**Product Information Sheet for NR-13400**

**Streptococcus pneumoniae, Strain EMC23F**

**Catalog No. NR-13400**

For research use only. Not for human use.

**Contributor:**
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**Manufacturer:**
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**Product Description:**
- **Bacteria Classification:** Streptococcaceae, Streptococcus
- **Species:** Streptococcus pneumoniae
- **Strain:** EMC23F (also referred to as 1212458)
- **Original Source:** The antibiotic-resistant variant Streptococcus pneumoniae (S. pneumoniae), strain EMC23F is a human wild-type clinical isolate that was found to be naturally resistant to trimethoprim.
- **Comments:** S. pneumoniae, strain EMC23F is reported to be resistant to trimethoprim at a concentration of 25 µg per mL.\(^1\)\(^2\)

*S. pneumoniae* is a Gram-positive, α-hemolytic diplococcal aerotolerant anaerobe that is a major cause of pneumonia, bacterial meningitis and otitis media. *S. pneumoniae* has a polysaccharide capsule that acts as a virulence factor for the organism. There are over ninety different capsular types of *S. pneumoniae* which differ in virulence, prevalence, and extent of drug resistance.\(^3\)\(^4\)

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Todd-Hewitt broth containing 0.5% (w/v) yeast extract supplemented with 15% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**
NR-13400 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°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 Todd-Hewitt containing 0.5% (w/v) yeast extract broth or equivalent
  - Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or Todd-Hewitt agar or equivalent

**Incubation:**
- **Temperature:** 37°C
- **Atmosphere:** Aerobic with 5% CO\(_2\)

**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: *Streptococcus pneumoniae*, Strain EMC23F, NR-13400."

**Biosafety Level:** 2


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References:

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