

Enterococcus faecalis, Strain B3286

Catalog No. NR-31886

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Enterococcaceae, Enterococcus

Species: Enterococcus faecalis

Strain: B3286 (also referred to as EnGen0211)

Original Source: Enterococcus faecalis (E. faecalis), strain B3286 is an infectious clinical isolate collected from human blood in 1987 in the United States.¹

Comments: E. faecalis, strain B3286 was deposited as a hemolytic isolate with high-level resistance to gentamicin.¹ The complete genome of E. faecalis, strain B3286 has been sequenced (GenBank: [AIR1000000000](https://www.ncbi.nlm.nih.gov/nuclseq/AIR1000000000)).

E. faecalis is a Gram-positive, facultatively anaerobic coccus that is a commensal inhabitant of the gastrointestinal and female genital tract.² It is also the most frequently isolated species, often as a mono-infection, from root canals of endodontically treated 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 high levels of antibiotic resistance.⁴ Virulent strains often express a cytolysin toxin encoded on various mobile genetic elements, pathogenicity islands, and conjugative plasmids.⁵

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:

NR-31886 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, Brain Heart Infusion broth or equivalent
Tryptic Soy agar, Tryptic Soy agar with 5% defibrinated sheep blood, Brain Heart Infusion agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic (with or without 5% CO₂) or anaerobic

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 1 day.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Enterococcus faecalis, Strain B3286, NR-31886."

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 (BMBL). Current Edition. Washington, DC: U.S. Government Printing Office.

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References:

1. Gilmore, M., Personal Communication.
2. 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.
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. Arias, C. A. and B. E. Murray. "The Rise of the *Enterococcus*: Beyond Vancomycin Resistance." Nat. Rev. Microbiol. 10 (2012): 266-278. PubMed: 22421879.
5. McBride, S. M., et al. "Genetic Variation and Evolution of the Pathogenicity Island of *Enterococcus faecalis*." J. Bacteriol. 191 (2009): 3392-3402. PubMed: 19270086.
6. Huycke, M. M., C. A. Spiegel and M. S. Gilmore. "Bacteremia Caused by Hemolytic, High-Level Gentamicin-Resistant *Enterococcus faecalis*." Antimicrob. Agents Chemother. 35 (1991): 1626-1634. PubMed: 1929336.

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