

***Streptococcus pneumoniae*, Strain GA13430**

**Catalog No. NR-19101**

**Product Description:** *Streptococcus pneumoniae* (*S. pneumoniae*), strain GA13430 was isolated in 1999 from the blood of a patient with bacteremia and fever in Georgia, USA. *S. pneumoniae*, strain GA13430 was deposited as a member of serotype 19F.

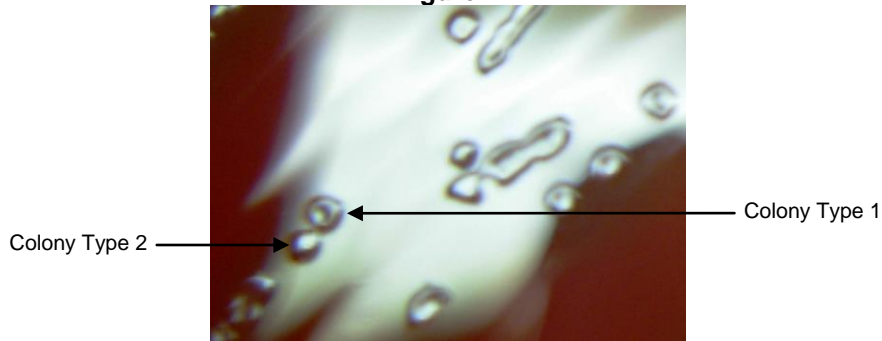
**Lot<sup>1</sup>: 62743337**

**Manufacturing Date: 02JUL2014**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphologies (Figure 1) <sup>2,3</sup>  Hemolysis on blood agar <sup>2</sup> Motility (wet mount) Catalase VITEK <sup>®</sup> 2 (GP Card) VITEK <sup>®</sup> MS (MALDI-TOF)	Gram-positive cocci Report results  α-hemolytic Report results Negative Consistent with <i>S. pneumoniae</i> Consistent with <i>S. pneumoniae</i>	Gram-positive cocci Colony type 1: Circular, umbilicate, undulate, opaque and gray Colony type 2: Circular, low convex, entire, opaque, smooth and gray α-hemolytic Non-motile Negative Consistent with <i>S. pneumoniae</i> Consistent with <i>S. pneumoniae</i>
<b>Antibiotic Susceptibility Profile<sup>4</sup></b> Benzylpenicillin <sup>5</sup> Ciprofloxacin <sup>7</sup> Levofloxacin <sup>5</sup> Gatifloxacin <sup>7</sup> Ofloxacin <sup>5</sup> Erythromycin <sup>5</sup> Telithromycin <sup>5</sup> Clindamycin <sup>7</sup> Quinupristin/dalfopristin <sup>7</sup> Linezolid <sup>5</sup> Vancomycin <sup>5</sup> Tetracycline <sup>5</sup> Rifampicin <sup>7</sup> Trimethoprim/sulfamethoxazole <sup>5</sup> Amoxicillin <sup>5</sup> Meropenem <sup>5</sup> Cefotaxime <sup>5</sup> Cefuroxime <sup>7</sup> Cefaclor <sup>7</sup> Ceftriaxone <sup>5</sup> Chloramphenicol <sup>5</sup>	Sensitive Report results Sensitive Report results Report results Report results Resistant Report results Sensitive Sensitive Report results Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Report results Report results Resistant	Inconclusive (2-4 µg/mL) <sup>6</sup> Intermediate (3 µg/mL) Sensitive (1 µg/mL) Sensitive (0.38 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.125 µg/mL) Sensitive (0.38 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (0.047 µg/mL) Resistant (80 µg/mL) Sensitive (2 µg/mL) Intermediate (0.5-1 µg/mL) Inconclusive (1-2 µg/mL) <sup>8</sup> Resistant (4 µg/mL) Resistant (256 µg/mL) Intermediate (2 µg/mL) Resistant (8-16 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1430 base pairs) Riboprinter <sup>®</sup> Microbial Characterization System	Consistent with <i>S. pneumoniae</i> Consistent with <i>S. pneumoniae</i>	Consistent with <i>S. pneumoniae</i> <sup>9</sup> Consistent with <i>S. pneumoniae</i>
<b>Purity (post-freeze)<sup>10</sup></b>	Consistent with <i>S. pneumoniae</i>	Consistent with <i>S. pneumoniae</i>
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

- <sup>1</sup>*S. pneumoniae*, strain GA13430 (also referred to as SPAR29) was deposited by Scott T. Chancey, Ph.D., Division of Infectious Diseases, Department of Medicine, Emory University, Atlanta, Georgia, USA. NR-19101 was produced by inoculation of the deposited material into Tryptic Soy broth and incubated for 24 hours 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 24 hours at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> to produce this lot.
- <sup>2</sup>21 hours 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>Two colony types were observed. Plating of the individual colony types showed that they merged to a single colony type (Colony Type 1, Figure 1). The 16S ribosomal RNA gene of the mixed population was sequenced and found to be consistent with *S. pneumoniae*.
- <sup>4</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)
- <sup>5</sup>Tested by VITEK<sup>®</sup> AST-GP74 card (VITEK<sup>®</sup> 2, version 5.04)
- <sup>6</sup>*S. pneumoniae*, strain GA13430 was deposited as being sensitive to penicillin. Results from multiple antibiotic susceptibility tests, completed on this lot of NR-19101, produced penicillin MICs between 2 µg/mL and 4 µg/mL, which indicates both sensitive and intermediate penicillin susceptibilities.
- <sup>7</sup>Tested by bioMérieux E-test<sup>®</sup>: cefuroxime (catalog number 506958), ciprofloxacin (412310), clindamycin (412314), cefaclor (504550), gatifloxacin (530250), rifampicin (412449) and quinupristin/dalfopristin (528750)
- <sup>8</sup>*S. pneumoniae*, strain GA13430 was deposited as being sensitive to cefotaxime. Results from multiple antibiotic susceptibility tests, completed on this lot of NR-19101, produced cefotaxime MICs between 1 µg/mL and 2 µg/mL, which indicates both sensitive and intermediate cefotaxime susceptibilities.
- <sup>9</sup>100% identical to *S. pneumoniae*, strain GA13430 (GenBank: AIKP01000001.1)
- <sup>10</sup>Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub>.

Figure 1



Date: 29 DEC 2014

Signature:

Title: Technical Manager, BEI Authentication or designee

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