

***Mycobacterium intracellulare*, Strain 1956**

**Catalog No. NR-44267**

**Product Description:**

*Mycobacterium intracellulare* (*M. intracellulare*), strain 1956 was isolated in 2011 from human sputum at NIAID, NIH, Bethesda, Maryland, USA. NR-44267 was produced by inoculation of BEI Resources seed lot 62009739 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 15 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> to produce this lot.

**Lot: 70031778**

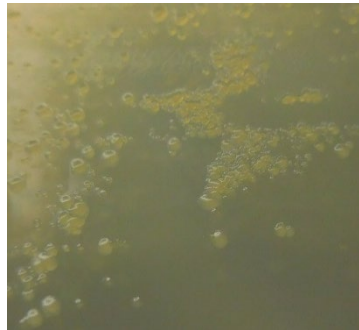
**Manufacturing Date: 07FEB2020**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis<sup>1</sup></b> Cellular morphology 14 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> on Middlebrook 7H10 agar with OADC enrichment Colony morphology  Motility (wet mount) Growth rate Acid-fast stain Biochemical tests VITEK® MS (MALDI-TOF)	Gram-positive rods  Report results  Report results ≥ 7 days Positive (red colonies)  <i>M. intracellulare</i> (≥ 90%)	Gram-positive rods  Circular, convex, entire, smooth and cream (Figure 1)  Non-motile 14 days Positive (red colonies)  <i>M. intracellulare</i> (99.9%)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1420 base pairs)  Sequencing of Heat Shock Protein 65 gene (~ 440 base pairs)	≥ 99% sequence identity to <i>M. intracellulare</i> , strain 1956 (GenBank: JAOG01000001.1) ≥ 99% sequence identity to <i>M. intracellulare</i> , strain 1956 (GenBank: JAOG01000003.1)	100% sequence identity to <i>M. intracellulare</i> , strain 1956 (GenBank: JAOG01000001.1) <sup>2</sup> 99.8% sequence identity to <i>M. intracellulare</i> , strain 1956 (GenBank: JAOG01000003.1) <sup>2</sup>
<b>Purity (post-freeze)</b> Middlebrook 7H10 agar with OADC enrichment 18 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> Tryptic Soy agar 18 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</b> 14 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> on Middlebrook 7H10 agar with OADC enrichment	Growth	Growth

<sup>1</sup>Information on *Mycobacterium* testing is available from Ribón, W. "Biochemical Isolation and Identification of Mycobacteria." *Biochemical Testing*. (2012) Jose C. Jimenez-Lopez (Ed.), InTech, Available from: <http://www.intechopen.com/books/biochemical-testing/biochemical-isolation-and-identification-of-mycobacteria>, 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, and Magee, J. G. and A. C. Ward. "Family III. *Mycoacteriaceae* Chester 1897, 63<sup>AL</sup>." *Bergey's® Manual of Systematic Bacteriology, Volume 5*. (2012) Goodfellow, M., et al. (Ed.), Springer.

<sup>2</sup>Phenotypic tests performed on BEI Resources seed lot 62009739 rule out other slow-growing *Mycobacterium* species [Magee, J. G. and A. C. Ward. "Family III. *Mycoacteriaceae* Chester 1897, 63<sup>AL</sup>." *Bergey's® Manual of Systematic Bacteriology, Volume 5*. (2012) Goodfellow, M., et al. (Ed.), Springer.].

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

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Program Manager or designee, ATCC Federal Solutions

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