

**Actinomyces sp., Oral Taxon 178, Strain F0338**

**Catalog No. HM-146**

**For research use only. Not for human use.**

**Contributor:**

Jacques Izard, Assistant Member of the Staff, Department of Molecular Genetics, The Forsyth Institute, Boston, Massachusetts

**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: Actinomycetaceae, Actinomyces

Species: Actinomyces sp.

Subtaxon: Oral Taxon 178

Strain: F0338

Original Source: Actinomyces sp., Oral Taxon 178, strain F0338 was isolated from a human oral cavity.<sup>1</sup>

Comments: Actinomyces sp., Oral Taxon 178, strain F0338 (HMP ID 9005) 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. Oral Taxon 178 strain F0338 is currently being sequenced by the Human Genome Sequencing Center at the [Baylor College of Medicine](#) (GenBank: [AEUH00000000](#)).

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. 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.<sup>2-4</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Actinomyces Broth supplemented with 10% glycerol.

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

**Packaging/Storage:**

HM-146 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 ([ATCC medium 7](#)) or equivalent Tryptic Soy Agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Anaerobic gas mixture (80% N<sub>2</sub>:10% CO<sub>2</sub>:10% H<sub>2</sub>)

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 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: Actinomyces sp., Oral Taxon 178, Strain F0338, HM-146."

**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 <http://www.cdc.gov/biosafety/publications/bmb15/index.htm>.

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**References:**

1. [HMP\\_9005](#) (*Actinomyces* sp., Oral Taxon 178, strain F0338)
2. Yeung, M. K. "Molecular and Genetic Analyses of *Actinomyces* spp." *Crit. Rev. Oral Biol. Med.* 10 (1999): 120-138. PubMed: 10759417.
3. Paster, B. J., et al. "Bacterial Diversity in Human Subgingival Plaque." *J. Bacteriol.* 183 (2001): 3770-3783. PubMed: 11371542.
4. Dewhirst, F. E., et al. "The Human Oral Microbiome." *J. Bacteriol.* 192 (2010): 5002-5017. PubMed: 20656903.

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