

CFP-10, Recombinant Protein Reference Standard

Catalog No. NR-49425

Product Description: NR-49425 is a recombinant form of the culture filtrate antigen, CFP-10, from *Mycobacterium tuberculosis*. The recombinant protein consists of the native protein sequence in addition to a hexa-histidine tag (predicted molecular weight ~ 14.4 kDa). The recombinant protein was expressed in *Escherichia coli* (*E. coli*) BL21 (DE3) pLysS cells and purified by immobilized-metal affinity chromatography.

Lot¹: 63571021

Manufacturing Date: 19AUG2015

| TEST | SPECIFICATIONS | RESULTS |
|--|---|---|
| Appearance | Report results | White, fluffy clumps or film |
| SDS-PAGE | Protein band of interest represents > 90% of total staining intensity | Dominant band of ~ 14 kDa accounts for > 90% of total staining intensity (Figure 1) |
| Concentration by Bicinchoninic Acid Protein Assay ² | Report results | 1.46 mg per mL |
| Final Product Quantity per vial Volume per vial | Report results Report results | 2.04 mg 1.40 mL |
| Western Blot Analysis Polyclonal anti-CFP-10 ³ Monoclonal anti-histidine tag ⁴ | Reactive Reactive | Reactive (Figure 2) Reactive (Figure 3) |
| Endotoxin Content (Limulus Amoebocyte Lysate Assay) | Report results | < 7.4 EU/mg protein |
| Filtration | 0.2 µm sterile-filtered | 0.2 µm sterile-filtered |

¹CFP-10 was harvested and purified from *E. coli* BL21 (DE3) pLysS cells transformed with BEI Resources NR-13297, lot: 62795353.

²Using BSA as a standard

³Rabbit anti-CFP-10 polyclonal antibody (BEI Resources, NR-13801) (1:10000 dilution)

⁴6xHis tag monoclonal antibody (R&D Systems, MAB050) (1:1000 dilution)

Date: 23 SEP 2015

Signature: 

BEI Resources Authentication

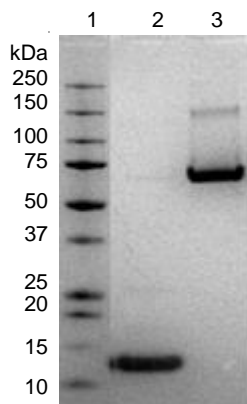
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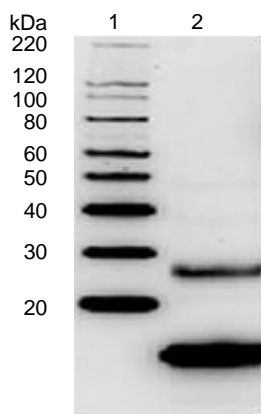


Figure 1: SDS-PAGE of CFP-10



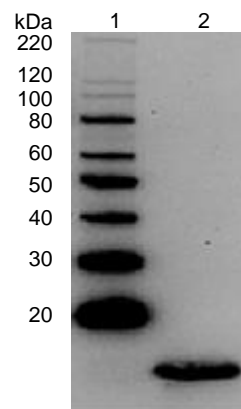
Lane 1: Precision Plus Protein™ Standard
 Lane 2: NR-49425, 2.0 µg
 Lane 3: BSA, 2.0 µg

Figure 2: Western Blot with Polyclonal Anti-CFP-10



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-49425, 1.0 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-49425, 1.0 µg