

***Mycobacterium colombiense*, Strain 10BT**

Catalog No. NR-49074

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Mycobacteriaceae*, *Mycobacterium*

Species: *Mycobacterium colombiense*

Strain: 10BT (also referred to as CIP 108962[†] and CECT 3035[†])¹

Original Source: *Mycobacterium colombiense* (*M. colombiense*), strain 10BT was isolated in 1995 from the blood of an HIV-positive patient in Bogota, Colombia.¹

Comments: *M. colombiense*, strain 10BT was deposited to BEI Resources as the type strain for the species.¹ The complete genome of *M. colombiense*, strain 10BT is available (GenBank: [AFVW000000000](https://www.ncbi.nlm.nih.gov/nuccore/AFVW000000000)).

M. colombiense is a non-pigmented, acid-fast, non-motile, rod-shaped species of slow-growing nontuberculous mycobacteria classified within the *Mycobacterium avium* complex (MAC).¹ *M. colombiense* is differentiated from other species of the MAC by a unique 16S-23S internal transcribed spacer (ITS) 1 sequence, which forms the new MAC sequevar MAC-X, and a unique 16S ribosomal RNA gene sequence.¹ *M. colombiense* has been isolated from clinical specimens in both immunocompromised and immunocompetent patients.^{1,2,3,4,5}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Middlebrook 7H9 broth with ADC enrichment supplemented with 10% glycerol.

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

Packaging/Storage:

NR-49074 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 Middlebrook ADC enrichment or equivalent

Middlebrook 7H10 agar with Middlebrook OADC enrichment or Lowenstein-Jensen agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: 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 tubes and 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 colombiense*, Strain 10BT, NR-49074."

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.

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References:

1. Murcia, M. I., et al. "*Mycobacterium colombiense* sp. nov., a Novel Member of the *Mycobacterium avium* Complex and Description of MAC-X as a New ITS Genetic Variant." Int. J. Syst. Evol. Microbiol. 56 (2006): 2049-2054. PubMed: 16957098.
2. Esparcia, O., et al. "Lymphadenopathy Caused by *Mycobacterium colombiense*." J. Clin. Microbiol. 46 (2008): 1885-1887. PubMed: 18305134.
3. Vuorenmaa, K., et al. "*Mycobacterium colombiense* and Pseudotuberculous Lymphadenopathy." Emerg. Infect. Dis. 15 (2009): 619-620. PubMed: 19331753.
4. Gao, W., et al. "Disseminated Cutaneous Infection Caused by *Mycobacterium colombiense*." Acta Derm. Venereol. 94 (2014): 727-728. PubMed: 24573766.
5. Otchere, I. D., et al. "Isolation and Characterization of Nontuberculous Mycobacteria from Patients with Pulmonary Tuberculosis in Ghana." Int. J. Mycobacteriol. 6 (2017): 70-75. PubMed: 28317808.

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