

Product Information Sheet for HM-432

Enterococcus faecalis, Strain TX2137

Catalog No. HM-432

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: TX2137 (also referred to as E1798)^{1,2}

Original Source: *Enterococcus faecalis* (*E. faecalis*), strain TX2137 was isolated from a human gastrointestinal tract.^{3,4}

Comments: *E. faecalis*, strain TX2137 ([HMP ID 9494](#)) 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 TX2137 was sequenced at the Genome Institute at [Washington University](#) (GenBank: [AEBQ00000000](#)).

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.⁵ *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.⁶

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion broth supplemented with 10% glycerol. Each vial of HM-432 lot 61086679 contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion broth supplemented with 15% glycerol.

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

Packaging/Storage:

HM-432 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 or Tryptic Soy broth or equivalent
Brain Heart Infusion agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂

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 TX2137, HM-432."

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.

Disclaimers:

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References:

1. Bourgogne, A., et al. "Large Scale Variation in *Enterococcus faecalis* Illustrated by the Genome Analysis of Strain OG1RF." Genome Biol. 9 (2008): R110. PubMed: 18611278.
2. Galloway-Peña, J. R., et al. "Diversity of the *fsr-gelE* Region of the *Enterococcus faecalis* Genome but Conservation in Strains with Partial Deletions of the *fsr* Operon." Appl. Environ. Microbiol. 77 (2011): 442-451. PubMed: 21097591.
3. Arias, C. A., Personal Communication.
4. [HMP ID 9494](#) (*Enterococcus faecalis*, strain TX2137)
5. 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.
6. McBride, S. M., et al. "Genetic Variation and Evolution of the Pathogenicity Island of *Enterococcus faecalis*." J. Bacteriol. 191 (2009): 3392-3402. PubMed: 19270086.

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