

***Streptococcus pneumoniae*, Strain EMC23F**

**Catalog No. NR-51859**

**Product Description:**

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.

**Lot: 70029631<sup>1</sup>**

**Manufacturing Date: 10MAY2018**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Hemolysis <sup>2</sup> Motility (wet mount) Biochemical tests: Catalase VITEK <sup>®</sup> MS (MALDI-TOF)	Gram-positive cocci Report results  α-hemolytic Report results  Report results <i>S. pneumoniae</i>	Gram-positive cocci Circular, raised, entire, smooth and gray (Figure 1) α-hemolytic Non-motile  Negative <i>S. pneumoniae</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>3</sup></b> Etest <sup>®</sup> antibiotic test strips <sup>4</sup> Trimethoprim	Report results	Resistant (> 32 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~1480 base pairs)	≥ 99% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: AF003930.1)	99.8% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: AF003930.1) <sup>5</sup>
<b>Purity (post-freeze)<sup>6</sup></b>	Consistent with expected colony morphology	Consistent with expected colony morphology
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>NR-13400 lot 70029631 was produced by the inoculation of BEI Resources NRS-13400 lot 20090206 into Todd-Hewitt broth containing 0.5% (w/v) yeast extract and incubated for 1 day at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub>. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 1 day at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> to produce this lot.

<sup>2</sup>1 day at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood

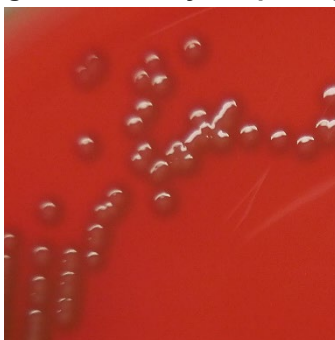
<sup>3</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>4</sup>1 day at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Mueller Hinton agar with 5% defibrinated sheep blood

<sup>5</sup>Also consistent with other *Streptococcus* species

<sup>6</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood.

**Figure 1: Colony Morphology**



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