Data Sheet (Cat.No.TMPH-03004)

TargetMol

Ag85A Protein, Mycobacterium tuberculosis, Recombinant (His)

General Information

Synonyms:	Acyl-CoA:diacylglycerol acyltransferase;Antigen 85 complex A (85A;Ag85A);DGAT;fbpA; Diacylglycerol acyltransferase/mycolyltransferase Ag85A;mpt44;Fibronectin-binding protein A (Fbps A)
Protein Construction:	53-331 aa
Species:	Mycobacterium tuberculosis
Expression Host:	E. coli
Accession:	P9WQP2
Molecular Weight:	34.1 kDa (predicted)
AA Sequence:	YLQVPSPSMGRDIKVQFQSGGANSPALYLLDGLRAQDDFSGWDINTPAFEWYDQSGLSVVMPVGGQSSFYS DWYQPACGKAGCQTYKWETFLTSELPGWLQANRHVKPTGSAVVGLSMAASSALTLAIYHPQQFVYAGAMS GLLDPSQAMGPTLIGLAMGDAGGYKASDMWGPKEDPAWQRNDPLLNVGKLIANNTRVWVYCGNGKPSDL GGNNLPAKFLEGFVRTSNIKFQDAYNAGGGHNGVFDFPDSGTHSWEYWGAQLNAMKPDLQRALGATPNT

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The antigen 85 proteins (FbpA, FbpB, FbpC) are responsible for the high affinity of mycobacteria for fibronectin, a large adhesive glycoprotein, which facilitates the attachment of M.tuberculosis to murine alveolar macrophages

(AMs). They also help to maintain the integrity of the cell wall by catalyzing the transfer of mycolic acids to cell wall arabinogalactan, and through the synthesis of alpha,alpha-trehalose dimycolate (TDM, cord factor). They catalyze the transfer of a mycoloyl residue from one molecule of alpha,alpha-trehalose monomycolate (TMM) to another TMM, leading to the formation of TDM. FbpA mediates triacylglycerol (TAG) formation with long-chain acyl-CoA as the acyl donor and 1,2-dipalmitoyl-sn-glycerol (1,2-dipalmitin) as the acyl acceptor.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481