

Mycobacterium tuberculosis*, Strain H37Rv, Purified Demannosylated Lipoarabinomannan (DLAM)*Catalog No. NR-56329**

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Product Description:

NR-56329 is a preparation of demannosylated lipoarabinomannan (DLAM) derived from the cell wall of irradiated *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv. LAM possesses many biological activities including immunogenicity, induction of TNF and the release of other cytokines, and inhibition of antigen processing. The nonreducing termini of strain H37Rv LAM are extensively capped with mannose. Mannose-capped LAM (ManLAM) has demonstrated immunomodulatory effects, such as inhibition of T cell activation and proliferation and influences cytokine production. Variability in mannose capping observed in clinical isolates and among different strains of *M. tuberculosis* may contribute to the variation of biological activities *in vitro*. Removal of the mannose caps of LAM from virulent strain H37Rv provides the opportunity to study the biological features attributed to LAM that are not associated with mannose capping.

Lot: 70072675**Manufacturing Date: 24FEB2025**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 25.Rv.2.24.DLAM is attached.

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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WORK SHEET FOR DEMANNOSYLATED LIPOARABINOMANNAN

General Information

BEI Catalog and Lot Number: NR-56329 70072675
CSU Lot Number: 25.Rv.2.24.DLAM
Species: Mycobacterium tuberculosis
Strain: H37Rv

Purification Information

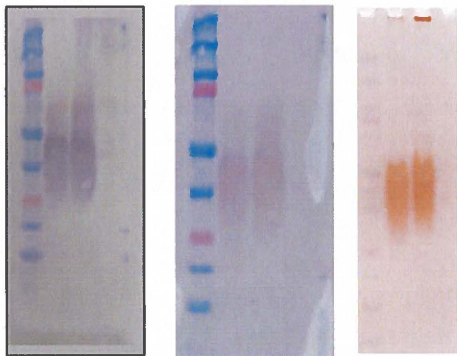
Cells Irradiated: Yes
Viability Test Performed: No Viable Organism Detected
LAM starting material (lot #): 25.Rv.1.2.LAM
LAM starting material (mg): 10 mg
Protocol used (SOP #): PP059.3
Date started: 1/6/2025
Date completed: 2/24/2025
Notebook; pages Megan Stookey NB 5 pgs: 26, 28, 30, 32, 35, 38, 39, 48, 49, 52, 55, 56
Additional notes (if applicable): N/A

Quality Control Information

BCA: 0.086 mg protein per mg LAM Notebook and page(s): Megan Stookey Notebook 5 pg. 49
Endotoxin assay used: EndoZyme II Notebook and page(s): Megan Stookey Notebook 5 pg. 55
Endotoxin amount: 7.990 ng/mg LAM Notebook and page(s): Megan Stookey Notebook 5 pg. 48
Image J Concentration: 2.121 mg/ml
Total amount of LAM: 5.606 mg
Silver stain date: 2/19/2025 Notebook and page(s): Megan Stookey Notebook 5 pg. 52
Western blot: 2/19/2025 Antibody used: CS-35 Notebook and page(s): Megan Stookey Notebook 5 pg. 52
Western blot: 2/19/2025 Antibody used: Con A Notebook and page(s): Megan Stookey Notebook 5 pg. 52
Amount Loaded on gel/s: 3 µg

QC Gel and Blots:

CS-35 Con A Silver



CS-35 and ConA:

Lane 1: Ladder
Lane 2: Demannosylated LAM product
Lane 3: H37Rv LAM
Lane 4: HSPX (negative control)

Silver Stain:

Lane 1: Ladder
Lane 2: Demannosylated LAM product
Lane 3: H37Rv LAM

Aliquot Information:

*Aliquot information reflects those made at the time of QC. Bulk aliquots will be broken down as needed.

22 vials x 0.25 mg aliquots
1 vial x 0.106 mg aliquot

Megan Stookey
Research Associate

2/26/25
Date

Kanika
Laboratory Supervisor

2/25/25
Date