Product Information Sheet for HM-228

Lactobacillus sp., Strain 7_1_47FAA

Catalog No. HM-228

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Lactobacillaceae, Lactobacillus*
Species: *Lactobacillus* sp.
Strain: 7_1_47FAA
Original Source: *Lactobacillus* sp., strain 7_1_47FAA was isolated in 2007 from inflamed biopsy tissue taken from the sigmoid colon of a 25-year-old female patient with Crohn's disease in Calgary, Alberta, Canada.[1,2]
Comments: *Lactobacillus* sp., strain 7_1_47FAA (HMP ID 1027) 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 *Lactobacillus* sp., strain 7_1_47FAA was sequenced at the Broad Institute (GenBank: ACWR00000000).
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.

Lactobacillus species belong to a large and diverse group of Gram-positive, facultatively anaerobic, non-spore-forming, rod-shaped bacteria that produce lactic acid as a major product of carbohydrate fermentation.[3] These bacteria are ubiquitous in the environment and propagate in ecological niches such as food, plants and decaying material. In humans and animals, several lactobacilli form part of the normal flora of the mouth, gut and vagina. *Lactobacillus* species are of great commercial importance in the probiotic food industry.[4] *Lactobacillus* are considered non-pathogenic in humans, however a few species are recognized as opportunistic pathogens involved in bacteremia and other significant infections.[5]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X *Lactobacillus* sake medium supplemented with 5% DMSO.

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

Packaging/Storage:
HM-228 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:
Lactobacillus Sake Medium or equivalent
Tryptic Soy Agar with 5% defibrinated sheep blood or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Anaerobic (80% N_2:10% CO_2:10% H_2)
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 72 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* sp., Strain 7_1_47FAA, HM-228."

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

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References:

1. E. Allen-Vercoe, personal communication.
2. HMP ID 1027 (*Lactobacillus* sp., strain 7_1_47FAA)
3. Makarova, K., et al. "Comparative Genomics of the Lactic Acid Bacteria." Proc. Natl. Acad. Sci. USA. 103 (2006): 15611-15616. PubMed: 17030793.
4. Klein, G., et al. "Taxonomy and Physiology of Probiotic Lactic Acid Bacteria." Int. J. Food Microbiol. 41 (1998): 103-125. PubMed: 9704860.
5. Griffiths, J. K., J. S. Daly and R. A. Dodge. "Two Cases of Endocarditis Due to *Lactobacillus* Species: Antimicrobial Susceptibility, Review, and Discussion of Therapy." Clin. Infect. Dis. 15 (1992): 250-255. PubMed: 1520759.

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