

***Mycobacterium abscessus*, Strain DJO-44274**

Catalog No. NR-49093

Product Description: *Mycobacterium abscessus* (*M. abscessus*), strain DJO-44274 was isolated from an unknown source at the University of Texas Health Science Center at Tyler, Tyler, Texas, USA.

Lot¹: 63066975

Manufacturing Date: 30SEP2013

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphology ³ Motility (wet mount) Growth on Brain Heart Infusion agar Growth rate Growth at 26°C Growth at 37°C Growth at 45°C Growth at 55°C Acid-fast stain Biochemical tests ^{5,6} Pyrazinamidase Urease Catalase Semiquantitative catalase Heat-stable catalase Iron uptake Tween 80 hydrolysis Growth in the presence of 5% sodium chloride Growth in the presence of thiophene-2-carboxylic acid hydrazide (TCH)	Gram-positive rods Report results Report results Report results < 7 days Report results Positive Negative Negative Positive (red colonies) Positive Positive Positive Positive Report results Negative Report results Positive Positive	Gram-positive rods Punctiform, opaque and cream (Figure 1) Non-motile Growth < 7 days Positive Positive Positive ⁴ Negative Positive (red colonies) Positive Positive Positive Positive Positive Negative Weak positive Positive Positive
Genotypic Analysis⁷ Whole Genome Sequencing (~ 4.7 megabase pairs)	Report results	Consistent with <i>M. abscessus</i> ⁸
Purity (post-freeze)^{9,10}	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)³	Growth	Growth

¹NR-49093 was produced by inoculation of the deposited material into Middlebrook 7H9 broth with ADC enrichment and grown for 6 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 6 days at 37°C in an aerobic atmosphere with 5% CO₂ to produce this lot.

²Information on *Mycobacterium* testing is available from Ribón, W. "Biochemical Isolation and Identification of Mycobacteria." *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.

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

⁴Specification for this test was obtained from Magee, J. G. and A. C. Ward. "Family III. *Mycobacteriaceae* Chester 1897, 63^{AL}." *Bergey's[®] Manual of Systematic Bacteriology, Second Edition, Volume Five*. (2012) Goodfellow, M., et al. (Ed.), Springer, which indicates that most strains of *M. abscessus* are negative for this test; however up to 10% of strains may be positive.

⁵Negative tests are observed for > 7 days.

⁶Biochemical test results rule out other rapid-growing *Mycobacterium* species, including the *M. fortuitum* group, *M. smegmatis*, *M. mucogenicum*, *M. chelonae* and *M. immunogenum*.

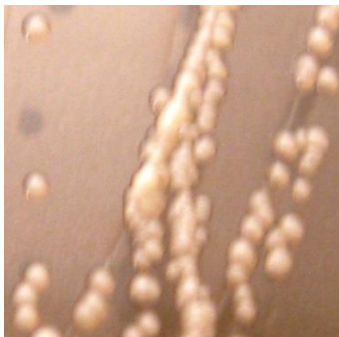
⁷Illumina[®] MiSeq[®] sequence was analyzed with CLC Genomics Workbench Version 7.0.2.

⁸Originally deposited as *M. xenopi* and updated to *M. abscessus* following whole genome sequence analysis.

⁹Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ on Middlebrook 7H10 agar with OADC enrichment.

¹⁰Middlebrook 7H10 agar with OADC enrichment contains malachite green, which may inhibit growth of contaminating microorganisms.

Figure 1: Colony Morphology



Date: 04 NOV 2015

Signature: 
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