

***Streptococcus pneumoniae*, Strain GA19998**

Catalog No. NR-19133

Product Description: *Streptococcus pneumoniae* (*S. pneumoniae*), strain GA19998 was isolated in 2004 from the blood of a patient with pneumonia in Georgia, USA. *S. pneumoniae*, strain GA19998 was deposited as a member of serotype 19A.

Lot¹: 62743341

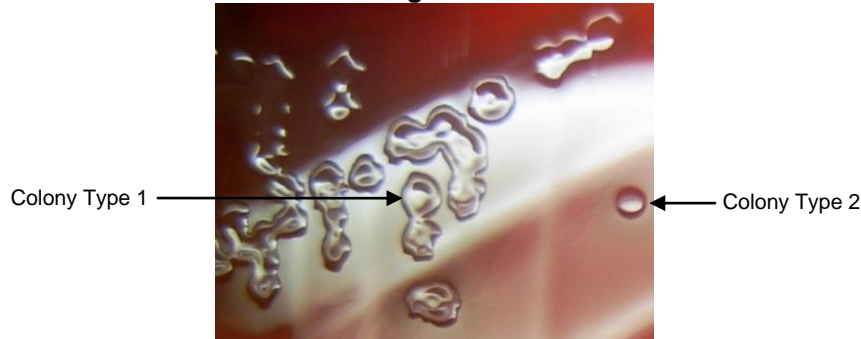
Manufacturing Date: 02JUL2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphologies (Figure 1) ^{2,3} Hemolysis on blood agar ² Motility (wet mount) Catalase VITEK [®] 2 (GP Card) VITEK [®] 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>
Antibiotic Susceptibility Profile⁴ Benzylpenicillin ⁵ Ciprofloxacin ⁶ Levofloxacin ⁵ Gatifloxacin ⁶ Ofloxacin ⁵ Erythromycin ⁵ Telithromycin ⁵ Clindamycin ⁶ Quinupristin/dalfopristin ⁶ Linezolid ⁵ Vancomycin ⁵ Tetracycline ⁵ Rifampicin ⁶ Trimethoprim/sulfamethoxazole ⁵ Amoxicillin ⁵ Meropenem ⁵ Cefotaxime ⁵ Cefuroxime ⁶ Cefaclor ⁶ Ceftriaxone ⁵ Chloramphenicol ⁵	Intermediate Report results Sensitive Report results Report results Report results Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Report results Resistant Intermediate Intermediate Resistant Resistant Report results Resistant Sensitive	Intermediate (4 µg/mL) Resistant (3.0 µg/mL) Sensitive (1 µg/mL) Sensitive (0.25 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 1 µg/mL) Sensitive (0.5 µg/mL) Sensitive (0.25 µg/mL) Sensitive (0.38 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.064 µg/mL) Resistant (≥ 320 µg/mL) Intermediate (4 µg/mL) Intermediate (0.5 µg/mL) Resistant (≥ 4 µg/mL) Resistant (32.0 µg/mL) Resistant (256 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 2 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs) Riboprinter [®] Microbial Characterization System	Consistent with <i>S. pneumoniae</i> Consistent with <i>S. pneumoniae</i>	Consistent with <i>S. pneumoniae</i> ⁷ Consistent with <i>S. pneumoniae</i>
Purity (post-freeze)⁸	Consistent with <i>S. pneumoniae</i>	Consistent with <i>S. pneumoniae</i>
Viability (post-freeze)²	Growth	Growth

Certificate of Analysis for NR-19133

- ¹*S. pneumoniae*, strain GA19998 (also referred to as SPAR61) was deposited by Scott T. Chancey, Ph.D., Division of Infectious Diseases, Department of Medicine, Emory University, Atlanta, Georgia, USA. NR-19133 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% CO₂. 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% CO₂ to produce this lot.
- ²21 hours at 37°C in an aerobic atmosphere with 5% CO₂ on Tryptic Soy agar with 5% defibrinated sheep blood
- ³Two colony types were observed. Plating of the individual colony types showed that colony type 1 reverted back to a mixed colony type whereas colony type 2 remained true. The 16S ribosomal RNA gene of each colony type was sequenced and found to be consistent with *S. pneumoniae*.
- ⁴Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)
- ⁵Tested by VITEK[®] AST-GP74 card (VITEK[®] 2, version 5.04)
- ⁶Tested by bioMérieux E-test[®]: cefuroxime (catalog number 506958), ciprofloxacin (412310), clindamycin (412314), cefaclor (504550), gatifloxacin (530250), rifampicin (412449) and quinupristin/dalfopristin (528750)
- ⁷≥ 99.8% identical to *S. pneumoniae*, strain GA19998 (GenBank: ALCS01000005.1)
- ⁸Purity 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% CO₂.

Figure 1



Date: 29 DEC 2014

Signature: 

Title: Technical Manager, BEI Authentication or designee

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