

AFB Clinical Specimen (Mycobacteria Smear & Culture)

Revised 9/20/2023

Test description	Acid fast microscopy and culture of pulmonary and non-pulmonary clinical specimens.
Test use	To determine the presence or absence of mycobacteria in clinical specimens and, if isolated, to identify to the species or complex.
Test department	Mycobacteriology Laboratory Phone: (860) 920-6649, FAX: (860) 920-6721
Methodology	Smear by Auramine-rhodamine fluorescent stain. Culture using agar (Lowenstein-Jensen) and broth (BACTEC™ MGIT™) media. Identification methods: Real Time PCR and MALDI-TOF Mass Spectroscopy (MS).
Availability	Daily, Monday-Friday.
Specimen Requirements	Clinical specimens from pulmonary and extra pulmonary sites. Swab specimens are strongly discouraged. Sputum: minimum volume 3 ml (5-10 ml preferred) collected in a sterile, 50–ml conical tube. Whole blood: Collect in green top tube with heparin or yellow top tube with SPS.
Collection Kit/Container	To obtain collection kit, refer to Collection Kit Ordering Information.
Collection Instructions	Varies according to anatomic site. If needed, contact the Mycobacteriology laboratory for further information.
Specimen Handling & Transport	Store at 2-8 °C prior to transport. Transport as soon as possible to laboratory. Transport with an ice pack (preferred) or at room temperature (15-25 °C). Avoid temperature extremes. <u>Exceptions</u> : Room temperature storage and transport is required for blood, bone marrow, CSF, tissue, and gastric wash/lavage samples.
Unacceptable Conditions	Unlabeled specimens. Specimens that have leaked or containers that have broken in transit. Whole blood collected in tubes containing anticoagulants other than heparin or SPS (EDTA and ACD are not acceptable). Coagulated blood.
Requisition Form	Clinical Test Requisition OL-9B (select AFB Clinical Specimen)
Required Information	Name and address of submitter. Two patient identifiers (ie.name, DOB, Acc.#, MRN), Town of residence (city, state, zip), specimen source/type, date collected, test(s) requested. Please ensure information on the requisition matches that on the specimen.
Limitations	<ul style="list-style-type: none"> • A negative result does not rule out infection with mycobacteria. • Non-acid fast organisms present in culture may interfere with isolation and identification of mycobacteria.
Additional information	<ul style="list-style-type: none"> • A nucleic acid amplification testing for the presence of <i>Mycobacterium tuberculosis</i> complex DNA is automatically done on the first patient specimen submitted for Mycobacteria Smear & Culture that is found to be acid fast smear positive or on request (see MTBC NAAT). • Anti-tuberculous drug susceptibility testing is performed on the initial <i>M. tuberculosis</i> complex isolate from each patient. • Cultures are incubated 6 weeks before being reported as Mycobacteria Not Found.