Mycobacterium tuberculosis, Strain 95-2453

Catalog No. NR-30603
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Contributor:
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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: Mycobacteriaceae, Mycobacterium Species: Mycobacterium tuberculosis Strain: 95-2453

Original Source: Mycobacterium tuberculosis (M. tuberculosis), strain 95-2453 was isolated between 1995 and 2000 from human sputum from an HIV-negative patient infected with pulmonary tuberculosis in North America.1,2

Comment: M. tuberculosis, strain 95-2453 was deposited as a multi-drug sensitive (MDS) strain of tuberculosis with sensitivity to rifampicin and isoniazid.1,2

M. tuberculosis is an acid-fast, Gram-positive, non-motile, rod-shaped aerobic bacterium. It is the causative agent of tuberculosis (TB) and is responsible for more morbidity in humans than any other bacterial disease. M. tuberculosis is a slow-growing pathogen with a thick, lipid-rich cell wall, lending bacilli the unusual propensity to shut down its metabolism in the face of adverse conditions and enter a latent phase in which it displays phenotypic resistance to antibiotic therapy. The primary focus of infection is the lungs, with TB being spread by infectious aerosols produced by coughing. The spread of multidrug-resistant (MDR) and extensively drug-resistant (XDR) TB is a major medical and public health concern.3-4

Material Provided:
Each vial contains approximately 0.7 mL of bacterial culture in Middlebrook 7H9 broth with ADC enrichment with 10% glycerol.

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

Packaging/Storage:
NR-30603 was packaged aseptically in screw-capped plastic vials. 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 ADC enrichment or equivalent
Middlebrook 7H10 agar with OADC enrichment or equivalent

Incubation:
Temperature: 37°C
Atmosphere: Aerobic (with or without 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 2 to 6 weeks.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Mycobacterium tuberculosis, Strain 95-2453, NR-30603.”

Biosafety Level: 3

This publication recommends that practices with this agent include the use of respiratory protection and the implementation of specific procedures and use of specialized equipment to prevent and contain aerosols.

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References:

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