

Actinomyces neuii*, Strain MJR8396A*Catalog No. HM-1266****For research use only. Not for human use.****Contributor:**

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Actinomycetaceae*, *Actinomyces*

Species: *Actinomyces neuii*

Strain: MJR8396A

Original Source: *Actinomyces neuii* (*A. neuii*), strain MJR8396A is a vaginal isolate obtained in 2014 from a female with bacterial vaginosis in St. Louis, Missouri, USA.^{1,2}

Comments: *A. neuii*, strain MJR8396A ([HMP ID 3198](#)) 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. neuii*, strain MJR8396A was sequenced at the Genome Institute at [Washington University](#) (GenBank: [LRPJ00000000](#)).

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. neuii is facultatively anaerobic, non-motile, non-sporulating, Gram-positive rod, earlier termed as CDC Fermentative Coryneform Group 1.^{3,4} *A. neuii* is commonly found in abscesses and infected atheromas in breast tissue, skin infections in below the waistline areas including groin, buttock rectal areas and genitourinary tract infections.^{5,6} *A. neuii* is also the most frequently detected *Actinomyces* species in infected tissues around different types of prostheses and medical devices such as ventriculoperitoneal shunts.⁶

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Modified Reinforced Clostridial broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-1266 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:

Modified Reinforced Clostridial broth or Modified Chopped Meat broth or *Actinomyces* broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Brucella agar with hemin (5 µg/mL) and vitamin K1 (10 µg/mL) supplemented with 5% defibrinated sheep blood or Columbia agar with hemin and vitamin K1 supplemented with 5% defibrinated sheep blood¹ or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Anaerobic or aerobic with 5% CO₂

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 4 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 neuii*, Strain MJR8396A, HM-1266."

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/bmbI5/index.htm.

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References:

1. Lewis, A., Personal Communication.
2. [HMP ID 3198](#) (*Actinomyces neuii*, strain MJR8396A)
3. Na'Was, T. E., et al. "Comparison of Biochemical, Morphologic, and Chemical Characteristics of Centers for Disease Control Fermentative Coryneform Groups 1, 2 and A-4." *J. Clin. Microbiol.* 25 (1987): 1354-1358. PubMed: 3114316.
4. Funke, G., et al. "Assignment of Human-Derived CDC Group 1 Coryneform Bacteria and CDC Group 1-Like Coryneform Bacteria to the Genus *Actinomyces* as *Actinomyces neuii* subsp. *neuii* sp. nov., subsp. nov., and *Actinomyces neuii* subsp. *anitratus* subsp. nov." *Int. J. Syst. Bacteriol.* 44 (1994): 167-171. PubMed: 8123558.
5. von Graevenitz, A. "*Actinomyces neuii*: Review of an Unusual Infectious Agent." *Infection* 39 (2011): 97-100. PubMed: 21340579.
6. Könönen, E. and W. G. Wade. "*Actinomyces* and Related Organisms in Human Infections." *Clin. Microbiol. Rev.* 28 (2015): 419-442. PubMed: 25788515.

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