

***Lactobacillus vaginalis*, Strain  
EX336960VC11**

**Catalog No. HM-405**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Lactobacillaceae*, *Lactobacillus*

Species: *Lactobacillus vaginalis*

Strain: EX336960VC11

Original Source: *Lactobacillus vaginalis* (*L. vaginalis*), strain EX336960VC11 was isolated from a human mid-vaginal wall in March 2010, in Richmond, Virginia.<sup>1,2</sup>

Comments: *L. vaginalis*, strain EX336960VC11 is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. *L. vaginalis*, strain EX336960VC11 is currently being sequenced at [Virginia Commonwealth University](#).

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. vaginalis* is a Gram-positive, mesophilic, non-motile facultative anaerobe bacterium that is commonly found in vaginal and rectal flora of healthy women.<sup>3,4</sup> Its role in the regulation of pH through lactic acid production by anaerobic metabolism of glycogen helps promote a healthy ecosystem within the female lower vaginal tract.<sup>5</sup>

**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-405 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 (CO<sub>2</sub> 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 to 48 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 vaginalis*, Strain EX336960VC11, HM-405."

**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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

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**References:**

1. G. A. Buck, personal communication.
2. [HMP 9662](#) (*L. vaginalis*, strain EX336960VC11)
3. Embley, T. M., N. Faquir, W. Bossart, and M. D. Collins. "Lactobacillus vaginalis sp. nov. from the Human Vagina." *Int. J. Syst. Bacteriol.* 39 (1989): 368-370.
4. Gustafsson, R. J., et al. "The *Lactobacillus* Flora in Vagina and Rectum of Fertile and Postmenopausal Healthy Swedish Women." *BMC Womens Health* 11 (2011): 17. PubMed: 21609500.
5. Boskey, E. R., et al. "Acid Production by Vaginal Flora In Vitro Is Consistent with the Rate and Extent of Vaginal Acidification." *Infect. Immun.* 67 (1999): 5170-5175. PubMed: 10496892.

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