

***Mycobacterium tuberculosis*, Strain H37Rv, Total Lipids**

Catalog No. NR-14837

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Contributor:

BEI Resources or NIH - TB Vaccine Testing and Research Materials Contract

Manufacturer:

Karen Dobos, Ph.D., Colorado State University, Fort Collins, Colorado, USA and NIH - TB Vaccine Testing and Research Materials Contract

Product Description:

NR-14837 is a preparation of the total cellular lipids of irradiated *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv, including those with known biological activities, such as trehalose dimycolate (TDM) and sulpholipids. The culture was grown to late-log phase in glycerol-alanine-salts medium, washed with PBS, inactivated by gamma irradiation and dried. The cellular lipids were extracted with 30 mL of chloroform/methanol (2:1) per gram of cells at 55°C for 18 hours. Cells were removed by filtration and contaminating hydrophilic molecules were removed by biphasic partitioning with water (Folch Wash). The organic phase of the Folch wash was collected and dried.

Material Provided:

Each vial contains approximately 5 mg of dried total lipids from *M. tuberculosis*, strain H37Rv.

Note: Total lipid is soluble in chloroform:methanol (2:1).

Chloroform or DMSO can also be used depending on the downstream application.

Packaging/Storage:

NR-14837 was packaged aseptically in glass vials. The product is provided at room temperature and should be stored at room temperature in a dry atmosphere immediately upon arrival.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium tuberculosis*, Strain H37Rv, Total Lipids, NR-14837."

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, 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

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References:

1. 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.
2. Hancock, C. I., et al. eds. *Bacterial Cell Surface Techniques*. New York: Wiley & Sons, 1988. 125-135.

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