**Enterococcus faecium, Strain Patient #3-1**

**Catalog No. NR-31912**

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:** Patient #3-1 (also referred to as EnGen0312)
- **Original Source:** Enterococcus faecium (E. faecium), strain Patient #3-1 was isolated from the stool of a human patient having dominance of vancomycin-resistant Enterococcus in the stool but no bacteremia.¹
- **Comment:** The complete genome of E. faecium, strain Patient #3-1 (EnGen0312) has been sequenced (GenBank: AJDX00000000).

E. faecium is a Gram-positive, facultative, anaerobic coccus that is a commensal inhabitant of the gastrointestinal tract of both humans and animals.²³ E. faecium is an emerging and challenging nosocomial pathogen due to its inherent hardness and ability to develop antibiotic resistance.²³ Its large open pan-genome allows for horizontal gene transfer between E. faecium and other pathogenic and non-pathogenic bacteria to adapt to changing environments.²³ The large majority of strains isolated from nosocomial infections have been classified as CC17, with a distinct genetic lineage characterized by ampicillin resistance and a pathogenicity island carrying the esp gene, which is known to contribute virulence in an animal model.²³⁵⁶ Two other virulence genes, hyl and acm, have been identified.²³

**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-31912 was packaged aseptically, in screw-capped plastic 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:**

**Note:** Specific growth conditions are reported on the Certificate of Analysis for each lot.

**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: 35 to 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 faecium, Strain Patient #3-1, NR-31912."

**Biosafety Level:**

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**Disclaimers:**

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References:

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