

Enterococcus faecalis, Strain MMH594

Catalog No. NR-31975

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Enterococcaceae, Enterococcus

Species: Enterococcus faecalis

Strain: MMH594 (also referred to as EnGen0310)

Original Source: Enterococcus faecalis (E. faecalis), strain MMH594 was isolated in 1985 from the blood of a patient with bacteremia in Wisconsin, USA.^{1,2}

Comments: E. faecalis, strain MMH594 is reported to contain the first identified and sequenced pathogenicity island within the genus.^{2,3} This common laboratory strain is a cytolytic isolate which shows resistance to erythromycin and gentamicin.^{2,4} The complete genome of E. faecalis, strain MMH594 has been sequenced (GenBank: [AJDZ000000000](https://www.ncbi.nlm.nih.gov/nuclseq/AJDZ000000000)).

E. faecalis is a Gram-positive, facultatively anaerobic coccus that is a commensal inhabitant of the gastrointestinal and female genital tract.⁵ It is also the most frequently isolated species from patients with infective endocarditis, colorectal cancer and persistent apical periodontitis.^{6,7,8} 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.⁹ Virulent strains often express a cytolysin toxin that is encoded on various mobile genetic elements, pathogenicity islands and conjugative plasmids.¹⁰

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:

NR-31975 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 Brain Heart Infusion broth or equivalent
Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or 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 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: Enterococcus faecalis, Strain MMH594, NR-31975."

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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