

# **Certificate of Analysis for NR-48784**

# Mycobacterium tuberculosis, Strain H37Rv, Purified Trehalose Monomycolate (TMM)

Catalog No. NR-48784

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

**Product Description:** NR-48784 is a preparation of purified trehalose monomycolate (TMM) that was extracted from the lipid fraction obtained from irradiated *Mycobacterium tuberculosis*, strain H37Rv cells. Following purification steps, the TMM was dried under nitrogen gas.

Lot: 70000217 Manufacturing Date: 29NOV2016

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 16.Rv.11.18.02.TMM is attached.

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#### WORK SHEET FOR PURIFIED LIPID FRACTION

#### **General Information**

BEI Catalog Number:	NR-48784
CSU Lot Number:	16.Rv.11.18.02.TMM
Fraction Type:	trehalose monomycolate
Species:	M. tuberculosis
Strain:	H37Rv

#### **Purification Information**

Starting material: 10:10:3	from H37Rv 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):	PP030.1, SP031, SP032, SP033, SP037, SP046
Date started:	9/28/16
Date completed:	11/29/16
Notebook; page(s):	TMM Notebook I pp 91-99

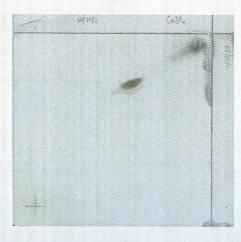
Additional notes: 2:1-soluble acetone-insoluble 10:10:3 Rv TL was applied to preparatory TLC plates and resolved with 60/30/6 chloroform/methanol/water. Extracted bands were polished on prep plates with 65/25/4, same solvents.

## **Quality Control Information:**

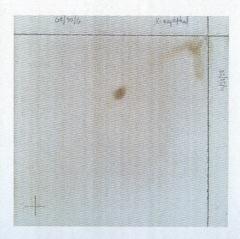
Total amount of TMM: 2.05 mg		MALDI-TOF completed:	11/29/16	
TLC date:	11/18/16	Date dried on N <sub>2</sub> bath:		
Notebook and page(s	): TMM I pp 99-100 and I	PIM I p 45		

## **TLC Analysis:**





## α-naphthol



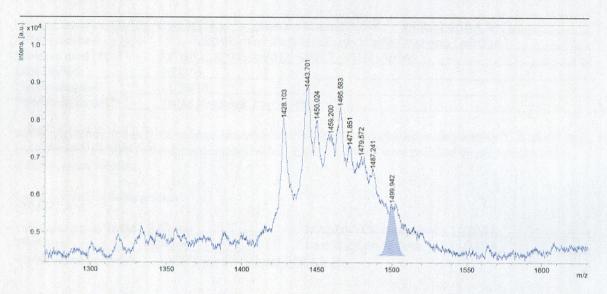
## **TLC solvent system**

1st dimension 65/25/4 chloroform/ methanol/ water, left to right;  $2^{nd}$  dimension 60/30/6, same solvents, bottom to top. Loaded  $25~\mu g$  TMM.

# **Aliquot information**

 $\begin{array}{ccc} 8 \text{ x } 0.25 \text{ mg} = & 2.00 \text{ mg} \\ \underline{1 \text{ x } 0.05 \text{ mg}} = & 0.05 \text{ mg} \\ & & 2.05 \text{ mg} \end{array}$ 

# **MALDI** Analysis



Purified sample (1  $\mu$ l at 2.0  $\mu$ g/ $\mu$ l) was mixed 1:1 with DHB matrix and analyzed in positive mode.

(Research Associate) date

updated QC Pheet

(Laboratory Supervisor)

2 7 1 1 date