

CFP10 recombinant protein

Recombinant antigen CFP10 for Mycobacterium tuberculosis (Koch's bacillus)

CATALOG #
AAA14239

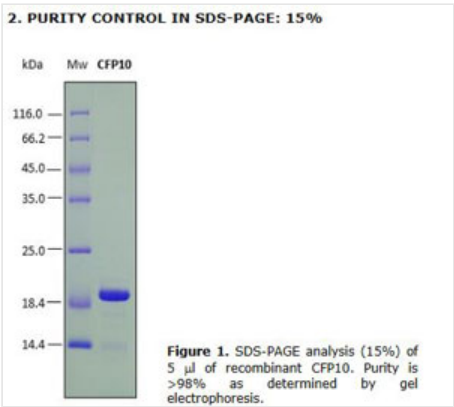
HOST
Escherichia Coli.

PRODUCT SYNONYMS

CFP10; Recombinant antigen CFP10 for Mycobacterium tuberculosis (Koch's bacillus); esxB; CFP10 recombinant protein

PRODUCT SPECIFICATIONS

Host	Escherichia Coli.
Form/Format	Dry powder (stabilized with 5% trehalose)
Sequence Length	100
Application Notes	Possible Applications : WB, DB, Indirect ELISA , positive control in direct ELISA , CLIA , lateral flow. Where this product has not been tested for use in a particular technique, this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates. *The measurement of the protein concentration has been performed with the theoretical extinction coefficient of the recombinant protein obtained from Gill and vonHippel, 1989. It is recommended that the users carry out their absorbance determinations to avoid equipment variabilities regarding final concentration, mainly in reproducibility analysis.
Composition	Components: his-CFP10 Composition: recombinant antigen with a his-tag in its N-terminus. Components: Storage buffer before lyophilization Composition: 20 mM phosphate buffer pH 6.5, 0.15 M NaCl and 0.1% polyoxyethylene (10) tridecyl ether
Quality Control	Protein Concentration Determined Espectrophotometrically: $DO_{280} = 0.66$ $A_{0.1\%} (=1 \text{ g/l}) = 0.484$ Concentration: 1.37 mg/ml
Absence of precipitation after a freezing and thawing cycle	ok
Observations	Proteins should be maintained frozen at high concentrations. The dilution to be performed for ELISA assays should be made with a small quantity of protein, the same day of the experiment. In order to defrost the protein, maintain the aliquot at 25°C without shaking to avoid aggregation. Prior making test dilutions and after defrosting the protein, is recommended to remove possible protein aggregates by centrifuging the stock solution, avoiding alterations in the immobilization of the biomolecule to the solid surface.
Total Quantity Per Aliquot	1mg
Reconstitution	with approx. 0.670 ml of sterile double-distilled water, a final concentration of approx. 1.37 mg/ml will be obtained. The solubilization of the cake should be developed for 15 min to allow a homogeneous protein solution, considering that part of the cake can be on the glass-walls of the container. Upon reconstitution, leave the solution at least 15 min homogenizing with a mild agitation at 4°C. Avoid vigorous shaking that can cause foaming and protein denaturation. With this reconstitution, the protein will be maintained at pH 6.5. It is recommended that the users carry out their absorbance determinations to avoid concentration variabilities due to the equipment used, mainly in reproducibility analysis.
Preparation and Storage	Upon arrival, it should be stored at 4°C to -20°C in vertical position, avoiding all possible humidity and maintaining the vials dry. Once reconstituted, it should be aliquoted to avoid repeated freezing and thawing cycles and stored at -20°C to -80°C.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CFP10 recombinant protein	The Mycobacterium tuberculosis gene for the 10 kDa culture filtrate antigen EsxB, has been expressed as a recombinant antigen fused to a his-tag in its N-terminus.
Product Categories/Family for CFP10 recombinant protein	BACTERIA

NCBI AND UNIPROT INFORMATION

NCBI GI #	597960710
Molecular Weight	Determined by SDS-PAGE, the protein band is between molecular markers of 25,000 and 18,400 Da, while relative molecular mass calculated from amino acid sequence is 17,506.0 Da.
NCBI Official Full Name	CFP10, partial

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.