

**MPT32/Apa (Gene Rv1860), Purified Native Protein from *Mycobacterium tuberculosis*, Strain H37Rv****Catalog No. NR-14862**

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

**Product Description:** NR-14862 is a preparation of native MPT32/Apa (Gene Rv1860) purified from *Mycobacterium tuberculosis*, strain H37Rv culture filtrate protein fraction. The culture filtrate protein fraction was precipitated with 40% ammonium sulfate, applied to a ConA column, eluted, concentrated, dialyzed, applied to a phenyl sepharose column and eluted. The purified MPT32/Apa was dialyzed in 10 mM ammonium bicarbonate.

**Lot: 61315854****Manufacturing Date: 20DEC2013**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 13.Rv.2.12.20.45kDa.A is attached.

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor 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<sup>®</sup>'s knowledge.

ATCC<sup>®</sup> 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.



WORK SHEET FOR PURIFIED NATIVE PROTEINS

General Information

Lot Number: 13.Rv.2.12.20.45kDa.A  
Product: 45kDa  
Species: Mycobacterium tuberculosis  
Strain: H37Rv

Purification Information

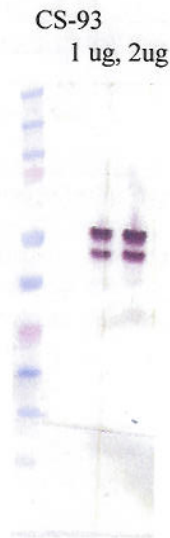
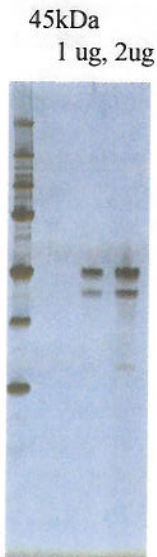
Starting material: 13.Rv.2.8.6.7.CFP, 13.Rv.2.8.20.8.CFP, 13.Rv.2.9.3.9.CFP, 13.Rv.2.7.23.6.CFP, 13.Rv.2.7.9.5.CFP, 13.Rv.2.6.25.9.CFP, 13.Rv.2.6.11.8.CFP, 13.Rv.2.5.28.7.CFP, & 13.Rv.2.5.14.6.CFP (1.177 g total)

Protocol used (SOP #'s): PP019.3 and PP022.3  
Date started: 10/23/2013  
Date completed: 12/20/2013  
Notebook; page(s): Rachel Hazenfield Protein #2 pp.65-72  
Additional notes (if applicable): Material only went over conA and C4 columns (no phenaseph column)

Quality Control Information

Clarity of product/suspension after dialysis: clear  
BCA: 0.236  $\mu\text{g}/\mu\text{l}$  Notebook and page(s): Rachel Hazenfield Protein #2 pg. 72  
Total volume: 74.6ml Total amount of Protein: 17.6mg  
Silver Stain Date: 12/12/2013 Notebook and page(s): Rachel Hazenfield Protein #2 pp.72  
Western blot Date: 12/12/2013 Antibody used: CS-93  
Notebook and page(s): Rachel Hazenfield Protein #2 pp.72  
Mass Spectrometry information/file (if applicable): \_\_\_\_\_

QC Gel and Western:



Aliquot Information:  
35 x 0.5mg, 1x 0.1mg

Rachel Hazenfield  
(Research Associate)

12/20/13  
(date)

[Signature]  
(Laboratory Supervisor)

12/23/2013  
(date)