

***Mycobacterium tuberculosis*, Strain H37Rv, Purified Phosphatidylinositol Mannosides 1 & 2 (PIM<sub>1,2</sub>)****Catalog No. NR-14846**

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

**Product Description:** NR-14846 is a preparation of the purified phosphatidylinositol mannosides 1 & 2 (PIM<sub>1,2</sub>) cell wall glycolipids of *Mycobacterium tuberculosis*, strain H37Rv. The soluble organic fraction was extracted from irradiated cells, dried and titrated with cold acetone. The acetone-insoluble fraction was then applied to preparative thin-layer chromatography plates in a solvent system of chloroform/methanol/water (60:30:6). PIMs were purified from the dried matrix using 40% methanol in chloroform.

**Lot: 70001798****Manufacturing Date: 27JAN2017**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 17.Rv.1.27.01.PIM<sub>1,2</sub> is attached.

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## WORK SHEET FOR PURIFIED LIPID FRACTION

### General Information

BEI Catalog Number: NR-14846  
CSU Lot Number: 17.Rv.1.27.01.PIM<sub>1,2</sub>  
Fraction Type: phosphatidylinositol mannosides 1,2  
Species: *M. tuberculosis*  
Strain: H37Rv

### Purification Information

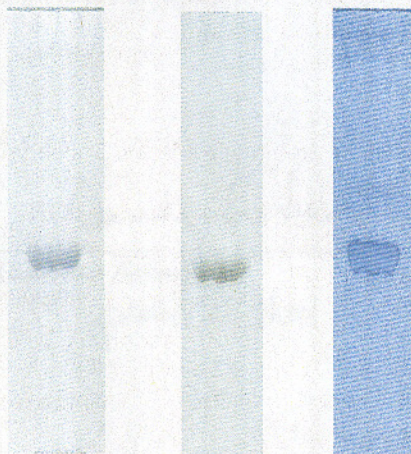
Starting material: 10:10:3 total lipid Starting Material Lot #: 13.Rv.2.5.28.7.WCg  
Cells Irradiated: Yes Viability Test Performed: No Viable Organism Detected  
Protocol used (SOP #'s): PP026.2, SPO31b, SPO32, SPO33, SPO37, SPO45.2  
Date started: 12/1/16  
Date completed: 1/27/17  
Notebook; page(s): PIM Notebook 1 pp 48-60

### Quality Control Information:

Total amount of PIM<sub>1,2</sub>: 14.575 mg MALDI-TOF completed: 1/27/17  
TLC date: 1/23/17 Date dried on N<sub>2</sub> bath: 1/27/17  
Notebook and page(s): PIM I pp 61-65

### TLC Analysis:

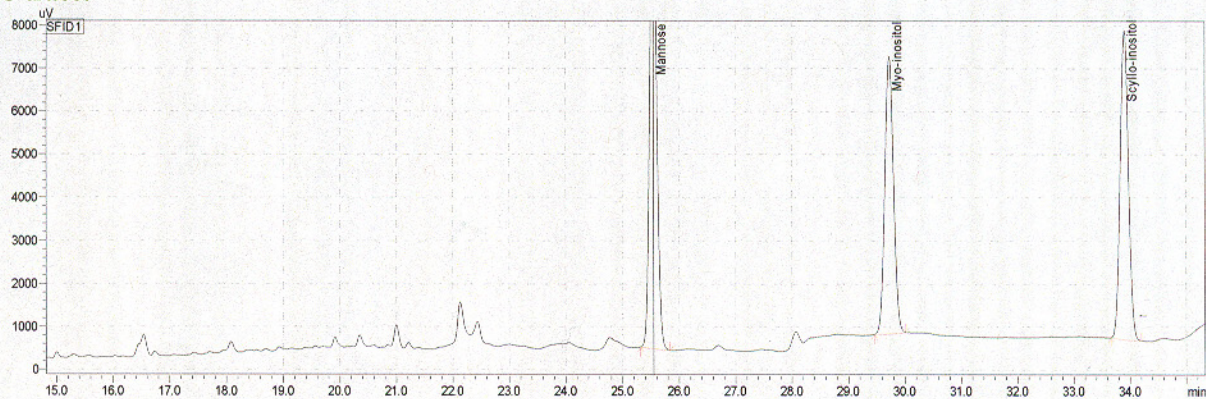
$\alpha$ -naphthol      CuSO<sub>4</sub>      Dittmer-Lester



### Aliquot Information:

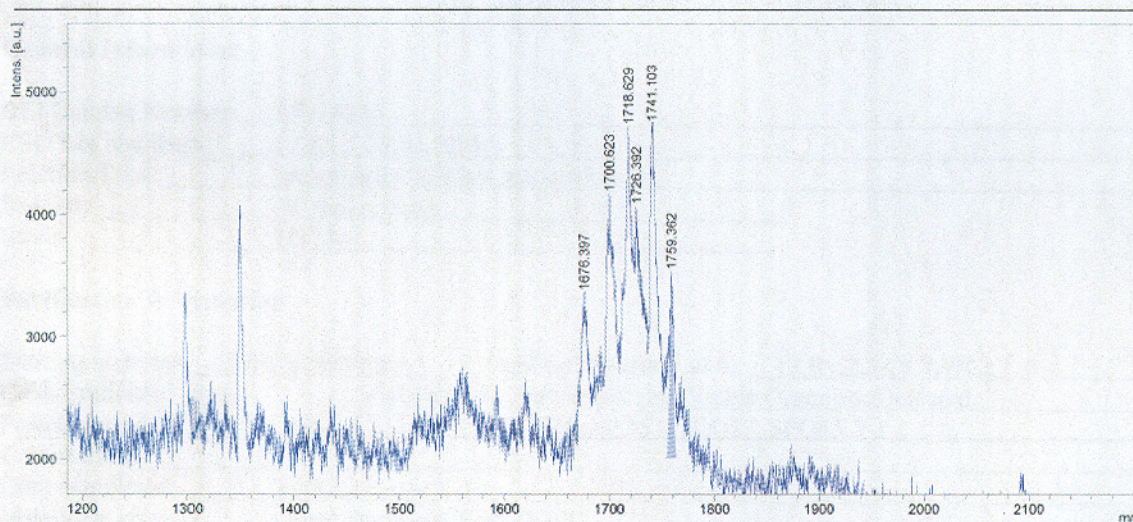
29 x 0.500 mg = 14.500 mg  
1 x 0.075 mg = 0.075 mg  
**14.575 mg**

### GC trace:



Injected 0.25  $\mu$ g alditol acetate derivatized PIM<sub>1,2</sub>.

MALDI-TOF



Analyzed 1.0 ug 17.Rv.1.27.01.PIM<sub>1,2</sub> with 1.0 ul DHB matrix in positive mode.

*Dan C. Lissner* 2/9/17  
(Research Associate) date  
updated QC sheet

*C. Mahaffey* 2/9/17  
(Laboratory Supervisor) date