
Lab Dept: Microbiology

Test Name: BLOOD CULTURE, FUNGUS

General Information

Lab Order Codes: BCF

Synonyms: Culture, Blood for Fungus; BC, Fungal; Culture, Blood for Yeast; Blood Culture, Yeast; Fungus Culture, Blood

CPT Codes: 87103 – Culture, fungi isolation, with presumptive identification of isolates; blood

The following testing may be added if appropriate based on findings for organism identification (multiple additions are possible if more than one organism is identified) and to aid in patient treatment management.

87106 – Culture, fungi definitive identification, each organism; yeast (if appropriate)

87107 – Culture, fungi definitive identification, each organism; mold (if appropriate)

87077 – Aerobic isolate, additional methods required for definitive identification, each isolate (if appropriate)

87147 – Culture, typing; immunologic method, other than immunofluorescence (e.g., agglutination grouping), per antiserum (if appropriate)

87184 – Susceptibility studies, disk method, per plate (if appropriate)

87186 – Susceptibility studies, microdilution or agar dilution, each multi-antimicrobial, per plate (if appropriate)

87206 – Smear, primary source with interpretation, fluorescent and/or acid fast stain for bacteria, fungi or cell types (if appropriate)

Test Includes: Culture and identification of yeast and filamentous fungi. Positive results are called immediately to the physician or patient's nurse. Susceptibilities will be performed if requested.

Logistics

Lab Testing Sections: Microbiology

Phone Numbers: MIN Lab: 612-813-5866

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

Turnaround Time: Results are reported when received. All positive results are reported immediately by phone to the physician or patient's nurse. Negative cultures are final after 30 days.

Special Instructions: Draw blood before starting antimicrobial therapy. Specific site and date/time of collection are required for specimen processing. **Specify the fungal species suspected. *Malassezia furfur* requires olive oil for growth.**

Specimen

Specimen Type: Whole blood

Container: Bactec Myco/F Lytic bottle (red)
Obtain from Material (storeroom item #14892)



Volume: 1-5 mL; 3 mL preferred

Collection: **BLOOD:**

Venipuncture:

Prep with Prevantics Chlorhexidine Gluconate (3.15%) & Isopropyl Alcohol (70%) Antiseptic Wipe

1. Remove the protective cap from the bottle, disinfect the top of the BACTEC Myco/F Lytic with 70 % alcohol and allow to dry.
2. Open the Prevantics antiseptic wipe, do not unfold wipe.

3. Apply the CloraPrep® solution using a back-and-forth friction scrub for 30 seconds.
4. Allow the area to dry for 30 seconds.
5. If the site must be touched during venipuncture, disinfect the gloved fingers.
6. Collect 1-5 mL of blood and aseptically inoculate the BACTEC Myco/F Lytic bottle using a blood transfer device,

Line Draw:

1. Remove the protective cap from the bottle, disinfect the stopper of the BACTEC Myco/F Lytic with 70% alcohol and allow to dry.
2. Prep catheter port by scrubbing the hub for 30 seconds using chlorhexidine gluconate (CHG) and allowing to dry.
3. Aseptically collect 1-5 mL of blood through the injection port/cap. Blood may be collected without first drawing a discard.
4. Collect 1-5 mL of blood and aseptically inoculate the BACTEC Myco/F Lytic bottle using a blood transfer device,

Transport/Storage:

Onsite collections:

- Transport to the Microbiology Laboratory immediately at room temperature. **Do not refrigerate.**
- If sending bottles through the pneumatic tube system, package bottles separately to avoid breakage. Use of plastic bottle holders are recommended.

Offsite collections: Specimens must be promptly transported to the laboratory at room temperature, with the next available courier, not to exceed 24 hours from the time of collection.

Sample Rejection:

Specimen with a transit time exceeding 48 hours after collection. Improperly labeled specimen; specimens with prolonged transit time, specimen not submitted in appropriate transport container; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range:

No fungus isolated after 30 days

Critical Values:

All positive results will be called to the physician or patient's nurse.

Limitations:

- A single negative culture does not rule out disseminated fungal infection. If disseminated or deep fungal infection is strongly suspected, biopsy of the appropriate tissue and/or bone marrow aspiration for sections and fungus culture should be considered.

Methodology:

BACTEC™ FX Fluorescent Series

References:

Cook, JH, and M Pezzlo (1992). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC

Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7th edition, American Society for Microbiology, Washington DC, pp 33-104

Updates:

3/2/2009: Updated collection information for venipuncture options.

3/23/2010: Updated CPTs

6/16/2010: Line draw preparation update

11/10/2014: Added offsite collection.

12/1/2023: discontinued Wampole Isolator tubes. Changed Methodology to BACTEC™ FX Fluorescent Series