

***Mycobacterium tuberculosis*, Strain H37Rv, Purified Trehalose Monomycolate (TMM)****Catalog No. NR-48784**

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**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: 64091718****Manufacturing Date: 30MAY2017**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 17.Rv.5.25.01.TMM is attached.

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## WORK SHEET FOR PURIFIED LIPID FRACTION

### General Information

BEI Catalog Number: NR-48784  
CSU Lot Number: 17.Rv.5.25.01.TMM  
Fraction Type: trehalose monomycolate  
Species: *M. tuberculosis*  
Strain: H37Rv

### Purification Information

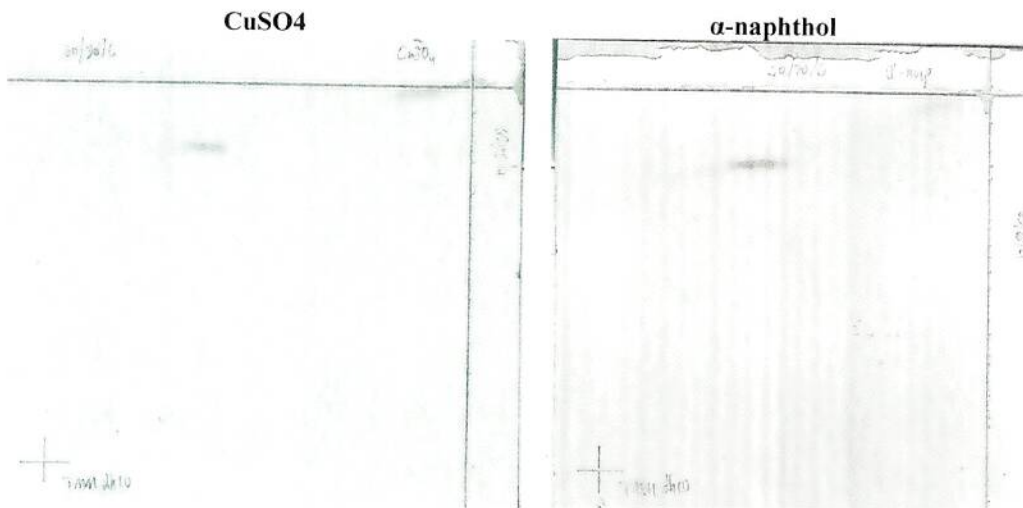
Starting material: 2:1 TL from H37Rv Starting Material Lot #: 15.Rv.2.11.10.10.WCg.b  
Cells Irradiated: Yes Viability Test Performed: No Viable Organism Detected  
Protocol used (SOP #'s): PP030.1, SP031, SP032, SP033, SP037, SP046  
Date started: 4/26/17  
Date completed: 5/30/17  
Notebook; page(s): TDM/TMM/SL Notebook 3 pp 65-78

Additional notes: 2:1 Rv TL was applied to silica gel flash columns, which were washed with chloroform, then an increasing methanol gradient. The 10-20% MeOH in CHCl<sub>3</sub> fractions were 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: 11.3 mg MALDI-TOF completed: 6/5/17  
TLC date: 5/25/17 Date dried on N<sub>2</sub> bath: 5/30/17  
Notebook and page(s): TDM/TMM/SL Notebook 3 pp 79-82

### TLC Analysis:



### TLC solvent system

1st dimension 65/25/4 chloroform/ methanol/ water, left to right; 2<sup>nd</sup> dimension 60/30/6, same solvents, bottom to top. Loaded 25 μg TMM.

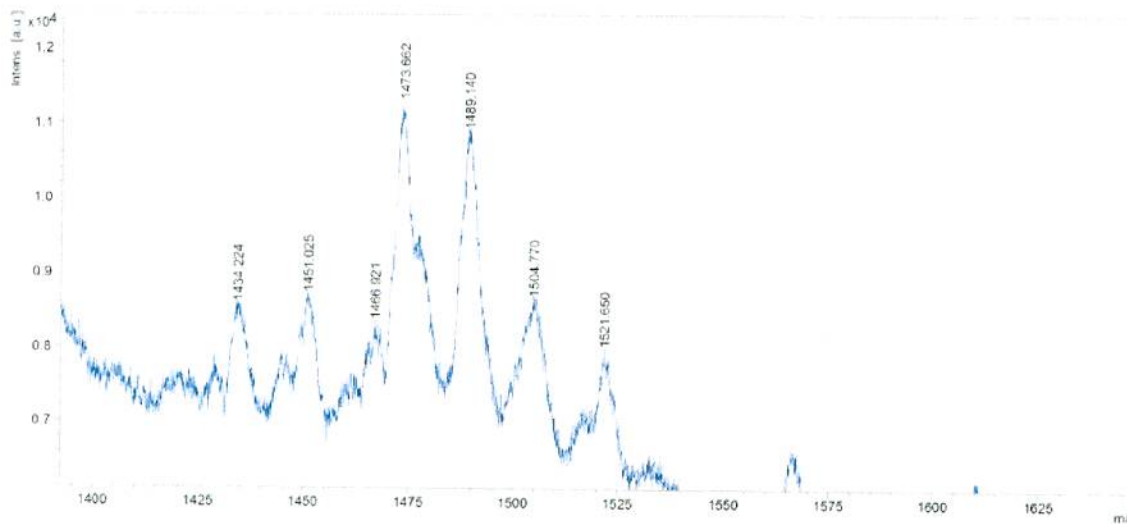
**Aliquot information**

25 x 0.25 mg = 6.25 mg

1 x 5.05 mg = 5.05 mg

11.30 mg

**MALDI Analysis**



Purified sample (1  $\mu$ l at 2.5  $\mu$ g/ $\mu$ l) was mixed 1:1 with DHB matrix and analyzed in positive mode.

Dan G. Jensen      6/5/17  
(Research Associate)      date

C. J. Lehassy      6/5/17  
(Laboratory Supervisor)      date