

## Lactobacillus iners, Strain UPII 143-D

### Catalog No. HM-126

**For research use only. Not for use in humans.**

#### Contributor:

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#### Manufacturer:

BEI Resources

#### Product Description:

**Bacteria Classification:** *Lactobacillaceae*, *Lactobacillus*

**Species:** *Lactobacillus iners*

**Strain:** UPII 143-D

**Original Source:** *Lactobacillus iners* (*L. iners*), strain UPII 143-D was isolated from a human vagina.<sup>1,2</sup>

**Comments:** *L. iners*, strain UPII 143-D ([HMP 0522](#)) 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 143-D was sequenced at the [J. Craig Venter Institute](#) (GenBank: [AEXJ00000000](#)).

**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.<sup>3</sup> 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.<sup>4,5</sup>

#### Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Lactobacillus MRS broth supplemented with 10% glycerol. Each vial of lot 59576252 contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion broth supplemented with 10% glycerol.

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

#### Packaging/Storage:

HM-126 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:

Brain Heart Infusion broth, Lactobacillus MRS broth or equivalent

Tryptic Soy agar with 5% sheep blood or equivalent

##### Incubation:

Temperature: 37°C

Atmosphere: Aerobic (with or without 5% CO<sub>2</sub>) 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 for 1 to 2 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 143-D, HM-126."

#### 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](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Lewis, A., Personal Communication.
2. [HMP ID 0522](#) (*Lactobacillus iners*, strain UPII 143-D)
3. 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.
4. Macklaim, J. M., et al. "Microbes and Health Sackler Colloquium: At the Crossroads of Vaginal Health and Disease, the Genome Sequence of *Lactobacillus iners* AB-1." *Proc. Natl. Acad. Sci. USA* (2010): 4688-4695. PubMed: 21059957.
5. Petrova, M. I., et al. "*Lactobacillus iners*: Friend or Foe?" *Trends in Microbiol.* 25 (2017): 182-191. PubMed: 27914761.

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