

## Enterococcus faecalis, Strain ERV103

### Catalog No. HM-934

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

#### Contributor:

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#### Manufacturer:

BEI Resources

#### Product Description:

**Bacteria Classification:** Enterococcaceae, Enterococcus

**Species:** Enterococcus faecalis

**Strain:** ERV103

**Original Source:** Enterococcus faecalis (E. faecalis), strain ERV103 is a clinical isolate from a human secretion in Bogota, Colombia, in 2006.<sup>1</sup>

**Comments:** E. faecalis, strain ERV103 (HMP ID 1328) 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 E. faecalis, strain ERV103 was sequenced at the Genome Institute at Washington University (GenBank: ALZJ00000000).

**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.

E. faecalis is a Gram-positive, facultatively anaerobic coccus that inhabits the gastrointestinal and female genital tract. It is also the most frequently isolated species, often as a monoinfection, from root canals of endodontically treated teeth with persistent apical periodontitis.<sup>2</sup> E. faecalis is an opportunistic pathogen and has become a serious concern in hospitals because of its inherent hardiness and antibiotic resistance. The bacterium produces a cytotoxin that is encoded on various mobile genetic elements, pathogenicity islands, and conjugative plasmids.<sup>3</sup>

#### Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X 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-934 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:

**Note:** Lot-specific growth conditions are indicated on the Certificate of Analysis.

#### Media:

Tryptic Soy broth or Brain Heart Infusion broth or equivalent  
Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

#### Incubation:

Temperature: 35 to 37°C

Atmosphere: Anaerobic or aerobic (with or without 5% CO<sub>2</sub>)

#### 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 tube, slant and/or plate for 24 hours.

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: Enterococcus faecalis, Strain ERV103, HM-934."

#### 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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Chowdhury, S. A., et al. "A Trilocus Sequence Typing Scheme for Hospital Epidemiology and Subspecies Differentiation of an Important Nosocomial Pathogen, *Enterococcus faecalis*." J. Clin. Microbiol. 47 (2009): 2713-2719. PubMed: 19571023.
2. Stevens, R. H., O. D. Porras and A. L. Delisle. "Bacteriophages Induced from Lysogenic Root Canal Isolates of *Enterococcus faecalis*." Oral Microbiol. Immunol. 24 (2009): 278-284. PubMed: 19572888.
3. McBride, S. M., et al. "Genetic Variation and Evolution of the Pathogenicity Island of *Enterococcus faecalis*." J. Bacteriol. 191 (2009): 3392-3402. PubMed: 19270086.
4. *Enterococcus faecalis*, strain ERV103 ([HMP ID 1328](#))

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