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SUPPORTING INFECTIOUS DISEASE RESEARCH

Bacteroides sp., Strain D2

Catalog No. HM-28

For research use only. Not for human use.

Contributor:

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Product Description:

Bacteria Classification: Bacteroidaceae, Bacteroides Species: Bacteroides sp.

Strain: D2 (Allen-Vercoe lab designation 2_1_39)

- <u>Original Source</u>: *Bacteroides* sp., strain D2 was isolated from biopsy tissue taken from the rectum of a healthy 44-year old female undergoing a colon cancer screen procedure in Calgary, Alberta, Canada.¹
- <u>Comments:</u> Bacteroides sp., strain D2 is a reference genome for <u>The Human Microbiome Project</u> (HMP). HMP is an initiative to identify and characterize human microbial flora. The whole genome shotgun sequencing of *Bacteroides* sp., strain D2 is available (GenBank: <u>ACGA00000000</u>).

Bacteroides species are anaerobic, mesophilic, non-motile, Gram-negative rods that have the highest antibiotic resistance rates of all anaerobic pathogens. These bacteria maintain a complex and usually beneficial host relationship when retained in the gut, but when they escape this environment they can cause significant pathology, including bacteremia and abscess formation in multiple body sites.²

Material Provided:

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

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

Packaging/Storage:

HM-28 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 (<u>ATCC medium 1490</u>) or equivalent Tryptic Soy Agar (TSA) with 5% sheep blood or equivalent <u>Incubation</u>: Temperature: 37°C Atmosphere: Anaerobic gas mixture (80% N₂:10% CO₂:10% H₂)

Propagation:

- 1. Keep vial frozen until ready for use, then thaw.
- 2. Transfer the entire thawed aliquot into Modified Chopped Meat Medium under anaerobic atmosphere.
- Inoculate additional broth tubes with 0.5 mL each from the suspension. Slants may be inoculated with 0.2 mL each. Streak several agar plates to check for colony morphology and purity.
- 4. Incubate cultures at 37°C under anaerobic atmosphere.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH as part of the Human Microbiome Project: *Bacteroides* sp., Strain D2, HM-28."

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. <u>Biosafety in</u> <u>Microbiological and Biomedical Laboratories</u>. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see <u>www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm</u>.

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References:

- 1. Professor Emma Allen-Vercoe, personal communication.
- Wexler, H. M. "Bacteroides: the Good, the Bad, and the Nitty-Gritty." <u>Clin. Microbiol. Rev.</u> 20 (2007): 593-621. PubMed: 17934076.

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