

***Enterococcus faecalis*, Strain TX1322**

Catalog No. HM-202

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: TX1322

Original Source: *Enterococcus faecalis* (*E. faecalis*), strain TX1322 was isolated in 1994 from the feces of a community volunteer in Texas, USA.^{1,2}

Comments: *E. faecalis*, strain TX1322 ([HMP ID 0349](#)) is reported to be resistant to kanamycin.¹ 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 TX1322 was sequenced at the Human Genome Sequencing Center at the [Baylor College of Medicine](#) (GenBank: [ACGM00000000](#)).

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 a frequently isolated species from root canals of teeth with persistent apical periodontitis.³ *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.⁴

Material Provided:

Each vial 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-202 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°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 or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood 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 to 3 days.

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 TX1322, HM-202."

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. Murray, B. E., Personal Communication.
2. [HMP ID 0349](#) (*E. faecalis*, strain TX1322)
3. 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.
4. McBride, S. M., et al. "Genetic Variation and Evolution of the Pathogenicity Island of *Enterococcus faecalis*." J. Bacteriol. 191 (2009): 3392-3402. PubMed: 19270086.
5. Solheim, M., et al. "Comparative Genomic Analysis Reveals Significant Enrichment of Mobile Genetic Elements and Genes Encoding Surface Structure-Proteins in Hospital-Associated Clonal Complex 2 *Enterococcus faecalis*." BMC Microbiol. 11 (2011): 3. PubMed: 21205308.
6. Zeng, J., F. Teng and B. E. Murray. "Gelatinase is Important for Translocation of *Enterococcus faecalis* across Polarized Human Enterocyte-Like T84 Cells." Infect. Immun. 73 (2005): 1606-1612. PubMed: 15731060.

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