

SUPPORTING INFECTIOUS DISEASE RESEARCH

# **Product Information Sheet for NR-36675**

Streptococcus agalactiae, Strain Gottschalk 19247

# Catalog No. NR-36675

# For research use only. Not for human use.

#### Contributor:

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#### Manufacturer:

**BEI Resources** 

# **Product Description:**

Bacteria Classification: Streptococcaceae, Streptococcus

Species: Streptococcus agalactiae

Serogroup: Group B

Strain: Gottschalk 19247 (also 18247)

Original Source: Streptococcus agalactiae (S. agalactiae), strain Gottschalk 19247 was isolated in 1998 by Dr. Monique Goyette from the vagina of an asymptomatic human patient at the Hôpital Saint-Joseph, Trois-Rivières, Quebec, Canada.<sup>1</sup>

<u>Comments</u>: *S. agalactiae*, strain Gottschalk 19247 belongs to serotype la by the coagglutination test; it has a randomly amplified polymorphic DNA (RAPD) profile of G IV cluster C.<sup>1,2</sup> The complete genome of *S. agalactiae*, strain Gottschalk 19247 has been sequenced (GenBank: ANFE00000000).<sup>3</sup>

S. agalactiae is a Gram-positive coccus characterized by the presence of Group B Lancefield antigen, and is known as Group B Streptococcus (GBS). GBS causes illness in people of all ages. In newborns, GBS most commonly causes sepsis, pneumonia, and sometimes meningitis. The most common problems caused by GBS in adults are bloodstream infections, pneumonia, skin and soft-tissue infections, and bone and joint infections. In addition to the presence of the Group B Lancefield antigen, GBS is also characterized by its ability to hydrolyze sodium hippurate and sensitivity to bile. S. agalactiae's polysaccharide antiphagocytic capsule is its main virulence factor. Genomes from multiple serotypes have been sequenced for comparative analyses. 5

## **Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Todd-Hewitt 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-36675 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 Tryptic Soy agar with 5% sheep blood or Todd-Hewitt agar 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.
- 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 sp. 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 agalactiae, Strain Gottschalk 19247, NR-36675."

# 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. Gottschalk, M. Personal Communication.
- Martinez, G., et al. "Characterization of Streptococcus agalactiae Isolates of Bovine and Human Origin by Randomly Amplified Polymorphic DNA Analysis." J. Clin. Microbiol. 38 (2000): 71-78. PubMed: 10618066.
- Stanhope, M. J. "Evolutionary Genomics and Population Genetics of Pathogenic Streptococci." <u>J. Craig Venter Institute</u>. (2009)
  <a href="http://gsc.jcvi.org/projects/gsc/streptococcus/index.sht">http://gsc.jcvi.org/projects/gsc/streptococcus/index.sht</a>
- Smith, J. P., K. K. Durfee and J. H. Marymount, Jr. "A Review of Laboratory Methods for Identification of Group B Streptococci (*Streptococcus agalactiae*)." <u>Am. J. Med. Technol.</u> 45 (1979): 199-204. PubMed: 371403.
- Tettelin, H., et al. "Genome Analysis of Multiple Pathogenic Isolates of Streptococcus agalactiae: Implications for Microbial "Pan-Genome"." <u>Proc. Natl. Acad. Sci. USA</u> 102 (2005): 13950-13955. PubMed: 16172379.

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