

***Mycobacterium shigaense*, Strain UN-152**

Catalog No. NR-49090

For research use only. Not for use in humans.

Contributor:

Dr. Enrico Tortoli, Senior Scientist, Emerging Bacterial Pathogens Unit, San Raffaele Scientific Hospital, Milan, Italy

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Mycobacteriaceae*, *Mycobacterium*

Species: *Mycobacterium shigaense*

Strain: UN-152

Original Source: *Mycobacterium shigaense* (*M. shigaense*), strain UN-152 was isolated in 2009 from a skin biopsy specimen of a 55-year-old male in Japan.¹

Comments: *M. shigaense* has been effectively published, though not validly published, as its own species. The complete genome of *M. shigaense*, strain UN-152 is currently being sequenced by BEI Resources.

M. shigaense is an acid-fast, rod-shaped species of slow-growing nontuberculous mycobacteria, which is phylogenetically included in *M. simiae* complex.^{1,2,3} *M. shigaense* has been isolated from clinical samples from both immunocompetent and immunocompromised patients, as well as from lettuce.^{1,3,4,5}

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-49090 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 shigaense*, Strain UN-152, NR-49090."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Nakanaga, K., et al. "*Mycobacterium shigaense* sp. nov., a Novel Slowly Growing Scotochromogenic Mycobacterium that Produced Nodules in an Erythroderma Patient With Severe Cellular Immunodeficiency and a History of Hodgkin's Disease." J. Dermatol. 39 (2012): 389-396. PubMed: 21955184.
2. Tortoli, E. "Microbiological Features and Clinical Relevance of New Species of the Genus *Mycobacterium*." Clin. Microbiol. Rev. 27 (2014): 727-752. PubMed: 25278573.
3. Koizumi, Y., et al. "*Mycobacterium shigaense* Causes Lymph Node and Cutaneous Lesions as Immune Reconstitution Syndrome in an AIDS Patient: The Third Case Report of a Novel Strain Non-Tuberculous Mycobacterium." Intern. Med. 55 (2016): 3375-3381. PubMed: 27853087.
4. Cui, P., et al. "Cutaneous *Mycobacterium shigaense* Infection in Immunocompetent Women, China." Emerg. Infect. Dis. 19 (2013): 819-820. PubMed: 23697461.
5. Dziejzinska, R., et al. "Nontuberculous Mycobacteria on Ready-to-Eat, Raw and Frozen Fruits and Vegetables." J. Food Prot. 79 (2016): 1452-1456. PubMed: 27497136.

ATCC® is a trademark of the American Type Culture Collection.

