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SUPPORTING INFECTIOUS DISEASE RESEARCH

Product Information Sheet for HM-259

Treponema denticola, Strain F0402

Catalog No. HM-259

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Spirochaetaceae*, *Treponema*
Species: *Treponema denticola*
Strain: F0402 (formerly known as B1)
Original Source: *Treponema denticola*, (*T. denticola*), strain F0402 was isolated from human subgingival dental plaque in the United States.[1,2]
Comments: *T. denticola*, strain F0402 (HMP ID 9353) 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 *T. denticola*, strain F0402 was sequenced at the Broad Institute (GenBank: ADEC00000000).
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.

T. denticola is a Gram-negative, obligately anaerobic, non-sporulating, motile spirochete usually found in the microflora of a human mouth, predominately in the subgingival plaque of patients with periodontitis.[3] This invasive bacterium has been identified as an important cause of periodontal disease and suspected to be involved in extra-oral infections.[4-7]

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Modified New Oral Spirochete Broth supplemented with 10% DMSO.

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

Packaging/Storage:

HM-259 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:

Modified New Oral Spirochete Broth (ATCC medium 1494) or equivalent
Note: Growth on agar is not recommended.
Incubation:
Temperature: 37°C
Atmosphere: Anaerobic (85% N_2:5% CO_2:10% H_2)
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 additional broth tubes.
4. Incubate cultures at 37°C for 5 to 7 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Treponema denticola*, Strain F0402, HM-259."

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/bmbl5/index.htm.

Disclaimers:

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References:

1. Jacques Izard, personal communication
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3. Chan, E. C., et al. "*Treponema denticola* (ex Brumpt 1925) sp. nov., nom. rev., and Identification of New Spirochete Isolates from Periodontal Pockets." Int. J. Syst. Bacteriol. 43 (1993): 196-203. PubMed: 8494734.
4. Dashper, S. G., et al. "Virulence Factors of the Oral Spirochete *Treponema denticola*." J. Dent. Res. 90 (2011): 691-703. PubMed: 20940357.
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