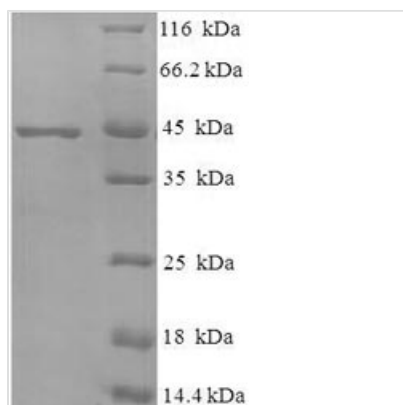




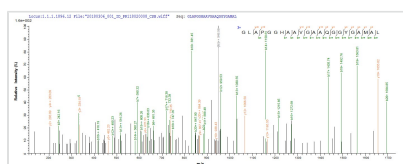
# Recombinant Mycobacterium tuberculosis

## MPT51/MPB51 antigen (mpt51)

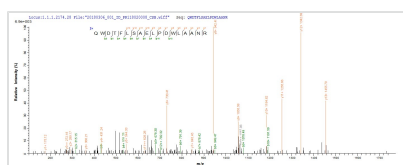
<b>Product Code</b>	CSB-EP363615MVZ
<b>Relevance</b>	May have a role in host tissue attachment, whereby ligands may include the serum protein fibronectin and small sugars.
<b>Abbreviation</b>	Recombinant Mycobacterium tuberculosis mpt51 protein
<b>Storage</b>	The shelf life is related to many factors, 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.
<b>Uniprot No.</b>	P9WQN6
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	AEPTAKAAPYENLMVPSPSMGRDIPVAFLAGGPHAVYLLDAFNAGPDVSNWV TAGNAMNTLAGKGISVVAPAGGAYSMYTNWEQDGSQWDTFLSAELPDWLA ANRGLAPGGHAAVGAAQGGYGAMALAAFHPDRFGFAGSMGFLYPSNTTTN GAIAAGMQQFGGVDTNGMWGAPQLGRWKWHDPWVHASLLAQNNTRVWWV SPTNPGASDPAAMIGQAAEAMGNSRMFYNQYRSVGGHNGHFDFFPASGDNG WGSWAPQLGAMSGDIVGAIR
<b>Research Area</b>	Others
<b>Source</b>	E.coli
<b>Target Names</b>	mpt51
<b>Expression Region</b>	27-299aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-SUMO-tagged
<b>Mol. Weight</b>	44.5kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP363615MVZ could indicate that this peptide derived from E.coli-expressed Mycobacterium tuberculosis mpt51.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP363615MVZ could indicate that this peptide derived from E.coli-expressed Mycobacterium tuberculosis mpt51.

## Description

Constructing a plasmid encoding the Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh) mpt51 protein (27-299aa) is the initial step in the general approach to express the recombinant Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh) mpt51 protein. The plasmid is then transformed into e.coli cells. Positive e.coli cells are selected and cultured, protein expression is induced, and cells are lysed. The protein is fused with a N-terminal 6xHis-SUMO tag. The resulting recombinant Mycobacterium tuberculosis (strain CDC 1551 / Oshkosh) mpt51 protein is then purified through affinity purification, and SDS-PAGE analysis is carried out to verify the presence and assess the purity of the protein. Its purity exceeds 90%.

## 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

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.