Product Information Sheet for HM-1091

Actinomyces sp., Strain S4-C9

Catalog No. HM-1091

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Actinomycetaceae, Actinomyces*
Species: *Actinomyces* sp.
Strain: S4-C9
Original Source: *Actinomyces* sp., strain S4-C9 is a vaginal isolate obtained in 2012 from a woman with bacterial vaginosis in Washington, USA.[1,2]
Comments: *Actinomyces* sp., strain S4-C9 (HMP ID 1628) 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 *Actinomyces* sp., strain S4-C9 was sequenced at the J. Craig Venter Institute (GenBank: JRMU01000000).
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.

Actinomyces species are Gram-positive, facultatively anaerobic, rod-shaped bacteria found as predominate flora of the normal human oral cavity, as well as the urogenital and gastrointestinal tracts.[3,4] Present from infancy to adulthood, *Actinomyces* species are the primary colonizers which initiate plaque formation and provide a platform for the adherence of other plaque bacteria, inviting infectious disease development.[3-5] *Actinomyces* species are opportunistic pathogens, requiring damage to mucosal barriers to cause infection.[3]

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-1091 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 Tryptic Soy Yeast Extract broth 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.
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 to 5 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* sp., Strain S4-C9, HM-1091."

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:

1. Sizova, M. V., Personal Communication.
2. HMP ID 1628 (*Actinomyces* sp., strain S4-C9)
3. Garcia-Garcia, A., et al. "Pelvic Actinomycosis." Can. J. Infect. Dis. Med. Microbiol. 2017 (2017): 9428650. PubMed: 28684963.
4. Yeung, M. K. "Molecular and Genetic Analyses of *Actinomyces* spp." Crit. Rev. Oral Biol. Med. 10 (1999): 120-138. PubMed: 10759417.
5. Paster, B. J., et al. "Bacterial Diversity in Human Subgingival Plaque." J. Bacteriol. 183 (2001): 3770-3783. PubMed: 11371542.
6. Dewhirst, F. E., et al. "The Human Oral Microbiome." J. Bacteriol. 192 (2010): 5002-5017. PubMed: 20656903.

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