

***Streptococcus pneumoniae*, Strain OREP4**

**Catalog No. NR-51851**

**Product Description:**

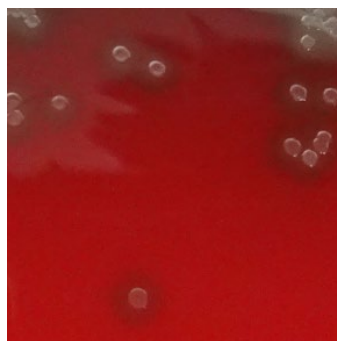
The antibiotic-resistant variant *Streptococcus pneumoniae* (*S. pneumoniae*), strain OREP4 was derived from human wild-type *S. pneumoniae*, strain DS2382-94 by natural selection using increasing concentrations of optochin. NR-51851 lot 70059690 was produced by the inoculation of BEI Resources seed lot 70041529 into Todd-Hewitt broth containing 0.5% (w/v) yeast extract, which was grown 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. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70059690**

**Manufacturing Date: 07APR2023**

| TEST   | SPECIFICATIONS   | RESULTS  |
|--|--|--|
| <b>Phenotypic Analysis</b><br>Cellular morphology<br>Colony morphology<br><br>Hemolysis<br>Motility (wet mount)<br>Biochemical characterization<br>Catalase<br>VITEK® MS (MALDI-TOF) | Gram-positive cocci<br>Report results<br><br>α-hemolytic<br>Report results<br><br>Report results<br><i>S. pneumoniae</i> | Gram-positive cocci<br>Circular, umbilicate, entire, smooth and gray (Figure 1)<br>α-hemolytic<br>Non-motile<br><br>Negative<br><i>S. pneumoniae</i> (99.9%) |
| <b>Antibiotic Susceptibility Profile</b><br>Thermo Scientific™ for differentiation of alpha-hemolytic <i>S. pneumoniae</i><br>Optochin   | Resistant  | Resistant (No zone)  |
| <b>Genotypic Analysis</b><br>Sequencing of 16S ribosomal RNA gene (1490 base pairs)  | ≥ 99% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: AF003930.1)  | 99.7% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: AF003930.1)  |
| <b>Purity (post-freeze)</b><br>7 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood                                  | Growth consistent with expected colony morphology  | Growth consistent with expected colony morphology  |
| <b>Viability (post-freeze)</b>   | Growth   | Growth   |

**Figure 1: Colony Morphology**



/Sonia Bjorum Brower/

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30 JUN 2023

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