**Mycobacterium tuberculosis, Strain H37Rv, Cell Membrane Fraction**

**Catalog No. NR-14831**
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**For research use only. Not for human use.**

**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-14831 is a preparation of the cell membrane fraction of *Mycobacterium tuberculosis*, strain H37Rv, 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 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 x g) 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. 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 of NR-14831 contains approximately 1 mg of cell membrane fraction from *M. tuberculosis*, strain H37Rv in 10 mM ammonium bicarbonate.

**Packaging/Storage:**
NR-14831 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 H37Rv, Cell Membrane Fraction, NR-14831.”

**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.**


**Disclaimers:**
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**References:**


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