

***Limosilactobacillus reuteri*, Strain CF48-3A**

Catalog No. HM-102

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Lactobacillaceae*, *Limosilactobacillus*

Species: *Limosilactobacillus reuteri* (Previously referred to as *Lactobacillus reuteri*, this genus has been reclassified and the genus designation on the vial label refers to the old nomenclature.)¹

Strain: CF48-3A

Original Source: *Limosilactobacillus reuteri* (*L. reuteri*), strain CF48-3A was isolated from the feces of a healthy child in Finland.^{2,3}

Comments: *L. reuteri*, strain CF48-3A ([HMP ID 0534](#)) 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. reuteri*, strain CF48-3A was sequenced at [Baylor College of Medicine](#) (GenBank: [ACHG000000000](#)).

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. reuteri is a Gram-positive, anaerobic, mesophilic, non-motile bacterium that is commonly found in the intestinal microbiota of rodents, birds and swine.^{1,3} *L. reuteri* produces antibiotic compounds which have inhibitory effects on pathogenic microorganisms. It is commonly used as a probiotic to maintain the balance of the gut microbial flora and stimulate the intestinal immune system.³

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Lactobacillus MRS broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-102 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:

Lactobacillus MRS broth

Lactobacillus MRS agar

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with or without 5% CO₂ or 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 in an aerobic atmosphere for 1 day.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Limosilactobacillus reuteri*, Strain CF48-3A, HM-102."

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 \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Zheng J., et al. "A Taxonomic Note on the Genus *Lactobacillus*: Description of 23 Novel Genera, Emended Description of the Genus *Lactobacillus* Beijerinck 1901, and Union of *Lactobacillaceae* and *Leuconostocaceae*." *Int. J. Syst. Evol. Microbiol.* 70 (2020): 2782-2858. PubMed: 32293557.
2. [HMP ID 0534](#) (*Limosilactobacillus reuteri*, strain CF48-3A)
3. Jones, S. E. and J. Versalovic. "Probiotic *Lactobacillus reuteri* Biofilms Produce Antimicrobial and Anti-Inflammatory Factors." *BMC Microbiol.* 9 (2009): 35. PubMed: 19210794.

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