

## TEST CHANGE

### Acid-Fast Bacillus (AFB) Culture and AFB Stain

0060152, MC AFB

#### Specimen Requirements:

**Patient Preparation:** Recommended collection: Three sputum specimens at 8-24 hour intervals (24 hours when possible) and at least one first-morning specimen. An individual order must be submitted for each specimen.

**Collect:** Respiratory specimens. Also acceptable: Body fluid, CSF, gastric aspirate, tissue, or urine.

**Specimen Preparation:** Place each specimen into 50 ml sterile specimen transport tube (ARUP Supply #29582) and place in an individually sealed bag. Respiratory Specimens: Transfer (for each collection) 5-10 mL to a sterile container. (Min: 1 mL) Body Fluids: Transfer 5 mL to a sterile container. (Min: 1 mL culture only) CSF: Transfer 5 mL to a sterile container. (Min: 1 mL culture only. Min: 5 mL culture and stain) Gastric Aspirates: Must be neutralized (pH7) with sodium carbonate if transport is delayed for more than four hours. Transfer 5-10 mL to a sterile container. (Min: 1 mL) Tissue: Transfer to a sterile container. (Min: Visible, for small tissue that cannot be ground, acid fast stain will not be performed.) Urine: Transfer at least 40 mL to a sterile container. (Min: 10 mL culture only. Min: 40 mL culture and stain)

**Transport Temperature:** Refrigerated.

**Unacceptable Conditions:** Dry material or material collected and transported on a swab. Acid Fast Stain: Stool, blood, bone marrow, grossly bloody specimens.

**Remarks:** Specimen source required.

**Stability:** Ambient: 24 hours; Refrigerated: 1 week; Frozen: Unacceptable 2-weeks

**Methodology:** Stain/Culture/Matrix-Assisted Laser Desorption Ionization-Time of Flight (MALDI-TOF) Mass Spectrometry/16SrDNA Sequencing/Polymerase Chain Reaction/Broth Microdilution

**Performed:** Sun-Sat

**Reported:** 1-62 days

Note:

Respiratory specimens, body fluids, CSF, gastric aspirates that are under 5 mL, and urine specimens under 40 mL will receive a volume suboptimal disclaimer in the report. Positive cultures are reported as soon as detected. AFB stain, AFB identification of positives, and susceptibility tests are billed separately from culture. Identification of positive culture is billed by matrix-assisted laser desorption ionization (MALDI), PCR and/or sequencing tests performed. Mycobacterium tuberculosis Complex Detection and Rifampin Resistance by PCR (ARUP test code 2010775) is available for respiratory, CSF, tissue and/or body fluid specimens. The laboratory should be notified when the presence of Mycobacterium genavense or Mycobacterium haemophilum is suspected, as these organisms will not grow on media routinely used for Mycobacterium isolation. The laboratory should be notified when M. xenopi is suspected, as this organism requires a different temperature from routine culture setup. The laboratory should be notified if the specimen is from a cystic fibrosis patient, as these specimens need additional decontamination from routine culture setup. Susceptibility will be performed on organisms isolated from a sterile source and isolates of Mycobacterium tuberculosis complex, M. chelonae, M. abscesses, M. fortuitum complex, M. immunogenum, M. mucogenicum. Susceptibility testing will be performed by request only on M. kansasii and M. marinum. Susceptibility testing of M. gordonae is inappropriate. For AFB susceptibility information, refer to Antimicrobial Susceptibility - AFB Mycobacteria (ARUP test code 0060217). For AFB culture on blood refer to Culture, Acid-Fast Bacillus, Blood (ARUP test code 0060060).

CPT Codes:

87116; CPT codes for identification and susceptibility vary based on method.

New York DOH Approval Status:

This test is New York DOH approved.

Interpretive Data:

Reference Interval:

Effective May 20, 2013

Culture negative for acid fast bacilli.

Identification performed on positives.

Susceptibility performed on all initial isolates of *M. tuberculosis* complex.

Susceptibility performed on significant isolates of *Mycobacterium* other than *M. tuberculosis* complex isolates.

