

***Clostridium symbiosum*, Strain WAL-14163**

**Catalog No. HM-309**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Clostridiaceae*, *Clostridium*

Species: *Clostridium symbiosum*

Strain: WAL-14163 (Wadsworth Anaerobe Laboratory)

Original Source: *Clostridium symbiosum* (*C. symbiosum*), strain WAL-14163 was isolated from the stool of a male child with autism.<sup>1,2</sup>

Comments: *C. symbiosum*, strain WAL-14163 ([HMP ID 9474](#)) 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 *C. symbiosum*, strain WAL-14163 was sequenced at the [Broad Institute](#) (GenBank: [ADLQ00000000](#)).

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.

*C. symbiosum* is a Gram-positive, spore-forming, obligately anaerobic bacteria that is part of normal human gut flora.<sup>3</sup> It differs from most *Clostridium* species in that it typically stains Gram negative and spores may be difficult to find. *C. symbiosum* can be pathogenic in rare circumstances.<sup>4</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Modified Chopped Meat medium supplemented with 10% glycerol.

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

**Packaging/Storage:**

HM-309 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:

Modified Chopped Meat medium or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

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 2 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: *Clostridium symbiosum*, Strain WAL-14163, HM-309."

**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](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Allen-Vercoc, E., Personal Communication.
2. [HMP ID 9474](#) (*Clostridium symbiosum*, strain WAL-14163)
3. Kaneuchi, C., et al. "Taxonomic Study of *Bacteroides clostridiiformis* subsp. *clostridiiformis* (Burri and Ankersmit) Holdeman and Moore and of Related Organisms: Proposal of *Clostridium clostridiiformis* (Burri and Ankersmit) comb. nov. and *Clostridium symbiosum* (Stevens) comb. nov." *Int. J. Syst. Bacteriol.* 26 (1976): 195-204.
4. Elsayed, S. and K. Zhang. "Bacteremia Caused by *Clostridium symbiosum*." *J. Clin. Microbiol.* 42 (2004): 4390-4392. PubMed: 15365052.

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