Ag85B Recombinant Protein Reference Standard

Catalog No. NR-14870

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Manufacturer:

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

Product Description:

NR-14870 is a recombinant form of the antigen 85 complex B (Ag85B) protein.[1] The recombinant protein consists of the native protein sequence in addition to a hexa-histidine tag. The recombinant protein was expressed in *Escherichia coli* and purified using standard chromatographic techniques followed by endotoxin removal procedures.

Ag85B is one of three components (Ag85A, Ag85B, Ag85C) of the secreted immunodominant 30-32 kDa Antigen 85 Complex present in the culture filtrate of *Mycobacterium tuberculosis* (*M. tuberculosis*).[2] Each of the three proteins are involved in cell wall formation and have been linked to disease pathogenesis through their fibronectin-binding abilities.[3] Ag85B is the most abundant secretory protein produced by *M. tuberculosis*.[4]

Note: This protein is provided as a reference standard and should be ordered with the corresponding plasmid (pMRLB.47; NR-13298).

Material Provided:

Each vial contains approximately 1 mg of lyophilized NR-14870 in 10 mM ammonium bicarbonate.

Note: NR-14870 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-14870 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: Ag85B Recombinant Protein Reference Standard, NR-14870."

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.

Disclaimers:

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References:

1. TubercuList: Rv1886c
2. Lozes, E., et al. "Immunogenicity and Efficacy of a Tuberculosis DNA Vaccine Encoding the Components of the Secreted Antigen 85 Complex." Vaccine 15 (1997): 830-833. PubMed: 9234526.
3. Belisle, J. T., et al. "Role of the Major Antigen of *Mycobacterium tuberculosis* in Cell Wall Biogenesis." Science 30 (1997): 1420-1422. PubMed: 9162010.
4. Anderson, D. H., et al. "An Interfacial Mechansim and a Class of Inhibitors Inferred from Two Crystal Structures of the *Mycobacterium tuberculosis* 30 kDa Major Secretory Protein (Antigen 85B), a Mycolyl Transferase." J. Mol. Biol. 307 (2001): 671-681. PubMed: 11254389.

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