

***Ruminococcus gnavus*, Strain CC55\_001C**

**Catalog No. HM-1056**

**For research use only. Not for use in humans.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Lachnospiraceae*, *Blautia* (Previously classified as *Ruminococcaceae*, *Ruminococcus*)<sup>1</sup>

Species: *Ruminococcus gnavus*

Strain: CC55\_001C

Original Source: *Ruminococcus gnavus* (*R. gnavus*), strain CC55\_001C was isolated in October 2010 from colonic biopsy tissue of a human subject in Victoria, British Columbia, Canada.<sup>2</sup>

Comments: *R. gnavus*, strain CC55\_001C ([HMP ID 1201](#)) 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 *R. gnavus*, strain CC55\_001C was sequenced at the [Broad Institute](#) (GenBank: [AZJF00000000](#)).

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.

*R. gnavus* is an obligately anaerobic, non-sporulating, Gram-positive coccus to coccobacillus recognized for its highly fermentative nature.<sup>3</sup> *R. gnavus* is commonly found in the digestive tract of humans and animals. In general, *R. gnavus* is viewed as a beneficial gut bacterium, with only a few cases of human infection ever reported.<sup>4,5</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Rumen Fluid-Glucose-Cellobiose broth supplemented with 10% glycerol.

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

**Packaging/Storage:**

HM-1056 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:

Rumen Fluid-Glucose-Cellobiose broth

Rumen Fluid-Glucose-Cellobiose agar<sup>3</sup> or Fastidious Anaerobe agar with 5% sheep blood<sup>2</sup> or Tryptic Soy agar with 5% sheep blood<sup>3</sup> or equivalent

Note: HM-1056 grows best on Tryptic Soy agar with 5% defibrinated sheep blood. Increased incubation time may be required for Rumen Fluid-Glucose-Cellobiose agar.

Incubation:

Temperature: 37°C

Atmosphere: 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 one to two days.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Ruminococcus gnavus*, Strain CC55\_001C, HM-1056.”

**Biosafety Level: 1**

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/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Ludwig, W., K. H. Schleifer and W. B. Whitman. "Revised Road Map to the Phylum *Firmicutes*." In: Bergey's Manual of Systematic Bacteriology, 2nd ed., vol. 3, The Firmicutes. P. De Vos, et al., eds., Springer-Verlag (2009): New York, pp. 1-13.
2. Allen-Vercoe, E., Personal Communication.
3. Moore, W. E. C., J. L. Johnson and L. V. Holdeman. "Emendation of *Bacteroidaceae* and *Butyrivibrio* and Descriptions of *Desulfomonas* gen. nov. and Ten New Species in the Genera *Desulfomonas*, *Butyrivibrio*, *Eubacterium*, *Clostridium*, and *Ruminococcus*." Int. J. Syst. Bacteriol. 26 (1976): 238-252.
4. Titécat, M., et al. "*Ruminococcus gnavus*: An Unusual Pathogen in Septic Arthritis." Anaerobe 30 (2014): 159-160. PubMed: 25312827.
5. Hansen, S. G. K., M. N. Skov and U. S. Justesen. "Two Cases of *Ruminococcus gnavus* Bacteremia Associated with Diverticulitis." J. Clin. Microbiol. 51 (2013): 1334-1336. PubMed: 23363832.
6. [HMP ID 1201](#) (*Ruminococcus gnavus*, strain CC55\_001C)

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