
Lab Dept: Microbiology

Test Name: ANAEROBIC CULTURE

General Information

Lab Order Codes: ANAC

Synonyms: Culture, Anaerobes

CPT Codes: 87075 – Culture bacterial; any source, anaerobic with isolation and presumptive identification of isolates
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.
87076 – Anaerobic isolate, additional methods required for definitive identification of isolates
87077 – Aerobic isolate, additional methods required for definitive identification, each isolate (if appropriate)
87181 – Susceptibility studies, antimicrobial agent; agar dilution method, per agent
87185 – Enzyme detection (eg, beta lactamase), per enzyme
87186 – Susceptibility studies, microdilution or agar dilution, each multi-antimicrobial, per plate (if appropriate)

Test Includes: Culture and identification of fastidious anaerobes.

Logistics

Lab Testing Sections: Microbiology

Phone Numbers: MIN Lab: 612-813-5866

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours a day

Turnaround Time: Results are reported within 2 - 7 days.

Special Instructions:

Specimen site and **date/time of collection** are required for specimen processing. Areas of the body containing anaerobes as a part of normal flora (stool, cervix, urethra, vagina, mouth, throat, sputum, bronchial wash, skin, voided and catheterized urine) **should not** be cultured. Collect in a manner to avoid contamination with normal flora.

- Bartholin gland – collect by aspiration
- Endometrium – collect by aspiration, or in the operating room
- Urine – collect by supra-pubic aspiration
- Vaginal abscess – collect by aspiration

Anaerobic culture requests will only be performed in conjunction with an existing bacterial culture order. Please ensure that an appropriate bacterial culture order (tissue, body fluid, CSF, abscess etc.) is placed at the same time. A bacterial culture will be ordered by the lab if not received from the provider.

Specimen**Specimen Type:**

Normally sterile body fluid or tissue, or other material obtained from an abscess or wound

Container:

Anaerobic transport medium (available from Microbiology)

- **Swab specimens:** BBL Port-A-Cul tube

Anaerobic transport system instructions:

- Store in dark at room temperature.
- Discard if media turns pink/purple.
- Discard after expiration date.

Volume:

As much aspirated specimen or tissue as possible.

Collection:

1. Disinfect skin surface with 70% alcohol. Allow to dry.
2. Aspirate specimen directly into the syringe. Remove air from syringe.
3. Aseptically transfer material into an anaerobic transport vial for fluids.
4. If unable to aspirate, obtain a swab from deep in the wound, firmly sampling the lesion's advancing edge. Place swab into anaerobic transport tube

Transport/Storage:

Onsite collections: Transport to the laboratory immediately at room temperature. **Do not refrigerate.** Refrigeration inhibits the viability of certain anaerobic organisms. **Do not** transport through the pneumatic tube.

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

Special Processing:

Refrigeration inhibits the viability of certain anaerobic organisms.

Sample Rejection: Specimens from sites in which anaerobic bacteria are normal flora (e.g., throat, rectal swabs, urine, bronch washes, cervico-vaginal mucosal swabs, sputum) are unacceptable for anaerobic culture; improperly labeled specimen; specimens with prolonged transit time (see [Transport/Storage](#) for requirements). Specimen not submitted in anaerobic transport media; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or patient's nurse will be notified before discarding.

Interpretive

Reference Range: No growth of anaerobic bacteria.

Limitations: In open wounds, anaerobic organisms may play an essential role, whereas aerobes may represent surface contamination. Serious anaerobic infections are often due to mixed flora, which are pathogenic synergists. The *Bacteroides fragilis* group is the most common anaerobic isolate and the most antibiotic resistant. Susceptibility testing will be performed if requested.

Methodology: Anaerobic culture

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:
3/23/2010: CPT Updates
3/7/2011: CPT Updates
11/10/2014: Added offsite collections.
10/26/2018: Updated name and updated containers