

SUPPORTING INFECTIOUS DISEASE RESEARCH

Product Information Sheet for HM-722

Bacteroides xylanisolv

xylanisolvens, Strain

Catalog No. HM-722

For research use only. Not for human use.

Contributor:

CL03T12C04

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Bacteroidaceae, Bacteroides

Species: Bacteroides xylanisolvens

Strain: CL03T12C04

<u>Original Source</u>: Bacteroides xylanisolvens (B. xylanisolvens), strain CL03T12C04 was isolated from healthy adult human feces in Boston, Massachusetts, USA.¹

<u>Comments</u>: B. xylanisolvens, strain CL03T12C04 (<u>HMP ID 1074</u>) is a reference genome for <u>The Human Microbiome Project</u> (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of B. xylanisolvens, strain CL03T12C04 was sequenced at the Broad Institute (GenBank: AGXE00000000).

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.

B. xylanisolvens is a Gram-negative, strictly anaerobic, non-motile bacterium commonly found in the distal mammalian gut.² It is generally considered to be a beneficial gut commensal, even showing promise as a probiotic³⁻⁵; however, *B. xylanisolvens* has been isolated albeit rarely from human infections.⁶

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Modified Reinforced Clostridial broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-722 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. Freezethaw cycles should be avoided.

Growth Conditions:

Media:

Modified Reinforced Clostridial broth or 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.
- 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 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: Bacteroides xylanisolvens, Strain CL03T12C04, HM-722."

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.

Disclaimers:

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References:

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- 1. Comstock, L. E., Personal Communication.
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- Ulsemer, P., et al. "Safety and Tolerance of Bacteroides xylanisolvens DSM 23964 in Healthy Adults." Benef. Microbes 3 (2012): 99-111. PubMed: 22417778.
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- 5. Ulsemer, P., et al. "Preliminary Safety Evaluation of a New *Bacteroides xylanisolvens* Isolate." <u>Appl. Environ. Microbiol.</u> 78 (2012): 528-535. PubMed: 22101046.
- Pedersen, R. M., E. S. Marmolin and U. S. Justesen. "Species Differentiation of Bacteroides dorei from Bacteroides vulgatus and Bacteroides ovatus from Bacteroides xylanisolvens - Back to Basics." <u>Anaerobe</u> 24 (2013): 1-3. PubMed: 23994205.
- Ramaraj, T., et al. "Improved Hybrid Genome Assemblies of Two Strains of *Bacteroides xylanisolvens*, SD_CC_1b and SD_CC_2a, Obtained Using Illumina and 454 Sequencing Technologies." <u>Genome Announc.</u> 2 (2014): e00237-14. PubMed: 24699955.

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