

Mycobacterium tuberculosis*, Strain H37Rv, Purified Phosphatidylinositol Mannoside 6 (PIM₆)*Catalog No. NR-14847**

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Product Description: NR-14847 is a preparation of the purified phosphatidylinositol mannoside 6 (PIM₆) cell wall glycolipids of irradiated *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. PIMs were purified from the dried matrix using 40% methanol in chloroform.

Lot: 70005722**Manufacturing Date: 20JUN2017**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 17.Rv.6.20.JMR.PIM₆ is attached.

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WORK SHEET FOR PURIFIED PIM6

General Information

Lot Number: 17.Rv.6.20.JMR.PIM6
Species: *Mycobacterium tuberculosis*
Strain: H37Rv

Purification Information

Starting material (lot #): 14.Rv.2.6.24.5.WCA
Cell amount (wet weight): 72.9
Protocol used (SOP #): PP015.5, PP016.6, PP017.3
Date started: 02/09/2017
Date completed: 06/20/2017
Notebook; pages: LLP#1 KN, JR, JB pgs 14, 15, 22, 23, 26-30
Additional notes (if applicable): _1 µg injected analyzed by LC-MS and spectra interrogated against the *Mtb* LipidDB (Sartain et al, J Lipid Res 2011)

Quality Control Information

Clarity of product: Clear
Endotoxin amount: 0.52 ng/mg Notebook and page(s): LLP#1 KN, JR, JB p30
GC Results: 0.58mg/ml Notebook and page(s): LLP#1 KN, JR, JB p29
Total amount of PIM6: 2.95mg
Silver stain date: 06/02/17 Notebook and page(s): LLP#1 KN, JR, JB p30

QC Silver Stain and LC-MS:



Name	Notes	Mass	m/z	Quality Score
Ac1PIM2 (R1CO2H+R2CO2H+R3CO2H=51:0,R4=H)	[M-H]-	1414.908	1413.9	100
Ac1PIM6 (R1CO2H+R2CO2H+R3CO2H=51:0,R4=H)	[M-H]-	2063.122	1030.554	100
Ac2PIM2 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M-H]-	1653.138	1652.13	87
Ac2PIM2 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M-H]-	1653.139	1652.132	100
Ac2PIM2 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=69:0)	[M-H]-	1681.169	1680.162	100
Ac2PIM2 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M-H]-	1695.186	1694.178	69.6
Ac2PIM2 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M-H]-	1695.186	1694.179	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M+HAc-H]-	2361.369	1179.677	69.6
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M-H]-	2301.35	1149.668	100

Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M+Na-2H]-	2323.332	1160.659	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=67:0)	[M+HAc-H]-	2361.369	1179.677	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=69:0)	[M+HAc-H]-	2389.399	1193.691	73
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=69:0)	[M-H]-	2329.38	1163.683	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=69:1)	[M-H]-	2327.365	1162.676	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=69:3)	[M+HAc-H]-	2383.352	1190.668	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M+HAc-H]-	2403.416	1200.7	69.6
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M-H]-	2343.397	1170.692	69.6
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M+Na-2H]-	2365.378	1181.682	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M+HAc-H]-	2403.417	1200.701	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=70:0)	[M-H]-	2343.398	1170.692	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=72:0)	[M-H]-	2371.429	1184.707	100
Ac2PIM6 (R1CO2H+R2CO2H+R3CO2H+R4CO2H=72:3)	[M+HAc-H]-	2425.398	1211.693	100
DG (R1CO2H+R2CO2H=34:0)	[M+HAc-H]-	656.5621	655.5548	55.7
DG (R1CO2H+R2CO2H=36:0)	[M+HAc-H]-	684.5933	683.5861	67.5
DG (R1CO2H+R2CO2H=36:0)	[M+HAc-H]-	684.5937	683.5863	86.3
Mycocerosic acid (C35)	[M+HAc-H]-	582.5612	641.5756	100
PI (R1CO2H+R2CO2H=33:0)	[M+HAc-H]-	884.5693	929.5648	67.3
PI (R1CO2H+R2CO2H=36:0)	[M-H]-	866.5903	847.5726	81.1
PI (R1CO2H+R2CO2H=36:0)	[M-H]-	866.5903	847.5728	100

***Trace PIM2 detected in sample**

Aliquot Information:

11 vials @ 250µg

1 vial @ 200ug retained by CSU

Jean M Ryan 4/13/18
(Research Associate) (date)

C. McHaffey 4/26/18
(Laboratory Supervisor) (date)