

***Streptococcus pneumoniae*, Strain 978059**

**Catalog No. NR-56693**

**For research use only. Not for use in humans.**

**Contributor and Manufacturer:**  
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**Product Description:**

Bacteria Classification: *Streptococcaceae*, *Streptococcus*

Species: *Streptococcus pneumoniae*

Strain: 978059

Original Source: *Streptococcus pneumoniae* (*S. pneumoniae*), strain 978059 was isolated in 2013 from a bronchoalveolar lavage sample of a 22-year-old male in Italy.<sup>1</sup>

Comments: *S. pneumoniae*, strain 978059 was deposited as part of the Global Priority Superbugs Collection. NR-56693 was deposited as resistant to ampicillin, ceftriaxone, erythromycin, penicillin, tetracycline and trimethoprim/sulfamethoxazole.

*S. pneumoniae* is a Gram-positive, α-hemolytic diplococcal aerotolerant anaerobe that is a major cause of pneumonia, bacterial meningitis and otitis media. *S. pneumoniae* has a polysaccharide capsule that acts as a virulence factor for the organism. There are over ninety different capsular types of *S. pneumoniae* which differ in virulence, prevalence, and extent of drug resistance.<sup>2,3</sup>

**Material Provided:**

Each vial contains approximately 0.3 mL of bacterial culture in Brain Heart Infusion broth supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-56693 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Media:

Brain Heart Infusion broth or Tryptic Soy broth or equivalent Brain Heart Infusion agar or Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO<sub>2</sub>

Propagation:

1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 1 day.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Streptococcus pneumoniae*, Strain 978059, NR-56693.”

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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**References:**

1. McGann, P., Personal Communication.
2. Jedrzejewski, M. J. “Pneumococcal Virulence Factors: Structure and Function.” *Microbiol. Mol. Biol. Rev.* 65 (2001): 187-207. PubMed: 11381099.
3. Habib, M., B. D. Porter and C. Satzke. “Capsular Serotyping of *Streptococcus pneumoniae* Using the Quellung Reaction.” *J. Vis. Exp.* (2014): e51208. PubMed: 24637727.

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