

# **Certificate of Analysis for NR-49425**

### CFP-10, Recombinant Protein Reference Standard

### Catalog No. NR-49425

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

## **Product Description:**

www.beiresources.org

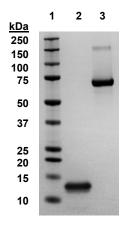
NR-49425 is a recombinant form of the culture filtrate antigen CFP-10 from *Mycobacterium tuberculosis*. The recombinant protein consists of the native protein sequence in addition to a hexa-histidine tag (predicted molecular weight ~ 14.4 kDa). The recombinant protein was expressed in *Escherichia coli*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

Lot: 70053880 Manufacturing Date: 01JUL2022

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	Lyophilized
SDS-PAGE	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 14 kDa accounts for > 95% of total staining intensity (Figure 1)
Final Product Amount per vial	Report results	177.6 µg
Identification by Western Blot Analysis Polyclonal anti-CFP-10 <sup>1</sup> Monoclonal anti-histidine tag <sup>2</sup>	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	Report results	< 11.26 EU/mg protein
Filtration	0.2 µm sterile-filtered	0.2 µm sterile-filtered

<sup>&</sup>lt;sup>1</sup>Using a 1:10,000 dilution of rabbit polyclonal Anti-*Mycobacterium 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

Figure 1: SDS-PAGE Analysis



Lane 1: Precision Plus Protein™ Standard Lane 2: NR-49425 lot 70053880, 2 μg

Lane 3: BSA, 2 µg

BEI Resources E-mail: contact@beiresources.org

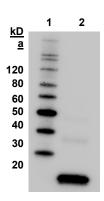
Tel: 800-359-7370 Fax: 703-365-2898

<sup>&</sup>lt;sup>2</sup>Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (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



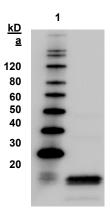
# **Certificate of Analysis for NR-49425**

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



Lane 1: MagicMark™ XP Protein Standard Lane 2: NR-49425 lot 70053880, 0.5 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard Lane 2: NR-49425 lot 70053880, 0.5 µg

/Sonia Bjorum Brower/ Sonia Bjorum Brower

01 DEC 2022

Technical Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

BEI Resources www.beiresources.org E-mail: contact@beiresources.org
Tel: 800-359-7370

Fax: 703-365-2898