

## CFP-10, Recombinant Protein Reference Standard

### Catalog No. NR-60455

This reagent is the tangible property of the U.S. Government.

### Product Description:

NR-60455 is a recombinant form of the culture filtrate antigen CFP-10 protein from *Mycobacterium tuberculosis* (*M. tuberculosis*). The recombinant protein consists of the native protein sequence in addition to a hexa-histidine tag. The recombinant protein was expressed in *Escherichia coli* BL21 (DE3) pLysS cells transformed with BEI Resources NR-13297 lot 59415499 and purified by nickel affinity chromatography.

Lot: 70075667

Manufacturing Date: 14NOV2025

| TEST                                                           | SPECIFICATIONS                                                        | RESULTS                                                                             |
|----------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Appearance                                                     | Report results                                                        | Frozen                                                                              |
| SDS-PAGE Analysis                                              | Protein band of interest represents > 90% of total staining intensity | Dominant band of ~ 14 kDa accounts for 96.6% of total staining intensity (Figure 1) |
| Concentration by Bicinchoninic Acid Protein Assay <sup>1</sup> | Report results                                                        | 0.34 mg/mL                                                                          |
| Final Product                                                  |                                                                       |                                                                                     |
| Quantity per vial                                              | Report results                                                        | 119 µg                                                                              |
| Volume per vial                                                | Report results                                                        | 350 µL                                                                              |
| Western Blot Analysis                                          |                                                                       |                                                                                     |
| Polyclonal anti-CFP-10 <sup>2</sup>                            | Reactive                                                              | Reactive (Figure 2)                                                                 |
| Monoclonal anti-histidine tag <sup>3</sup>                     | Reactive                                                              | Reactive (Figure 3)                                                                 |
| Endotoxin Content                                              |                                                                       |                                                                                     |
| Limulus Amoebocyte Lysate Assay <sup>4</sup>                   | Report results                                                        | < 14.7 EU/mg                                                                        |
| Filtration                                                     | 0.2 µm filter-sterilized                                              | 0.2 µm filter-sterilized                                                            |

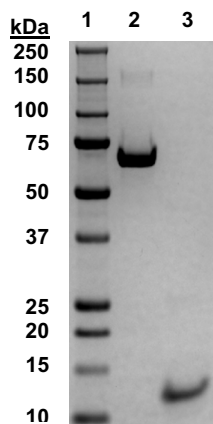
<sup>1</sup>Using bovine serum albumin (BSA) as a standard

<sup>2</sup>Using a 1:1,000,000 dilution of rabbit polyclonal Anti-*M. tuberculosis* CFP-10 (BEI Resources NR-13801) as primary antibody and a 1:1000 dilution of HRP-conjugated anti-rabbit IgG (R&D Systems HAF008) as secondary antibody

<sup>3</sup>Using a 1:1000 dilution of mouse monoclonal anti-His (R&D Systems MAB050) as primary antibody and a 1:1000 dilution of HRP-conjugated anti-mouse IgG (R&D Systems HAF007) as secondary antibody

<sup>4</sup>Charles River Endosafe®-PTS Endotoxin Testing System (Charles River PTS200SF)

Figure 1: SDS-PAGE Analysis



Lane 1: Precision Plus Protein Standard  
Lane 2: BSA, 2 µg  
Lane 3: NR-60455, 2 µg

# Certificate of Analysis for NR-60455

**Figure 2: Western Blot with Polyclonal Anti-*Mycobacterium tuberculosis* CFP-10**

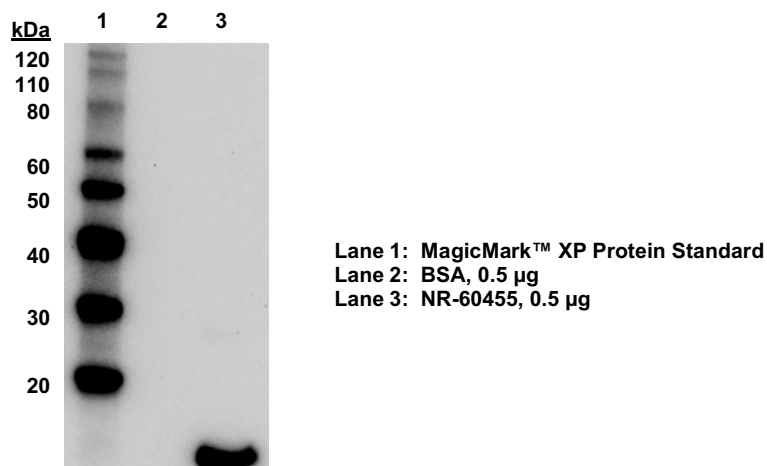
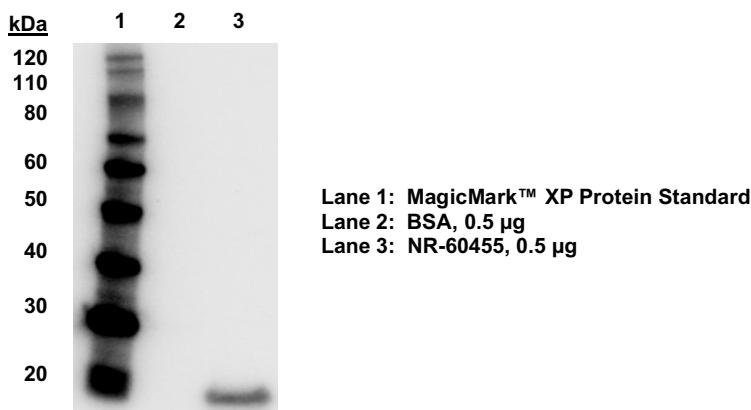


**Figure 3: Western Blot with Monoclonal Anti-Histidine Tag**



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27 FEB 2026

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