

Certificate of Analysis for NR-122

Mycobacterium tuberculosis subsp. tuberculosis, Strain H37Ra

Catalog No. NR-122

(Derived from ATCC® 25177™)

Product Description:

Mycobacterium tuberculosis (M. tuberculosis) subsp. tuberculosis, strain H37Ra is an attenuated strain derived from the virulent parent strain H37. Strain H37 was isolated in 1905 from the sputum of a patient with chronic pulmonary tuberculosis. NR-122 was produced by inoculation of BEI Resources seed lot 3685766 into Middlebrook 7H9 broth with ADC enrichment and grown for 21 days at 37°C in an aerobic atmosphere. Broth inoculum was added to Middlebrook 7H10 agar with OADC enrichment kolles and grown for 21 days at 37°C in an aerobic atmosphere to produce this lot.

Lot: 70055552 Manufacturing Date: 02DEC2022

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive rods	Gram-positive rods
Colony morphology	Report results	Irregular, low convex, undulate,
14 days at 37°C in an aerobic atmosphere on		rough and cream
Middlebrook 7H10 agar with OADC enrichment		
VITEK® MS (MALDI-TOF)	M. tuberculosis	M. tuberculosis (99.9%)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	≥ 99% sequence identity to	99.5% sequence identity to
(~ 1440 base pairs)	M. tuberculosis, strain H37Ra (GenBank: CP000611.1)	M. tuberculosis, strain H37Ra (GenBank: CP000611.1) ¹
Sequencing of Heat Shock Protein 65 gene	≥ 99% sequence identity to	100% sequence identity to
(~ 440 base pairs)	<i>M. tuberculosis</i> , strain H37Ra	<i>M. tuberculosis,</i> strain H37Ra
	(GenBank: CP000611.1)	(GenBank: CP000611.1) ¹
Purity (post-freeze)		
Middlebrook 7H10 agar with OADC enrichment	Growth consistent with expected	Growth consistent with expected
21 days at 37°C in an aerobic atmosphere	colony morphology	colony morphology
Tryptic Soy agar	Growth consistent with expected	Growth consistent with expected
21 days at 37°C in an aerobic atmosphere with and	colony morphology	colony morphology
without 5% CO ₂		
Viability (post-freeze)	Growth	Growth
14 days at 37°C in an aerobic atmosphere on		
Middlebrook 7H10 agar with OADC enrichment	a and Manianati	

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

/Sonia Bjorum Brower/

Sonia Bjorum Brower 20 MAR 2023

Technical Manager or designee, ATCC Federal Solutions

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