

***Mycobacterium tuberculosis*, Strain
CDC1551, Cytosol Fraction**

Catalog No. NR-14835

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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 and NIH - TB Vaccine Testing and Research Materials Contract

Product Description:

NR-14835 is a preparation of the cytosol fraction of *Mycobacterium tuberculosis*, strain CDC1551, and contains cytosolic proteins and soluble material released from the cell wall during disruption of the bacilli.

The culture was grown to late log phase in glycerol-alanine-salts medium, washed with PBS and inactivated by gamma irradiation. The bacilli were suspended at a concentration of 2 g/mL in PBS containing 8 mM EDTA, DNase, RNase, and a proteinase inhibitor tablet, and broken in a French Press pressure cell at 4°C. Unbroken cells were removed by low speed (3,000 × g) centrifugation. The cell wall was isolated by centrifugation at 27,000 × g. The supernatant was subjected to a 100,000 × g centrifugation for four hours, then collected and dialyzed against 10 mM ammonium bicarbonate. The protein content was determined using the BCA protein assay.

Material Provided:

Each vial contains approximately 1 mg of NR-14835 provided in 10 mM ammonium bicarbonate.

Packaging/Storage:

NR-14835 was packaged aseptically in cryovials. 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 CDC1551, Cytosol Fraction, NR-14835."

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.

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References:

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2. 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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4. Lucas, M. C., et al. "Fractionation and Analysis of Mycobacterial Proteins." Methods Mol. Biol. 1285 (2015): 47-75. PubMed: 25779310.

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