

***Mycobacterium avium*, Strain 2285 Rough**

**Catalog No. NR-44264**

**Product Description:**

*Mycobacterium avium* (*M. avium*), strain 2285 Rough was isolated between 2009 and 2013 from human sputum at the National Institute for Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, Maryland, USA. NR-44264 was produced by inoculation of BEI Resources seed lot 62009736 into Middlebrook 7H9 broth with ADC enrichment and grown for 17 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub>. Broth inoculum was added to Middlebrook 7H10 agar with OADC enrichment kolles, which were grown for 9 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70055551**

**Manufacturing Date: 16NOV2022**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis<sup>1,2</sup></b> Cellular morphology Colony morphology  Motility (wet mount) Growth rate Acid-fast stain VITEK® MS (MALDI-TOF)	Gram-positive rods Report results  Non-motile ≥ 7 days Positive (red colonies) <i>M. avium</i>	Gram-positive rods Irregular, low convex, undulate, rough and cream Non-motile 9 days Positive (red colonies) <i>M. avium</i> (99.9%)
<b>Phenotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1370 base pairs)  Sequencing of Heat Shock Protein 65 gene (~ 390 base pairs)	≥ 99% sequence identity to <i>M. avium</i> , strain 2285 Rough (GenBank: JAOE01000002.1) ≥ 99% sequence identity to <i>M. avium</i> , strain 2285 Rough (GenBank: JAOE01000002.1)	99.8% sequence identity to <i>M. avium</i> , strain 2285 Rough (GenBank: JAOE01000002.1) 100% sequence identity to <i>M. avium</i> , strain 2285 Rough (GenBank: JAOE01000002.1)
<b>Purity (post-freeze)</b> Middlebrook 7H10 agar with OADC enrichment <sup>3</sup> 9 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> Tryptic Soy agar 9 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub>	Growth consistent with expected colony morphology  Report results	Growth consistent with expected colony morphology  Growth consistent with expected colony morphology
<b>Viability (post-freeze)</b>	Growth	Growth

<sup>1</sup>Information 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, Available from: [Biochemical Isolation and Identification of Mycobacteria](#).

<sup>2</sup>Phenotypic tests performed on NRS-44264 lot 62009736 ruled out other slow-growing *Mycobacterium* species [Magee, J. G. and A. C. Ward. "Family III. *Mycobacteriaceae* Chester 1897, 63<sup>AL</sup>." Bergey's® Manual of Systematic Bacteriology, Second Edition, Volume Five. (2012) Goodfellow, M., et al. (Ed.), Springer].

<sup>3</sup>M7H10 agar with OADC enrichment contains malachite green, which may inhibit growth of contaminating microorganisms.

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