

***Streptococcus pneumoniae*, Strain OREP10A**

Catalog No. NR-59133

Product Description:

Streptococcus pneumoniae (*S. pneumoniae*), strain OREP10A was derived from human wild-type *S. pneumoniae*, strain DS3032-06 (serotype 10A) by natural selection using increasing concentrations of optochin. NR-59133 was produced by inoculation of the deposited material into Todd-Hewitt broth containing 0.5% (w/v) yeast extract and grown for 1 day at 37°C in an aerobic atmosphere with 5% CO₂. Broth inoculum was added to Todd-Hewitt agar containing 0.5% (w/v) yeast extract kolles, which were grown for 1 day at 37°C in an aerobic atmosphere with 5% CO₂ to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

Lot: 70058467

Manufacturing Date: 01MAR2023

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Hemolysis Motility (wet mount) Catalase VITEK® MS (MALDI-TOF)	Gram-positive cocci Report results α-hemolytic Report results Report results <i>S. pneumoniae</i>	Gram-positive cocci Circular, low convex, entire, translucent and smooth α-hemolytic Non-motile Negative <i>S. pneumoniae</i> (99.9%)
Antibiotic Susceptibility Profile¹ Thermo Scientific™ Oxoid Optochin Disc 1 day at 35°C in an aerobic atmosphere with 5% CO ₂ on Mueller Hinton agar with 5% defibrinated sheep blood Optochin (Thermo Scientific™ DD0001T)	Report results	Resistant (≤ 6 mm)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: NR_028665.1)	99.7% sequence identity to <i>S. pneumoniae</i> type strain (GenBank: NR_028665.1)
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere with 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)	Growth	Growth

¹Zone of Inhibition; Interpretation Guideline: Burton, R. L. and M. H. Nahm. "Development of a Fourfold Multiplexed Opsonophagocytosis Assay for Pneumococcal Antibodies against Additional Serotypes and Discovery of Serological Subtypes in *Streptococcus pneumoniae* Serotype 20." *Clin. Vaccine Immunol.* 19 (2012): 835-841. PubMed: 22518015.

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