

***Enterococcus faecalis*, Strain TUSoD Ef11****Catalog No. HM-51****For research use only. Not for human use.****Contributor:**

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**Product Description:**

**Bacteria Classification:** *Enterococcaceae*, *Enterococcus*

**Species:** *Enterococcus faecalis*

**Strain:** TUSoD Ef11

**Original Source:** *Enterococcus faecalis* (*E. faecalis*), strain TUSoD Ef11 was isolated on January 19, 2005, from an infected dental root canal of a patient with periapical periodontitis in Philadelphia, Pennsylvania, USA.<sup>1,2</sup>

**Comments:** *E. faecalis*, strain TUSoD Ef11 ([HMP ID 0347](#)) is a lysogenic strain which carries a prophage that has been induced and isolated.<sup>2</sup> This strain 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 TUSoD Ef11 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [ACOX02000000](#)).

**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 cocci that inhabits the gastrointestinal and female genital tract. It is also the most frequently isolated species, often as a mono-infection, 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 cytolysin toxin 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 Tryptic Soy broth supplemented with 10% glycerol.

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

**Packaging/Storage:**

HM-51 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:**

Tryptic Soy broth or equivalent

Tryptic Soy agar or equivalent

**Incubation:**

Temperature: 37°C

Atmosphere: Aerobic

**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 day.

**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 TUSoD Ef11, HM-51."

**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. Stevens, R. H., Personal Communication.
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. [HMP ID 0347](#) (*E. faecalis*, strain TUSoD Ef11)

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