

## ***Mycobacterium tuberculosis*, Strain H37Rv, Mycobactin**

### **Catalog No. NR-44101**

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

#### **Contributor:**

BEI Resources

#### **Manufacturer:**

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#### **Product Description:**

NR-44101 is a preparation of mycobactin derived from irradiated *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv. Mycobactin, an iron-binding siderophore, is located in the cell wall where it facilitates the transport of iron to the interior of the cell.<sup>1,2</sup> Mycobactin may also function as a growth factor in low-iron environments and has demonstrated a possible role in microbial virulence.<sup>3,4</sup>

#### **Material Provided:**

Each vial contains approximately 100 µg of dried mycobactin from *M. tuberculosis*, strain H37Rv.

**Note:** Mycobactin is soluble in chloroform:methanol (2:1). Chloroform or DMSO can also be used depending on the downstream application.

#### **Packaging/Storage:**

NR-44101 was packaged aseptically in glass vials. The product is provided frozen on dry ice and should be stored at -80°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

#### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium tuberculosis*, Strain H37Rv, Mycobactin, NR-44101."

#### **Biosafety Level: 1**

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).

#### **Disclaimers:**

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#### **References:**

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3. Snow, G. A. "Isolation and Structure of Mycobactin T, a Growth Factor from *Mycobacterium tuberculosis*." Biochem. J. 97 (1965): 766-775. PubMed: 16749098.
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5. Snow, G. A. "Mycobactins: Iron-Chelating Growth Factors from Mycobacteria." Bacteriol. Rev. 34 (1970): 99-125. PubMed: 4918634.
6. Cole, S. T., et al. "Deciphering the Biology of *Mycobacterium tuberculosis* from the Complete Genome Sequence." Nature 393 (1998): 537-544. PubMed: 9634230. Erratum in: Nature 396 (1998): 190-198.

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