Product Information Sheet for NR-19133

Streptococcus pneumoniae, Strain GA19998

Catalog No. NR-19133

For research use only. Not for use in humans.

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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Streptococcaceae*, *Streptococcus*
Species: *Streptococcus pneumoniae*
Strain: GA19998 (also referred to as SPAR61)
Serotype: 19A[1]
Original Source: *Streptococcus pneumoniae (S. pneumoniae)*, strain GA19998 was isolated in 2004 from the blood of a patient with pneumonia in Georgia, USA.[1]
Comments: Serotyping of *S. pneumoniae*, strain GA19998 was determined by the Quellung reaction and confirmed by genomic analysis.[2] The complete genome of *S. pneumoniae*, strain GA19998 has been sequenced (GenBank: ALCS00000000).

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.[3,4]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

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

Packaging/Storage:
NR-19133 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:
Tryptic Soy broth or Todd-Hewitt broth or equivalent
Tryptic Soy agar or Todd-Hewitt agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent
Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO_2

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.

Note: *Streptococcus* species are generally fast growers. To avoid overgrowth of the culture, incubation without shaking is recommended for growth in broth.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Streptococcus pneumoniae*, Strain GA19998, NR-19133."

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Chancey, S. T., Personal Communication.
2. Habib, M., B. D. Porter and C. Satzke. "Capsular Serotyping of *Streptococcus pneumoniae* Using the Quellung Reaction." J. Vis. Exp. 24 (2014): e51208. PubMed: 24637727.
3. Mitchell, A. M. and T. J. Mitchell. "*Streptococcus pneumoniae*: Virulence Factors and Variation." Clin. Microbiol. Infect. 16 (2010): 411-418. PubMed: 20132250.
4. Jedrzejas, M. J. "Pneumococcal Virulence Factors: Structure and Function." Microbiol. Mol. Biol. Rev. 65 (2001): 187-207. PubMed: 11381099.

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