

SUPPORTING INFECTIOUS DISEASE RESEARCH

Product Information Sheet for NR-19145

Streptococcus pneumoniae, Strain GA41565

Catalog No. NR-19145

For research use only. Not for human use.

Contributor:

Scott T. Chancey, Ph.D., Senior Research Associate, Division of Infectious Diseases, Department of Medicine, Emory University, Atlanta, Georgia, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Streptococcaceae, Streptococcus

Species: Streptococcus pneumoniae

Strain: GA41565 (also referred to as SPAR73)

Serotype: 19A1

<u>Original Source</u>: Streptococcus pneumoniae (S. pneumoniae), strain GA41565 was isolated in 2004 from the blood of a patient with pneumonia in Georgia, USA.¹

<u>Comments</u>: Serotyping of *S. pneumoniae*, strain GA41565 was determined by the Quellung reaction and confirmed by genomic analysis.¹ The complete genome of *S. pneumoniae*, strain GA41565 has been sequenced (GenBank: AGPO00000000).

 $S.\ pneumoniae$ 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. 2,3

Material Provided:

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

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

Packaging/Storage:

NR-19145 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% sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂

Propagation:

- 1. Keep vial frozen until ready for use, then thaw.
- 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.
- Incubate the tube, slant and/or plate at 37°C for 24 hours.

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 GA41565, NR-19145."

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

- 1. Chancey, S. T., Personal Communication.
- Mitchell, A. M. and T. J. Mitchell. "Streptococcus pneumoniae: Virulence Factors and Variation." <u>Clin. Microbiol. Infect.</u> 16 (2010): 411-418. PubMed: 20132250.
- Jedrzejas, M. J. "Pneumococcal Virulence Factors: Structure and Function." <u>Microbiol. Mol. Biol. Rev.</u> 65 (2001): 187-207. PubMed: 11381099.
- 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.

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