**Mycobacterium abscessus** subsp. *abscessus*, Strain 4530

**Catalog No. NR-44274**

For research use only. Not for use in humans.

**Contributor:**
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**Manufacturer:**
BEI Resources

**Product Description:**
*Bacteria Classification:* Mycobacteriaceae, *Mycobacterium*

*Species:* *Mycobacterium abscessus* subsp. *abscessus* (also referred to as *Mycobacteroides abscessus* subsp. *abscessus*)

[NR-44274 was deposited to BEI Resources as *Mycobacterium xenopi*; however, digital DNA-DNA hybridization (ddDH) testing, performed at BEI Resources, resulted in reclassification to *Mycobacterium abscessus* subsp. *abscessus*.]

Strain: 4530

Original Source: *Mycobacterium abscessus* (M. abscessus) subsp. *abscessus*, strain 4530 was isolated between 2009 and 2013 from human sputum in Texas, USA.

*M. abscessus* is an acid-fast, Gram-positive, non-motile, non-pigmenting, rod-shaped, rapidly growing mycobacterium. It is highly resistant to a number of antimicrobials, as well as commonly used disinfectants, particularly chlorine. *M. abscessus* is associated with chronic pneumonia in patients with chronic lung disease and with soft-tissue and post-surgical infections in both community and healthcare settings. This organism has been isolated from human, animal and environmental sources, including soil, bioaerosols and water. *M. abscessus* is subspeciated into *M. abscessus* subsp. *abscessus*, *M. abscessus* subsp. *bolletii* and *M. abscessus* subsp. *massiliense* based on the functionality of an inducible erythromycin methylase (*erm*) gene, with *M. abscessus* subsp. *massiliense* lacking a functional *erm*.

Reclassification of *M. abscessus* to the novel genera *Mycobacteroides* has been proposed following a comprehensive phylogenomic analysis of the genus *Mycobacterium*, and is currently under debate. This analysis identified 51 highly specific molecular signatures, in the form of conserved signature indels and conserved signature proteins, unique to the *Abscessus-Chelona* clade.

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Middlebrook 7H9 broth with ADC enrichment supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**
NR-44274 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**
Middlebrook 7H9 broth with Middlebrook ADC enrichment or equivalent

Middlebrook 7H10 agar with Middlebrook OADC enrichment or Lowenstein-Jensen agar or equivalent

**Incubation:**
Temperature: 37°C
Atmosphere: Aerobic with 5% CO₂

**Propagation:**
1. Keep vial frozen until ready for use; then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 5 to 14 days.

**Citation:**
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium abscessus* subsp. *abscessus*, Strain 4530, NR-44274.”

**Biosafety Level:** 2


**Disclaimers:**
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References:

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