

MYCS

Mycobacteria DNA Sequencing

GA Test Code	1000
Method	DNA Sequencing
	This assay is routinely ordered as a reflex from test #250 or 275 to identify the atypical species (e.g. <i>Mycobacterium gordonae</i>) present in the patient sample.
Specimens	<p>Bronchial Washings: 3.0 (min 1.0) mL, ambient (24 hrs) or refrigerated (7 days), in sterile plastic leak-proof container. Ship with cold pack.</p> <p>Sputum: 10.0 (min 5.0) mL, ambient (24 hrs) or refrigerated (7 days) in sterile plastic leak-proof container. For best results, collect 3 consecutive early morning samples. Ship with cold pack.</p> <p>Positive AFB (Liquid Media): 1.0 (min 0.5) mL, ambient (24 hrs) or refrigerated (7 days), in sterile plastic leak-proof container, double-bagged with absorbent cloth. Acceptable media include BacT/Alert, BACTEC, and Trek.</p> <p>Positive AFB (Solid Media): submit swab or small portion of colony (e.g. LJ medium), ambient (24 hrs) or refrigerated (7 days). Ship with cold pack.</p> <p>CSF: 1.0 (min 0.3) mL, refrigerated (7 days) in sterile leak-proof container.</p> <p>Bodily Fluid (e.g. pleural fluid): 3.0 (min 1.0) mL, ambient (24 hrs) or refrigerated (7 days), in sterile plastic leak-proof container. Ship with cold pack.</p> <p>Tissue: fresh tissue (preferred), 3 mm³, refrigerated (7 days) or frozen; for formalin-fixed, paraffin-embedded blocks, six 3-micron sections <i>preferred</i>, ambient; for needle biopsy, 2.0 (min 1.0) mL, refrigerated or frozen.</p> <p>Other Samples: Please contact GA for questions about other specimens.</p>
Causes for Rejection	Quantity not sufficient (QNS) for analysis; time and/or temperature instructions not followed.
Reference Range	Not Detected
Turnaround Time	2-7 days
CPT Codes	87153

Description

16S rRNA gene sequencing is performed on isolates submitted for mycobacterial identification.

Clinical Utility

Mycobacterium tuberculosis is the most prevalent and infectious species of mycobacteria. However, there are more than 60 other types of mycobacteria. *Mycobacteria avium-intracellulare* complex (MAC) can cause a lung infection in immunosuppressed patients, such as AIDS patients and the elderly. *M. gordonae* may be a marker of severe immunosuppression in patients infected with HIV. The most common presentation of *M. kansasii* infection is a chronic pulmonary infection that resembles pulmonary tuberculosis. Knowing the specific type of mycobacteria present in a patient sample can help guide a physician's patient management and treatment. Additionally, it aids infection control personnel in community surveillance and determines the level of concern about contagion.

Genetic Assays, Inc.