

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

**Catalog No. NR-49090**

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

**Contributor:**

Dr. Enrico Tortoli, Senior Scientist, Emerging Bacterial Pathogens Unit, San Raffaele Scientific Hospital, Milano, 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.<sup>1</sup>

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.<sup>1-3</sup> *M. shigaense* has been isolated from clinical samples from both immunocompetent and immunocompromised patients, as well as from lettuce.<sup>1,3-5</sup>

**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% 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 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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**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

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