Product Information Sheet for NR-49092

Mycobacterium avium, Strain DJO-44271

Catalog No. NR-49092

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Mycobacteriaceae*, *Mycobacterium*
Species: *Mycobacterium avium* (Originally deposited as *Mycobacterium xenopi* and updated to *avium* following whole genome sequence analysis)
Strain: DJO-44271
Original Source: *Mycobacterium avium (M. avium)*, strain DJO-44271 was isolated between 2009 and 2014 from a human in Texas.[1]

M. avium is an acid-fast, slow growing, non-chromogen bacillus ubiquitous in a number of environmental sources including water, soil and plants.[2] This opportunistic pathogen is capable of causing disease in both humans and animals. *M. avium* is subspeciated into *M. avium* subsp. *avium*, *M. avium* subsp. *hominissuis*, *M. avium* subsp. *paratuberculosis* and *M. avium* subsp. *silvaticum*, each of which has a specific host or hosts but shares many genotypic and phenotypic features.[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-49092 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 Lowenstein-Jensen agar or equivalent

Incubation:
Temperature: 37°C
Atmosphere: Aerobic with 5% CO_2
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 avium*, Strain DJO-44271, NR-49092."

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.

This publication recommends that practices with this agent include the use of respiratory protection and the implementation of specific procedures and use of specialized equipment to prevent and contain aerosols.

Disclaimers:

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References:

1. Ordway, D., Personal Communication.
2. Inderlied, C. B., C. A. Kemper and L. E. Bermudez. "The *Mycobacterium avium* Complex." Clin. Microbiol. Rev. 6 (1993): 266-310. PubMed: 8358707.
3. Thorel, M. F., M. Krichevsky and V. V. Levy-Frebault. "Numerical Taxonomy of Mycobactin-Dependent Mycobacteria, Emended Description of *Mycobacterium avium* and Description of *Mycobacterium avium* subsp. *avium* subsp. nov., *Mycobacterium avium* subsp. *paratuberculosis* subsp. nov. and *Mycobacterium avium* subsp. *silvaticum* subsp. nov." Int. J. Syst. Bacteriol. 40 (1990): 254-260. PubMed: 2397193.
4. Turenne, C. Y., R. Wallace Jr. and M. A. Behr. "*Mycobacterium avium* in the Postgenomic Era." Clin. Microbiol. Rev. 20 (2007): 205-229. PubMed: 17428883.
5. Mackenzie, N., et al. "Genomic Comparison of PE and PPE Genes in the *Mycobacterium avium* Complex." J. Clin. Microbiol. 47 (2009): 1002-1011. PubMed: 19144814.

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