



Recombinant Mycobacterium tuberculosis

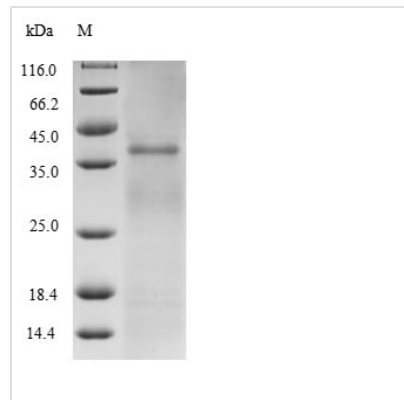
Diacylglycerol acyltransferase/mycolyltransferase

Ag85B (fbpB)

Product Code	CSB-EP314366MVZa0
Relevance	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
Abbreviation	Recombinant Mycobacterium tuberculosis fbpB protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P9WQP0
Product Type	Recombinant Protein
Immunogen Species	Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	FSRPGLPVEYLQVPSPSMGRDIKVQFQSGGNNSPAVYLLDGLRAQDDYNGW DINTPAFEWYYQSGLSIVMPVGGQSSFYSDWYSPACGKAGCQTYKWETFLTS ELPQWLSANRAVKPTGSAAGLSMAGSSAMILAAYHPQQFIYAGSLSALLDPS QGMGPSLIGLAMGDAGGYKAADMWGPSSDPAWERNDPTQQIPKLVANNTRL WVYCGNGTPNELGGANIPAEFLENFVRSSNLKFQDAYNAAGGHNAVFNFPPN GTHSWEYWGAQLNAMKGDLQSSLGAG
Research Area	others
Source	E.coli
Target Names	fbpB
Protein Names	30 kDa extracellular protein Acyl-CoA:diacylglycerol acyltransferase Antigen 85 complex B
Expression Region	41-325aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	36.2kDa


Protein Length

Full Length of Mature Protein

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Just like other recombinant proteins, the production of this recombinant M.tb fbpB protein began with appropriate cDNA and PCR methods, and then the fbpB expression plasmids were built. Following sequence determination of the constructs, plasmids were transformed into E.coli for the expression of the recombinant M.tb fbpB protein. N-terminal 6xHis tag was used in the process. And we finally get the protein of interest with purity of 85%+.

fbpB is a gene encoding a protein named Diacylglycerol acyltransferase/mycolyltransferase Ag85B in mycobacterium tuberculosis. This protein is also called 30 kDa extracellular protein, diacylglycerol acyltransferase, antigen 85 complex B (short name includes 85B and Ag85B), extracellular alpha-antigen and fibronectin-binding protein B (Fbps B). Ag85B is an immunogenic mycolyl transferase involved in the coupling of mycolic acids with arabinogalactan and is necessary for cell wall formation. An experiment has demonstrated that the production of IFN-gamma in the spleen cells increases in C57BL/6 mice subcutaneously immunized with recombinant fbpb protein.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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