

***Streptococcus agalactiae*, Strain BV3L5**

Catalog No. HM-829

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*

Strain: BV3L5

Original Source: *Streptococcus agalactiae* (*S. agalactiae*), strain BV3L5 was isolated from a human vaginal swab.¹

Comments: *S. agalactiae*, strain BV3L5 was deposited to BEI Resources as *Streptococcus* sp., and later identified as *S. agalactiae*. *S. agalactiae*, strain BV3L5 ([HMP ID 1256](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *S. agalactiae*, strain BV3L5 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [AZIR00000000](#)).

Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

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 (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.² Genomes from multiple serotypes have been sequenced for comparative analyses.³

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:

HM-829 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 Brain Heart Infusion broth or equivalent
Tryptic Soy agar with 5% defibrinated sheep blood or Brain Heart Infusion agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂ or anaerobic

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 to 3 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Streptococcus agalactiae*, Strain BV3L5, HM-829."

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. [HMP ID 1256](#) (*Streptococcus agalactiae*, strain BV3L5)
2. 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.
3. 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.

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