

***Mycobacterium canettii* Cell Membrane Fraction**

**Catalog No. NR-36504**

This reagent is the tangible property of the U.S. Government.

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

**Contributor and Manufacturer:**

Karen Dobos, PhD., Colorado State University, Fort Collins, Colorado, USA

**Product Description:**

NR-36504 is a preparation of the cell membrane fraction of *Mycobacterium canettii* and contains the cytoplasmic membrane and components of the outer lipid layer.

The culture was grown to late-log phase in glycerol-alanine-salts medium, washed with PBS and inactivated by gamma irradiation. The bacilli were broken in a French Press pressure cell and unbroken cells were removed by low speed centrifugation. The cell wall was isolated by centrifugation at 27,000 x g. The supernatant was subjected to a 100,000 x g centrifugation for four hours and the resulting membrane pellet was washed with PBS, then suspended and dialyzed in 10 mM ammonium bicarbonate. Protein content was determined using the BCA protein assay.

**Material Provided:**

Each vial contains approximately 1 mg of protein in 10 mM ammonium bicarbonate provided as a frozen pellet.

**Packaging/Storage:**

NR-36504 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 canettii* Cell Membrane Fraction, NR-36504."

**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:**

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](http://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. This material may be subject to third party patent rights.

**References:**

1. Lee, B.-Y., S. A. Hefta and P. J. Brennan. "Characterization of the Major Membrane Protein of Virulent *Mycobacterium tuberculosis*." Infect. Immun. 60 (1992): 2066-2074. PubMed: 1563797.
2. Brosch, R., et al. "A New Evolutionary Scenario for the *Mycobacterium tuberculosis* Complex." Proc. Natl. Acad. USA 99 (2002): 3684-3689. PubMed: 11891304.
3. 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.
4. Van Soolingen, D., et al. "A Novel Pathogenic Taxon of the *Mycobacterium tuberculosis* Complex, *Canetti*: Characterization of an Exceptional Isolate from Africa." Int. J. Syst. Bacteriol. 47 (1997): 1236-1245. PMID: 9336935.

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

