Lactobacillus iners, Strain UPII 60-B

Catalog No. HM-131

For research use only. Not for human use.

Contributor:

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Manufacturer: BEI Resources

Product Description:

Bacteria Classification: *Lactobacillaceae, Lactobacillus*
Species: *Lactobacillus iners*
Strain: UPII 60-B
Original Source: *Lactobacillus iners (L. iners),* strain UPII 60-B was isolated from a human vagina.[1]
Comments: *L. iners*, strain UPII 60-B (HMP ID 0523) 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. iners,* strain UPII 60-B was sequenced at the J. Craig Venter Institute (GenBank: AEXK01000000).
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. iners is a Gram-positive, facultatively anaerobic, rod-shaped bacterium.[2] It is the most frequently detected bacterial species in the human vagina. *L. iners* is widely present in healthy females as well as those suffering from bacterial vaginosis or who have undergone antimicrobial therapy, suggesting that it is an important indigenous species of vaginal flora.[3]

Material Provided:

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

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

Packaging/Storage:

HM-131 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:
NYC III broth or equivalent
Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO_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 tubes and plate at 37°C for 1 to 4 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Lactobacillus iners*, Strain UPII 60-B, HM-131."

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.

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References:

1. HMP 0523 (*Lactobacillus iners*, strain UPII 60-B)
2. Falsen, E., et al. "Phenotypic and Phylogenetic Characterization of a Novel *Lactobacillus* Species from Human Sources: Description of *Lactobacillus iners* sp. nov." Int. J. Syst. Bacteriol. 49 (1999): 217-221. PubMed: 10028266.
3. Macklaim, J. M., et al. "At the Crossroads of Vaginal Health and Disease, the Genome Sequence of *Lactobacillus iners* AB-1." Proc. Natl. Acad. Sci. USA 108 (2011): 4688-4695. PubMed: 21059957.
4. Witkin, S. S., et al. "Influence of Vaginal Bacteria and D- and L-Lactic Acid Isomers on Vaginal Extracellular Matrix Metalloproteinase Inducer: Implications for Protection Against Upper Genital Tract Infections." mBio 4 (2013): e00460-13. PubMed: 23919998.
5. Mendes-Soares, H., et al. "Comparative Functional Genomics of *Lactobacillus* spp. Reveals Possible Mechanisms for Specialization of Vaginal Lactobacilli to Their Environment." J. Bacteriol. 196 (2014): 1458-1470. PubMed: 24488312.

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