

## ***Mycobacterium chimaera*, Strain FI-01069T**

**Catalog No. NR-49072**

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

### **Contributor:**

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### **Manufacturer:**

BEI Resources

### **Product Description:**

**Bacteria Classification:** *Mycobacteriaceae*, *Mycobacterium*

**Species:** *Mycobacterium chimaera*

**Strain:** FI-01069T (also referred to as DSM 44623<sup>T</sup> and CIP 107892<sup>T</sup>)<sup>1</sup>

**Original Source:** *Mycobacterium chimaera* (*M. chimaera*), strain FI-01069T was isolated between 1999-2003 from sputum of a 56-year old female with bronchiectasis in Italy.<sup>1</sup>

**Comment:** *M. chimaera*, strain FI-01069T was deposited to BEI Resources as the type strain for this species.<sup>1,2</sup> The complete genome of *M. chimaera*, strain FI-01069T is available (GenBank: [MRBR000000000](https://www.ncbi.nlm.nih.gov/nuccore/MRBR000000000)).

*M. chimaera* is an acid-fast, rod-shaped species of slow-growing nontuberculous mycobacteria classified within the *Mycobacterium avium* complex (MAC).<sup>2</sup> It is distinguished by a unique mycolic acid pattern obtained by high pressure liquid chromatography (HPLC), which presents two clusters of peaks instead of the three presented by all other MAC organisms.<sup>2</sup> *M. chimaera* has been isolated from human pulmonary samples, rats and environmental samples including water and soil.<sup>2-5</sup>

### **Material Provided:**

Each vial contains approximately 0.7 mL of bacterial culture in Middlebrook 7H9 broth with ADC enrichment with 10% glycerol.

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

### **Packaging/Storage:**

NR-49072 was packaged aseptically in screw-capped plastic 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:**

Middlebrook 7H9 broth with ADC enrichment or equivalent

Middlebrook 7H10 agar with OADC enrichment 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 2 to 6 weeks.

### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium chimaera*, Strain FI-01069T, NR-49072."

### **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. Tortoli, E., et al. "Proposal to Elevate the Genetic Variant MAC-A, Included in the *Mycobacterium avium* Complex, to Species Rank as *Mycobacterium chimaera* sp. nov." Int. J. Syst. Evol. Microbiol. 54 (2004): 1277-1285. PubMed: 15280303.
2. Tortoli, E., Personal Communication.
3. Honda, J. R., et al. "Environmental Nontuberculous Mycobacteria in the Hawaiian Islands." PLoS Negl. Trop. Dis. 10 (2016): e0005068. PubMed: 27780201.
4. Durnez, L., et al. "First Detection of Mycobacteria in African Rodents and Insectivores, Using Stratified Pool Screening." Appl. Environ. Microbiol. 74 (2008): 768-773. PubMed: 18065608.
5. Wallace, R. J., Jr., et al. "Absence of *Mycobacterium intracellulare* and Presence of *Mycobacterium chimaera* in Household Water and Biofilm Samples of Patients in the United States with *Mycobacterium avium* Complex Respiratory Disease." J. Clin. Microbiol. 51 (2013): 1747-1752. PubMed: 23536397.

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