

***Streptococcus agalactiae*, Strain SGBS015**

Catalog No. NR-44135

For research use only. Not for human use.

Contributor:

Carol J. Baker, M.D., Professor, Department of Pediatrics, Section of Infectious Diseases, Baylor College of Medicine, Houston, Texas, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Streptococcaceae*, *Streptococcus*

Species: *Streptococcus agalactiae* (also referred to as *Streptococcus difficile*)¹

Serogroup: Group B²

Strain: SGBS015

Original Source: *Streptococcus agalactiae* (*S. agalactiae*), strain SGBS015 was isolated in 2003 from the blood of a bacteremia patient in Harris County, Texas, USA.²

Comment: The complete genome of *S. agalactiae*, strain SGBS015 has been sequenced (GenBank: [AYVZ00000000](http://www.ncbi.nlm.nih.gov/GenBank/AYVZ00000000)).

S. agalactiae is a Gram-positive cocci 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 (infection of the blood), pneumonia (infection in the lungs), and sometimes meningitis (infection of the fluid and lining around the brain). 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.³ Genomes from multiple serotypes have been sequenced for comparative analyses.⁴

Material Provided:

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

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

Packaging/Storage:

NR-44135 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°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% defibrinated sheep blood or Todd-Hewitt agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂

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 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 agalactiae*, Strain SGBS015, NR-44135."

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/bmb15/index.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither the ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure

authenticity and reliability of materials on deposit, the U.S. Government, ATCC[®], their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Kawamura, Y., et al. "High Genetic Similarity of *Streptococcus agalactiae* and *Streptococcus diffcillis*: *S. diffcillis* Eldar et al. 1995 is a Later Synonym of *S. agalactiae* Lehmann and Neumann 1896 (Approved Lists 1980)." Int. J. Syst. Evol. Microbiol. 55 (2005): 961-965. PubMed: 15774692.
2. Baker, C. J., Personal Communication.
3. Smith, J. P., K. K. Durfee and J. H. Marymount Jr. "A Review of Laboratory Methods for Identification of Group B Streptococci (*Streptococcus agalactiae*)." Am. J. Med. Technol. 45 (1979): 199-204. PubMed: 371403.
4. Tettelin, H., et al. "Genome Analysis of Multiple Pathogenic Isolates of *Streptococcus agalactiae*: Implications for Microbial "Pan-Genome"." Proc. Natl. Acad. Sci. USA 102 (2005): 13950-13955. PubMed: 16172379.

ATCC[®] is a trademark of the American Type Culture Collection.

