

Certificate of Analysis for NR-14825

Mycobacterium tuberculosis, Strain H37Rv, Culture Filtrate Proteins

Catalog No. NR-14825

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

Product Description: NR-14825 is a preparation of culture filtrate proteins (CFP) from *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv and contains most of the excreted and secreted proteins of the organism.

Lot¹: 64527431 Manufacturing Date: 15SEP2016

TEST	SPECIFICATIONS	RESULTS
SDS-PAGE (Silver Stain)	Report results	Multiple protein bands visible (Figure 1)
Concentration by Bicinchoninic Acid Protein Assay ²	Report results	2.22 mg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	1.02 mg 0.460 mL
Western Blot Analysis Monoclonal anti-SodA ³ Monoclonal anti-GroEL2 ⁴ Monoclonal anti-Ag85 Complex ⁵ Monoclonal anti-GroES ⁶ Monoclonal anti-PhoS1 ⁷ Monoclonal anti-DnaK ⁸ Monoclonal anti-DnaK ⁹	Reactive Reactive Reactive Reactive Reactive Reactive Reactive Reactive Reactive	Reactive (Figure 2)

¹Production was performed by Colorado State University (CSU) and provided as a bulk lot. NRC-14825 bulk lot 60398909 (CSU bulk lot 11.Rv.2.8.29.5.CFP) was aliquoted on 15SEP2016 as NR-14825 lot 64527431. Testing by BEI Resources was performed on NR-14825 lot 64527431 after vialing. The CSU documentation for bulk lot 11.Rv.2.8.29.5.CFP is attached.

Date: 24 JAN 2017

Signature:

BEI Resources Authentication

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected 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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²Using BSA as a standard

³M. leprae anti-SodA monoclonal antibody (BEI Resources, NR-19847) (1:20 dilution)

⁴*M. tuberculosis* anti-GroEL2 monoclonal antibody (BEI Resources, NR-13813) (1:100 dilution)

⁵M. tuberculosis anti-Ag85 complex monoclonal antibody (BEI Resources, NR-13816) (1:20 dilution)

⁶M. tuberculosis anti-GroES monoclonal antibody (BEI Resources, NR-49223) (1:1000 dilution)

⁷*M. tuberculosis* anti-PhoS1 monoclonal antibody (BEI Resources, NR-13790) (1:100 dilution)

⁸M. tuberculosis anti-DnaK (clone A) monoclonal antibody (BEI Resources, NR-49679) (1:1000 dilution)

⁹M. tuberculosis anti-DnaK (clone B) monoclonal antibody (BEI Resources, NR-50100) (1:1000 dilution)



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Figure 1: SDS-PAGE of NR-14825 Lane 1: Precision Plus Protein™ Standard

Lane 2: NR-14825, 11 μg Lane 3: NR-14825, 22 μg

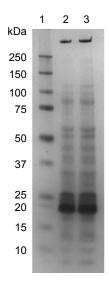
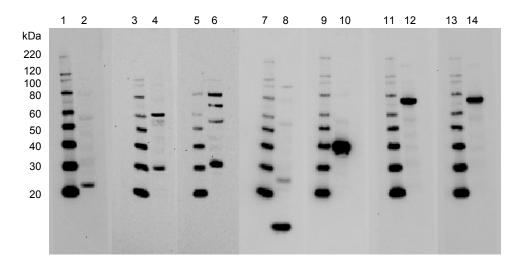


Figure 2: Western Blots of Prominent Culture Filtrate Proteins



Lane 1: MagicMark™ XP Protein Standard
Lane 2: NR-14825 (22 µg) with anti-SodA
Lane 3: MagicMark™ XP Protein Standard
Lane 4: NR-14825 (22 µg) with anti-GroEL2
Lane 5: MagicMark™ XP Protein Standard

Lane 6: NR-14825 (22 µg) with anti-Ag85 complex

Lane 7: MagicMark™ XP Protein Standard
Lane 8: NR-14825 (22 µg) with anti-GroES
Lane 9: MagicMark™ XP Protein Standard
Lane 10: NR-14825 (22 µg) with anti-PhoS1
Lane 11: MagicMark™ XP Protein Standard

Lane 12: NR-14825 (22 µg) with anti-DnaK Lane 13: MagicMark™ XP Protein Standard Lane 14: NR-14825 (22 µg) with anti-DnaK