

**Actinomyces sp., Oral Taxon 170, Strain F0386**

**Catalog No. HM-468**

**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.

Subtaxon: Oral Taxon 170

Strain: F0386

Original Source: *Actinomyces* sp., Oral Taxon 170, strain F0386 was isolated from a human oral cavity.<sup>1</sup>

Comments: *Actinomyces* sp., Oral Taxon 170, strain F0386 (HMP ID 9056) 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 170, strain F0386 is currently being sequenced by the Human Genome Sequencing Center at the Genome Institute at [Washington University](#) (GenBank: [AFBL00000000](#)).

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-468 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: Aerobic with 5% CO<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 24 to 48 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 170, Strain F0386, HM-468."

**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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. [HMP ID 9056](#) (*Actinomyces* sp., Oral Taxon 170, strain F0386)
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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