

***Mycobacterium tuberculosis*, Strain 00-2221**

Catalog No. NR-30599

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

Product Description: *Mycobacterium tuberculosis* (*M. tuberculosis*), strain 00-2221 was isolated between 1995 and 2000 from human sputum from an HIV-negative patient infected with pulmonary tuberculosis in North America. Strain 00-2221 was deposited as a multi-drug sensitive (MDS) strain of tuberculosis with sensitivity to rifampicin and isoniazid.

Lot¹: 61255105

Manufacturing Date: 19OCT2012

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphology ³ Growth rate Growth at 37°C Acid-fast stain Pigmentation in the dark (Scotochromogen) Photoinduction for 1 hour (Photochromogen) Nonchromogen (no pigment)	Gram-positive rods Report results ≥ 7 days Positive Positive (red colonies) Negative (no pigment) Negative (no pigment) Positive (no pigment)	Gram-positive rods Circular, flat, rough and white (Figure 1) ≥ 7 days Positive Positive (red colonies) Negative (no pigment) Negative (no pigment) Positive (no pigment)
Genotypic Analysis Sequencing of Heat Shock Protein 65 gene (~ 420 base pairs)	Consistent with <i>M. tuberculosis</i>	Consistent with <i>M. tuberculosis</i> ⁴
Purity (post-freeze)⁵	Consistent with <i>M. tuberculosis</i>	Consistent with <i>M. tuberculosis</i>
Viability (post-freeze)³	Growth	Growth

¹NR-30599 was produced by inoculation of the deposited material into Middlebrook 7H9 broth with ADC enrichment and grown for 21 days at 37°C in an aerobic atmosphere with 5% CO₂. Broth inoculum was added to Middlebrook 7H10 agar with OADC enrichment kolles which were grown for 16 days under propagation conditions to produce this lot.

²Information on *Mycobacterium* testing is available from Ribón, W. "Biochemical Isolation and Identification of Mycobacteria, Biochemical Testing." *Biochemical Testing*. (2012) Jose C. Jimenez-Lopez (Ed.), InTech, <http://www.intechopen.com/books/biochemical-testing/biochemical-isolation-and-identification-of-mycobacteria> and Lévy-Frébault, V. V. and F. Portaels. "Proposed Minimal Standards for the Genus *Mycobacterium* and for Description of New Slowly Growing *Mycobacterium* Species." *Int. J. Syst. Bacteriol.* 42 (1992): 315-323. PubMed: 1581193.

³25 days at 37°C in an aerobic atmosphere with 5% CO₂ on Middlebrook 7H10 agar with OADC enrichment

⁴Also consistent with *M. africanum*, *M. bovis*, *M. canettii* and *M. microti*

⁵Purity of this lot was assessed for 30 days at 37°C in an aerobic atmosphere with 5% CO₂ on Middlebrook 7H10 agar with OADC enrichment.

Figure 1: Colony Morphology



Certificate of Analysis for NR-30599

Date: 05 NOV 2015

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.

ATCC[®] is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

