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SUPPORTING INFECTIOUS DISEASE RESEARCH

# *Fusobacterium gonidiaformans*, Strain CMW8396

# Catalog No. HM-1274

# For research use only. Not for human use.

### Contributor:

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## Manufacturer:

**BEI Resources** 

#### **Product Description:**

Bacteria Classification: Fusobacteriaceae, Fusobacterium

<u>Species</u>: *Fusobacterium gonidiaformans* [HM-1274 was deposited to BEI Resources as *Fusobacterium equinum* (*F. equinum*), however, further sequence analysis by the depositor confirmed it as *F. gonidiaformans*.]<sup>1</sup>

### Strain: CMW8396

- <u>Original Source</u>: *F. gonidiaformans*, strain CMW8396 is a vaginal isolate obtained in 2014 from a female with bacterial vaginosis in St. Louis, Missouri, USA.<sup>1,2</sup>
- <u>Comments</u>: *F. gonidiaformans*, strain CMW8396 (<u>HMP ID 3206</u>) is a reference genome for <u>The Human</u> <u>Microbiome Project</u> (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *F. gonidiaformans*, strain CMW8396 was sequenced at the Genome Institute at <u>Washington University</u> (GenBank: <u>LRPX0000000</u>).
- <u>Note</u>: 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.

*F. gonidiaformans* is an anaerobic, non-motile, non-sporulating, Gram-negative bacteria and is a member of the gastrointestinal tract and female urogenital tract microflorae.<sup>3,4</sup> While primarily non-pathogenic, *F. gonidiaformans* has been isolated from infections of the gastrointestinal tract, genital tract, oropharynx, pulmonary pleurae and the central nervous system.<sup>3-5</sup> Unlike more pathogenic *Fusobacterium*, such as *F. nucleatum* and *F. periodonticum*, *F. gonidiaformans* is a passive invader requiring compromised mucosal integrity or coinfection with a virus for host cell invasion.<sup>5</sup>

## **Material Provided:**

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

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

## Packaging/Storage:

HM-1274 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 Chopped Meat broth or Columbia broth with hemin and vitamin K1<sup>1</sup> 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 blood<sup>1</sup> 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 1 to 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: *Fusobacterium gonidiaformans*, Strain CMW8396, HM-1274."

### 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. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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#### **References:**

- 1. Lewis, A., Personal Communication.
- 2. <u>HMP ID 3206</u> (*Fusobacterium gonidiaformans*, strain CMW8396)
- Citron, D. M. "Update on the Taxonomy and Clinical Aspects of the Genus *Fusobacterium*." <u>Clin. Infect. Dis.</u> 35 (2002): S22-27. PubMed: 12173104.
- George, W. L., et al. "Gram-Negative Anaerobic Bacilli: Their Role in Infection and Patterns of Susceptibility to Antimicrobial Agents. II. Little-Known *Fusobacterium* Species and Miscellaneous Genera." <u>Rev. Infect. Dis.</u> 3 (1981): 599-626. PubMed: 7025153.
- Manson McGuire, A., et al. "Evolution of Invasion in a Diverse Set of *Fusobacterium* Species." <u>MBio</u> 5 (2014): e01864. PubMed: 25370491.

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