

***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.

**Lot: 70037230****Manufacturing Date: 25NOV2020**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 20.Rv.11.17.01.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: 20.Rv.11.17.01.PIM<sub>1,2</sub>  
Fraction Type: phosphatidylinositol mannosides 1,2  
Species: *M. tuberculosis*  
Strain: H37Rv

### Purification Information

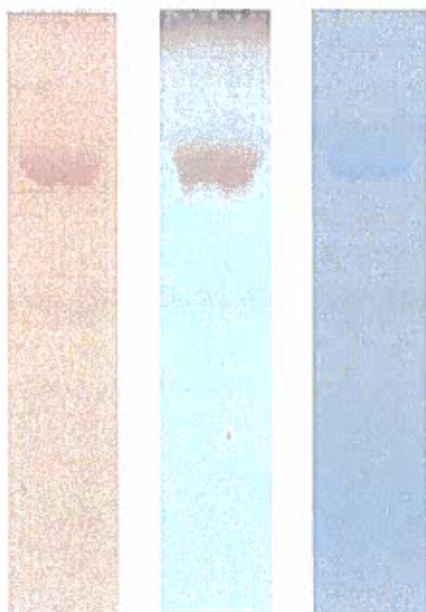
Starting material: 2:1 total lipid Starting Material Lot #: 17.Rv.2.11.1.11..WCg.a  
Cells Irradiated: Yes Viability Test Performed: No Viable Organism Detected  
Protocol used (SOP #'s): PP026.2, SPO31b, SPO32, SPO33, SPO37, SPO45.2  
Date started: 10/16/20  
Date completed: 11/25/20  
Notebook; page(s): Lipids Notebook 9 pp 117-131

### Quality Control Information:

Total amount of PIM<sub>1,2</sub>: 13.5 mg MALDI-TOF completed: 11/17/20  
TLC system: 65/25/4 CHCl<sub>3</sub>/CH<sub>3</sub>OH/H<sub>2</sub>O TLC date: 11/16/20  
Date dried on N<sub>2</sub> bath: 11/25/20 Notebook and page(s): Lipids 9 pp 132-140

### TLC Analysis:

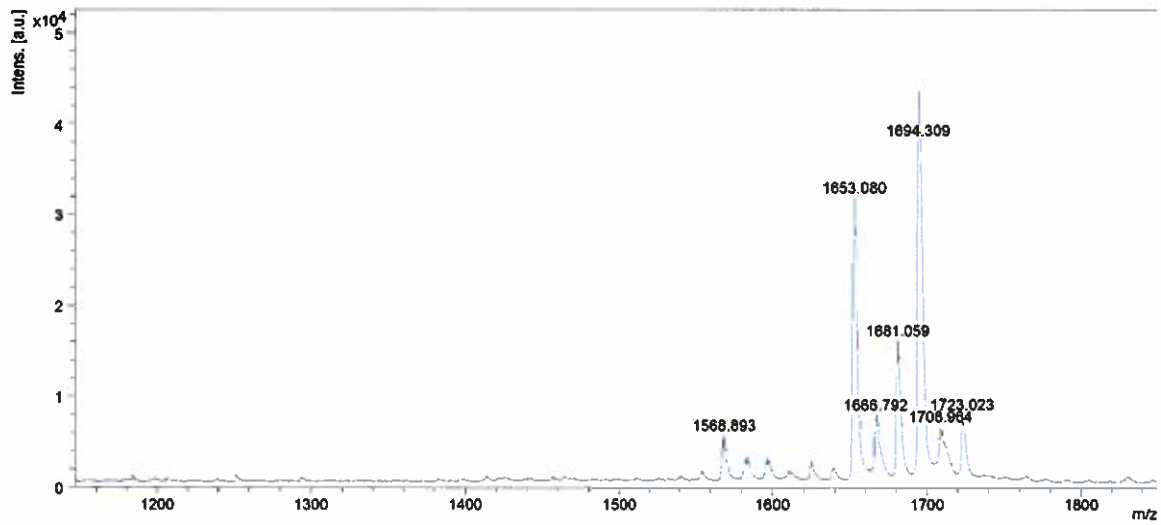
**$\alpha$ -naphthol      CuSO<sub>4</sub>      Dittmer-Lester**



### Aliquot Information:

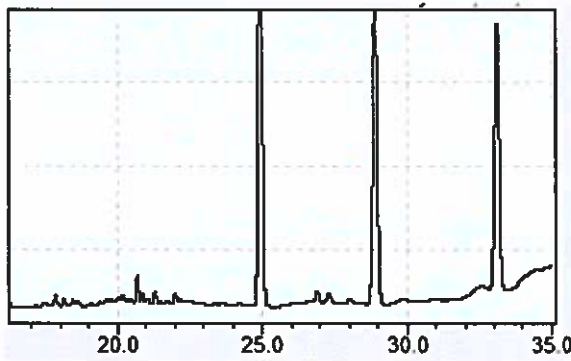
26 x 0.5 mg = 13.0 mg  
1 x 0.1 mg = 0.1 mg  
13.1 mg

**MALDI-TOF**



Analyzed 1.0 ug 20.Rv.11.17.01.PIM<sub>1,2</sub> with 1.0 ul DHB matrix in negative mode.

**GC trace:**



NS	retention time	min
Rhamnose	17.636	
Fucose	18.024	
Ribose	19.593	
Arabinose	20.027	
Xylose	21.747	
Mannose	24.929	
Galactose	26.025	
Glucose	27.322	
Myo-inositol	28.927	
Scyllo-inositol	33.091	

Injected 1.2 ug PIM<sub>1,2</sub> based on 200 ug PIM derivitized into alditol acetates.

Mannose	24.942	138503
Myo-inos	28.914	97405
Scyllo-inositol	33.107	88804

*Dany Wilson* 11/30/20  
 (Research Associate) date

*C. McHappy* 12/1/20  
 (Laboratory Supervisor) date