic or Microaerophilic (CO₂ is not required for growth)

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 24 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Lactobacillus gasseri*, Strain 224-1, HM-647."

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](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as

performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Y. Liu and Q. Xu, personal communication.
2. [HMP ID 9209](#) (*L. gasseri*, strain 224-1)
3. Hamilton-Miller, J. M. "The Role of Probiotics in the Treatment and Prevention of *Helicobacter pylori* Infection." *Int. J. Antimicrob. Agents* 22 (2003): 360-366. PubMed: 14522098.

ATCC® is a trademark of the American Type Culture Collection.

