

***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: 70026908****Manufacturing Date: 27JAN2020**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 20.Rv.01.27.01.TMM is attached.

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## WORK SHEET FOR PURIFIED LIPID FRACTION

### General Information

BEI Catalog Number: NR-48784  
CSU Lot Number: 20.Rv.01.27.01.TMM  
Fraction Type: trehalose monomycolate  
Species: *M. tuberculosis*  
Strain: H37Rv

### Purification Information

Starting material: 10.2g of lyophilized H37Rv cells Starting Material Lot #: 18.Rv.2.8.22.10.WCg.a  
Cells Irradiated: Yes Viability Test Performed: No Viable Organism Detected  
Protocol used (SOP #'s): PP030.1, SP031, SP032, SP033, SP037, SP046  
Date started: 9/8/19  
Date completed: 1/27/20  
Notebook; page(s): Lipids 9 pg. 1-18

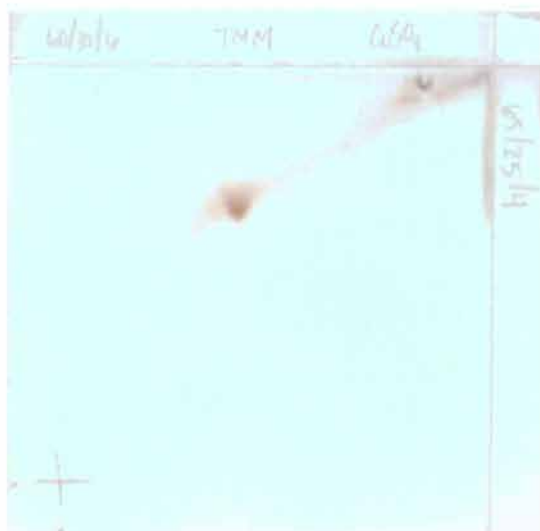
Additional notes:

### Quality Control Information:

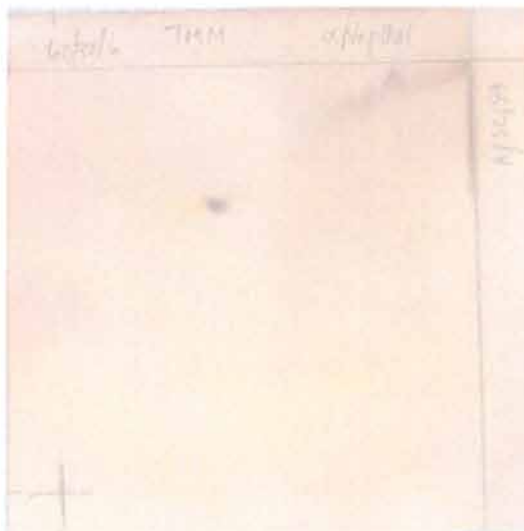
Total amount of TMM: 6.45 mg MALDI-TOF completed: 1/22/20  
TLC date: 1/27/20 Date dried on N<sub>2</sub> bath: 1/27/20  
Notebook and page(s): Lipids 9 pg. 22-26

### TLC Analysis:

**CuSO<sub>4</sub>**



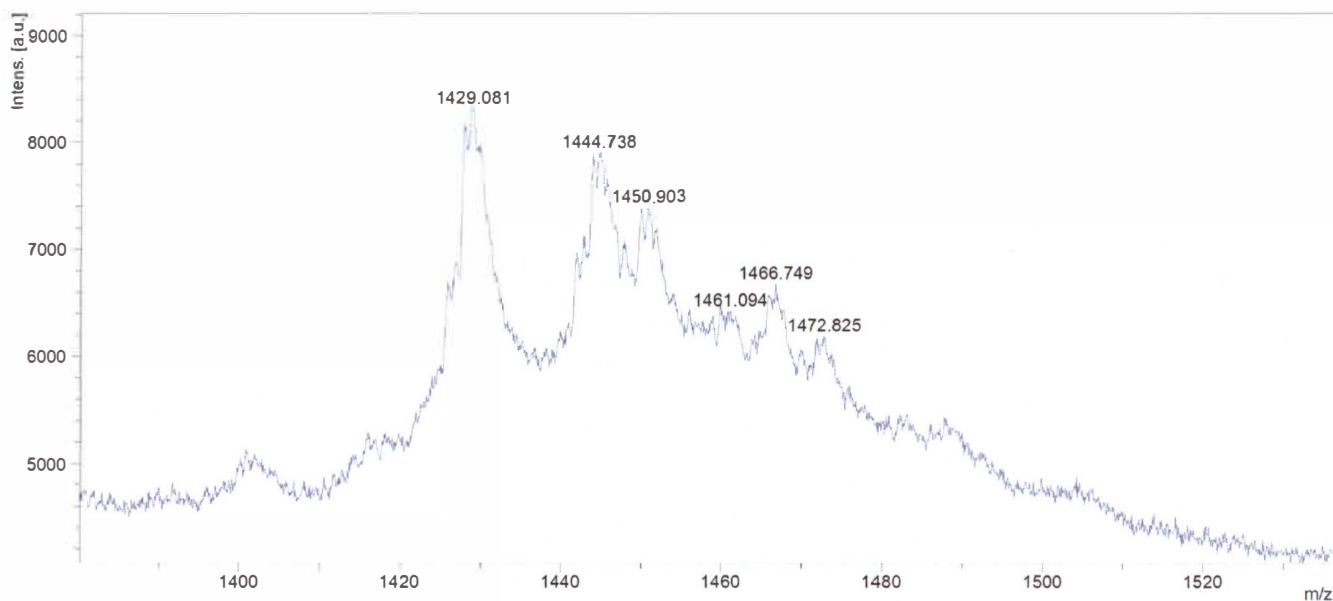
**$\alpha$ -naphthol**



### 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  $\mu$ g TMM.

### MALDI Analysis



Purified sample (1-2 $\mu$ g) was mixed 1:1 with DHB matrix and analyzed in positive mode.

#### Aliquot information

25 x 0.25 mg = 6.25 mg  
1 x 0.20 mg = 0.20 mg  
6.45 mg total

Kalish 1/27/20  
(Research Associate) date

C. McHaffey 1/27/2020  
(Laboratory Supervisor) date