**Enterococcus faecium**, Strain E1039

Catalog No. NR-28977

For research use only. Not for human use.

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**Manufacturer:**
BEI Resources

**Product Description:**
- **Bacteria Classification:** Enterococcaceae, Enterococcus
- **Species:** Enterococcus faecium
- **Strain:** E1039
- **Original Source:** Enterococcus faecium (E. faecium) strain E1039 is a non-infectious fecal isolate collected from a normal individual in the Netherlands in 1998 during a community surveillance program.

**Comments:** E. faecium, strain E1039 contains a mutation that introduces a premature stop codon that inactivates the acm gene and lacks the hyl gene. Strain E1039 is classified as DNA sequence type 94 based on multi-locus sequence typing of seven housekeeping genes. The complete genome of E. faecium, strain E1039 has been sequenced (GenBank: ACOS01000000).

E. faecium is a Gram-positive, facultative anaerobic coccus that is a commensal inhabitant of the gastrointestinal tract of both humans and animals. E. faecium is an emerging and challenging nosocomial pathogen due to its inherent hardiness and ability to develop antibiotic resistance. 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. The large majority of strains isolated from nosocomial infections have been classified as Clonal Complex 17 (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. Two other virulence genes, hyl and acm, have been identified.

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X 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-28977 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 24 hours.

**Citation:**
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Enterococcus faecium, Strain E1039, NR-28977.”

**Biosafety Level:** 2


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References:


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