

***Mycobacterium riyadhense*, Strain
NLA000201958T**

Catalog No. NR-49076

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Mycobacteriaceae*, *Mycobacterium*

Species: *Mycobacterium riyadhense*

Strain: NLA000201958T (also referred to as DSM 45176^T and CIP 109808^T)¹

Original Source: *Mycobacterium riyadhense* (*M. riyadhense*), strain NLA000201958T was isolated in 2009 from a maxillary sinus lavage of a 19-year-old male in Riyadh, Saudi Arabia.¹

Comments: *M. riyadhense*, strain NLA000201958T was deposited to BEI Resources as the type strain of the species.¹ The complete genome of *M. riyadhense*, strain NLA000201958T is currently being sequenced by BEI Resources.

M. riyadhense is an acid-fast, rod-shaped nonchromogenic species of slow-growing nontuberculous mycobacteria.¹ Like *M. tuberculosis*, it harbors the genes encoding for the 6 kDa early secretory antigenic target (ESAT-6) and the 10 kDa culture filtrate protein (CFP-10) within region of difference 1 (RD1), which may represent a virulence factor in *M. riyadhense*.¹⁻³ *M. riyadhense* has been isolated from clinical specimens involving extrapulmonary and pulmonary disease in Korea, Bahrain and France, suggesting an emerging pathogen.^{4,5} *M. riyadhense* has also been isolated from soil samples.⁶

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-49076 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 riyadhense*, Strain NLA000201958T, NR 49076."

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/bmb15/index.htm.

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References:

1. van Ingen, J., et al. "*Mycobacterium riyadhense* sp. nov., a Non-Tuberculous Species Identified as *Mycobacterium tuberculosis* Complex by a Commercial Line-Probe Assay." Int. J. Syst. Evol. Microbiol. 59 (2009): 1049-1053. PubMed: 19406791.
2. van Ingen, J., et al. "Region of Difference 1 in Nontuberculous *Mycobacterium* Species Adds a Phylogenetic and Taxonomical Character." J. Bacteriol. 191 (2009): 5865-5867. PubMed: 19617365.
3. Lewis, K. N., et al. "Deletion of RD1 from *Mycobacterium tuberculosis* Mimics Calmette-Guérin Attenuation." J. Infect. Dis. 187 (2003): 117-123. PubMed: 12508154.
4. Choi, J.-I., et al. "Lung Infection Caused by *Mycobacterium riyadhense* Confused with *Mycobacterium tuberculosis*: The First Case in Korea." Ann. Lab. Med. 32 (2012): 298-303. PubMed: 22779073.
5. Godreuil, S., et al. "*Mycobacterium riyadhense* Pulmonary Infection, France and Bahrain." Emerg. Infect. Dis. 18 (2012): 176-178. PubMed: 22261434.
6. Pontiroli, A., et al. "Prospecting Environmental Mycobacteria: Combined Molecular Approaches Reveal Unprecedented Diversity." PLoS One 8 (2013): e68648. PubMed: 23874704.

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