

***Mycobacterium tuberculosis*, Strain H37Rv, Purified Phthiocerol Dimycocerosate (PDIM)****Catalog No. NR-20328**

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

**Product Description:** NR-20328 is a preparation of phthiocerol dimycocerosate (PDIM) derived from the total cellular lipids of irradiated *Mycobacterium tuberculosis*, strain H37Rv.

**Lot: 70000499****Manufacturing Date: 27JAN2017**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 17.Rv.1.27.01.PDIM is attached.

Note: The label for NR-20328 lot 70000499 should read: "Phthiocerol dimycocerosate, *Mycobacterium tuberculosis*, Strain H37Rv".

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## WORK SHEET FOR PURIFIED LIPID FRACTION

### General Information

BEI Catalog Number: NR-20328  
CSU Lot Number: 17.Rv.1.27.01.PDIM  
Fraction Type: pthiocerol dimycocerosate  
Species: *M. tuberculosis*  
Strain: H37Rv

### Purification Information

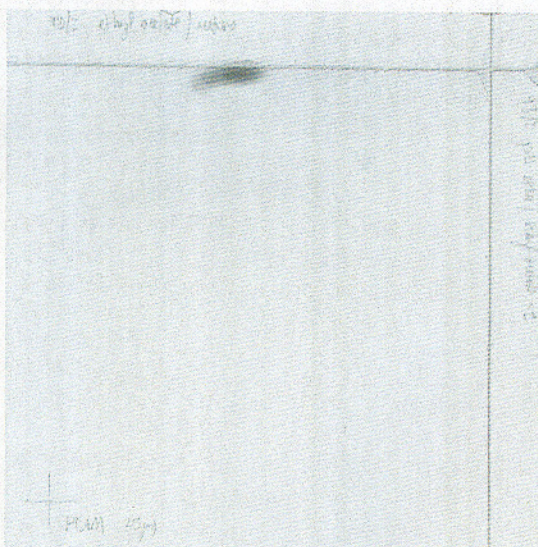
Starting material: 10:10:3 TL Starting Material Lot #: 14.Rv.2.6.10.4.WCg.b  
Cells Irradiated: Yes Viability Test Performed: No Viable Organism Detected  
Protocol used (SOP #'s): SP031, SP032, SP033, SP037.1  
Date started: 1/4/17  
Date completed: 1/27/17  
Notebook; page(s): PDIM Notebook 2 pp 47-50

Additional notes: Lower organic layer of 10:10:3 total lipid was developed on preparative TLC plates with 98/2 petroleum ether/ethyl acetate, then the top three bands were eluted with 2:1 chloroform/ methanol. Lipids were further purified by an additional round of prep plate extractions.

### Quality Control Information:

Total amount of PDIM : 9.475 mg MALDI-TOF completed: 1/27/17  
TLC date: 1/27/17 Date dried on N<sub>2</sub> bath: 1/27/17  
Notebook and page(s): PDIM Notebook 2 pp 51-52

### TLC Analysis:



Loaded 25 ug and ran in dimensions below:

1<sup>st</sup> 98/2 petroleum ether/ethyl acetate (x2)  
2<sup>nd</sup> 98/2 petroleum ether/acetone

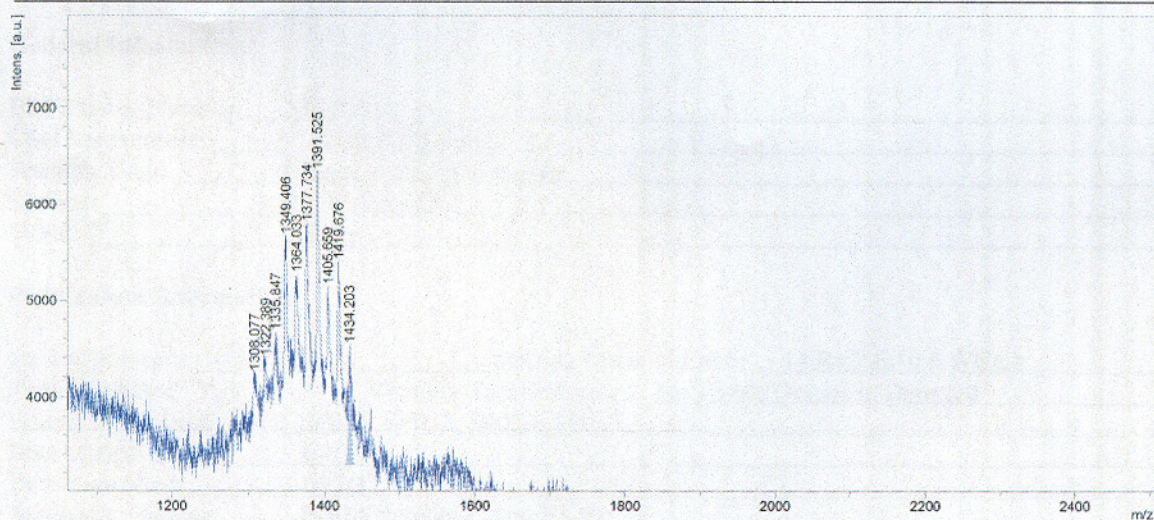
1<sup>st</sup> →

↑  
2<sup>nd</sup>

### Aliquot Information

0.500 mg x 18 = 9.000 mg  
0.475 mg x 1 = 0.475 mg  
9.475 mg

QC MALDI-TOF:



Equal volumes (1 ul) of PDIM at 1.0 mg/ml in 2:1 chloroform/methanol and DHB matrix were mixed, then analyzed in positive electrospray mode.

*Sam Crissan* 2/8/17  
\_\_\_\_\_  
(Research Associate) date  
updated QC sheet

*C. Mahaffey* 2/8/17  
\_\_\_\_\_  
(Laboratory Supervisor) date