

***Campylobacter* sp., Strain 10_1_50**

Catalog No. HM-213

For research use only. Not for human use.

Contributor:

Emma Allen-Vercoe, Assistant Professor, Department of Molecular and Cellular Biology, University of Guelph, Guelph, Ontario, Canada

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Campylobacteraceae*, *Campylobacter*

Species: *Campylobacter* sp.

Strain: 10_1_50

Original Source: *Campylobacter* sp., strain 10_1_50 was isolated in 2007 from normal gut biopsy tissue taken from a 19-year-old female patient with Crohn's disease in Calgary, Alberta, Canada.^{1,2}

Comments: *Campylobacter* sp., strain 10_1_50 ([HMP_ID 1019](#)) 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 *Campylobacter* sp., strain 10_1_50 was sequenced at the [Broad Institute](#) (GenBank: [ACWJ00000000](#)).

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.

Campylobacter species are microaerophilic, Gram-negative, non-sporulating, motile, spiral rod-shaped bacteria that typically reside in the gastrointestinal tract of warm-blooded animals. Several *Campylobacter* species are foodborne pathogens, causing inflammation of the intestine and diarrhea in infected animals and humans.^{3,4} Within the *Campylobacter* genus, *C. jejuni*, and its close relative *C. coli*, are the most common causes of human acute bacterial enteritis.^{5,6} There is accumulating evidence of the clinical and public health consequences of antibiotic resistance in *Campylobacter* species.^{7,8}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X 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-213 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:

Note: Growth in a biphasic system is highly recommended. Growth in broth or on agar is not recommended and may not be reproducible.

Media:

Tryptic Soy Broth and Tryptic Soy Agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Microaerophilic

Propagation:

1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot onto a biphasic slant (agar slant with broth).
3. Incubate the biphasic slant at 37°C for 48 to 72 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Campylobacter* sp., Strain 10_1_50, HM-213."

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. Professor Emma Allen-Vercoe, personal communication.
2. [HMP ID 1019](#) (*Campylobacter* sp., strain 10_1_50)
3. Man, S. M. "The Clinical Importance of Emerging *Campylobacter* Species." Nat. Rev. Gastroenterol. Hepatol. 8 (2011): 669-685. PubMed: 22025030.
4. Coker, A. O., et al. "Human *Campylobacter*iosis in Developing Countries." Emerg. Infect. Dis. 8 (2002): 237-244. PubMed: 11927019.
5. Altekruze, S. F., et al. "*Campylobacter jejuni*-An Emerging Foodborne Pathogen." Emerg. Infect. Dis. 5 (1999): 28-35. PubMed: 10081669.
6. Tam, C. C., et al. "*Campylobacter coli* - an Important Foodborne Pathogen." J. Infect. 47 (2003): 28-32. PubMed: 12850159.
7. Luangtongkum, T., et al. "Antibiotic Resistance in *Campylobacter*: Emergence, Transmission and Persistence." Future Microbiol. 4 (2009): 189-200. PubMed: 19257846.
8. Gibreel, A. and D. E. Taylor. "Macrolide Resistance in *Campylobacter jejuni* and *Campylobacter coli*." J. Antimicrob. Chemother. 58 (2006): 243-255. PubMed: 16735431.

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