Actinomyces viscosus, Strain C505

Catalog No. HM-238

For research use only. Not for use in humans.

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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Actinomycetaceae*, *Actinomyces*
Species: *Actinomyces viscosus*
Strain: C505
Original Source: *Actinomyces viscosus* (*A. viscosus*), strain C505 was isolated from expectorated sputum from a 33-year-old female patient with cystic fibrosis in October 2007.[1,2]
Comments: *A. viscosus*, strain C505 (HMP ID 0059) 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 *A. viscosus*, strain C505 was sequenced at the Broad Institute (GenBank: ACRE00000000).
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.

A. viscosus is a Gram-positive, facultatively anaerobic, rod-shaped bacterium commonly found in the flora of the normal human mouth.[3] *A. viscosus* is an important oral bacterium involved in the initiation and development of dental caries and gingivitis in humans.[4] Although *A. viscosus* appears to be of low virulence, there are cases which demonstrate the potential for this organism to cause invasive disease.[5,6]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Actinomyces broth supplemented with 10% glycerol.

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

Packaging/Storage:
HM-238 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:
Actinomyces broth or equivalent
Tryptic Soy Agar with 5% defibrinated sheep blood or equivalent

Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO_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 an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 2 days.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Actinomyces viscosus*, Strain C505, HM-238."

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 (BMBL). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Surette, M.G., Personal Communication.
2. HMP 0059 (*Actinomyces viscosus*, strain C505)
3. Georg, L. K., L. Pine and M. A. Gerencser. "*Actinomyces viscosus* comb. nov. A Catalase Positive, Facultative Member of the Genus *Actinomyces*." Int. J. Syst. Bacteriol. 19 (1969): 291-293.
4. Sosroseno, W., et al. "The Induction of Oral Tolerance to *Actinomyces viscosus* in Mice." Oral Dis. 12 (2006): 387-394. PubMed: 16792724.
5. Mardis, J. S. and W. J. Many, Jr. "Endocarditis Due to *Actinomyces viscosus*." South. Med. J. 94 (2001): 240-243. PubMed: 11235043.
6. Julian, K. G., et al. "*Actinomyces viscosus* Endocarditis Requiring Aortic Valve Replacement." J. Infect. 50 (2005): 359-362. PubMed: 15845438.
7. Yeung, M. K. "Molecular and Genetic Analyses of *Actinomyces* spp." Crit. Rev. Oral Biol. Med. 10 (1999): 120-138. PubMed: 10759417.

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