

***Enterococcus faecium*, Strain TX0133a04**

**Catalog No. HM-463**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Enterococcaceae*, *Enterococcus*

Species: *Enterococcus faecium*

Strain: TX0133a04

Source: *Enterococcus faecium* (*E. faecium*), strain TX0133a04, a vancomycin-sensitive derivative of the TX0133a strain, was isolated outside the zone of inhibition surrounding a vancomycin Etest strip.<sup>1-3</sup> The original TX0133a strain was isolated in Texas, USA on March 28, 2006, from the blood of a 60-year-old diabetic man with native valve endocarditis.<sup>3</sup>

Comments: *E. faecium*, strain TX0133a04 ([HMP ID 9525](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. *E. faecium*, strain TX0133a04 was sequenced at the Genome Institute at [Washington University](#) (GenBank: [AEBC00000000](#)).

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. faecium* is a Gram-positive, facultatively anaerobic coccus that inhabits the human gastrointestinal tract.<sup>4</sup> *E. faecium* is an emerging and challenging nosocomial pathogen because of its inherent hardiness and developing antibiotic resistance.<sup>5</sup>

**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-463 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 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 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 faecium*, Strain TX0133a04, HM-463."

**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. Arias, C. A., Personal Communication.
2. [HMP ID 9525](#) (*Enterococcus faecium*, strain TX0133a04)
3. Arias, C. A., et al. "Failure of Daptomycin Monotherapy for Endocarditis Caused by an *Enterococcus faecium* Strain with Vancomycin-Resistant and Vancomycin-Susceptible Subpopulations and Evidence of *in vivo* Loss of the *vanA* Gene Cluster." *Clin. Infect. Dis.* 45 (2007): 1343-1346. PubMed: 17968832.
4. Schleifer, K. H. and R. Kilpper-Bälz. "Transfer of *Streptococcus faecalis* and *Streptococcus faecium* to the Genus *Enterococcus* nom. rev. as *Enterococcus faecalis* comb. nov. and *Enterococcus faecium* comb. nov." *Int. J. Syst. Bacteriol.* 34 (1984): 31-34.
5. Arias, C. A. and B. E. Murray. "The Rise of the *Enterococcus*: Beyond Vancomycin Resistance." *Nat. Rev. Microbiol.* 10 (2012): 266-278. PubMed: 22421879.
6. Lam, M. M., et al. "Comparative Analysis of the First Complete *Enterococcus faecium* Genome." *J. Bacteriol.* 194 (2012): 2334-2341. PubMed: 22366422.

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