Ag85 Complex, Purified Native Protein from *Mycobacterium tuberculosis*, Strain H37Rv

Catalog No. NR-14855

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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:

The Antigen 85 complex was isolated from *Mycobacterium tuberculosis (M. tuberculosis)*, strain H37Rv culture filtrate proteins and purified.[1] This complex of fibronectin-binding proteins Ag85A (FbpA), Ag85B (FbpB), and Ag85C (FbpC) is the major secreted protein component of *M. tuberculosis* culture fluids and plays a key role in the pathogenesis of tuberculosis.[2,3,4] This protein complex is highly immunogenic and plays a role in cell wall assembly via a mycolyltransferase exchange process. All three purified antigens have shown extensive cross-reactivity and stimulate complement-mediated phagocytosis by host macrophages.[2,3]

Material Provided:

Each vial contains approximately 500 µg of lyophilized, purified Ag85 complex from *Mycobacterium tuberculosis*, strain H37Rv in 10 mM ammonium bicarbonate.

Note: NR-14855 is soluble in 100 mM to 500 mM aqueous buffered salt solutions, such as phosphate buffered saline. A 10 mM ammonium bicarbonate solution can also be used.

Packaging/Storage:

NR-14855 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: Ag85 Complex, Purified Native Protein from *Mycobacterium tuberculosis,* Strain H37Rv, NR-14855."

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. MycoBrowser: FbpA, FbpB, FbpC
2. Belisle, J. T., et al. "Role of the Major Antigen of *Mycobacterium tuberculosis* in Cell Wall Biogenesis." Science 276 (1997): 1420-1422. PubMed: 9162010.
3. Kremer, L., et al. "The *M. tuberculosis* Antigen 85 Complex and Mycolyltransferase Activity." Lett. Appl. Microbiol. 34 (2002): 233-237. PubMed: 11940150.
4. Wiker, H. G. and M. Harboe. "The Antigen 85 Complex: A Major Secretion Product of *Mycobacterium tuberculosis*." Microbiol. Rev. 56 (1992): 648-661. PubMed: 1480113.

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