
Lab Dept: Urine/Stool

Test Name: OCCULT BLOOD, STOOL

General Information

Lab Order Codes: OCB

Synonyms: Blood (Occult), Stool; Feces, Occult Blood; Guaiac, Stool; Hemoccult®, Stool; Stool Guaiac; Stool for Blood

CPT Codes: 82270 - Blood, occult, by peroxidase activity qualitative; feces, 1 – 3 simultaneous determinations

Test Includes: Detection of gastrointestinal bleeding

Logistics

Lab Testing Sections: Microbiology

Phone Numbers: MIN Lab: 612-813-5866

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

Turnaround Time: 2 hours

Special Instructions: Requisition must state specific **date/time of collection**.

Specimen

Specimen Type: Fresh random stool

Container: Plastic, leakproof container

Volume: 1 gram stool

Collection:**Fresh Stool**

1. Collect stool in a clean, dry bedpan or on a newspaper over the toilet. Do not contaminate with urine, residual soap or disinfectants.
 2. Transfer to a plastic, leakproof container.
 3. Those portions of stool containing blood and mucous are especially significant and should be transferred into the container.
 4. Specimens in diapers are not acceptable. Pediatric patients with severe diarrhea may use a U-bag collection system. Place the bag over the anal area in an attempt to retrieve the specimen before it soaks into the diaper. The diaper can also be reversed with the plastic side toward the skin to prevent the specimen from soaking into the diaper. Transfer specimen into a plastic, leakproof container.
- Transport fresh specimen to the Microbiology Laboratory immediately at room temperature. **Do not** send specimen through the pneumatic tube system. Fresh specimens with a transport time exceeding 2 hours after collection will be rejected.

**Collection at Home or in
Emergency Department:**

1. Label Hemocult® SENSE® card with patient's name and collection date/time.
 2. Using an applicator stick, take a small portion of stool (about the size of a match head) and apply a thin smear covering Box A.
 3. Reuse the applicator to obtain a second sample from a different part of the stool. Apply thin smear covering Box B.
 4. Close cover flap. Dispose of applicator stick in waste container.
 5. Transport to Microbiology Laboratory
- Transport slides containing samples within 14 days at room temperature. **Do not** refrigerate slides containing samples. Protect from heat and light. **Do not** store with chemicals such as chlorine bleach or ammonia.

Patient Preparation:

- Patient should not receive vitamin C (ascorbic acid) for 3 days prior to occult blood testing. Vitamin C may cause false negative reactions.
- High fiber, red meat free diet with restriction of peroxidase-rich vegetables (such as yellow turnips, horseradish, apples, oranges, bananas, broccoli, bean sprouts, cauliflower, cantaloupe, grapes, mushrooms, radishes, artichokes) has been recommended for 72 hours prior to testing to decrease the incidence of false-positive results.
- Therapeutic iron causes false-positive results.
- Avoid alcohol, aspirin, and other gastric irritants.
- Antacids may cause false-negative results.

Sample Rejection: **No diapers accepted.** Specimen (fresh) will be rejected with a transit time exceeding 2 hours after collection; specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; dried specimen; specimen contaminated with water or urine; external contamination. If an unacceptable specimen is received, the physician or patient's nurse will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range: Negative to trace

Limitations: Hemoccult® SENSE®, a Guaiac test, determines if there is bleeding from any area of the gastrointestinal tract (GI) – both upper and lower GI. GI bleeding may occur anywhere along the digestive tract and it could be caused by gastric or duodenal ulcers, esophageal varices, diverticular disease, ulcerative colitis, hemorrhoids, Crohn's disease, injury, polyps, adenoma, etc.

Hemoccult® SENSE® is designed for preliminary screening and not intended to replace other diagnostic procedures such as sigmoidoscopy, colonoscopy, barium enema, or other x-ray studies. Results with this test cannot be considered conclusive evidence of the presence or absence of GI bleeding or pathology.

Most methods lack sensitivity to small amounts of blood and might fail to detect slow rates of blood loss. When occult GI bleeding is suspected, at least three samples, preferably of separate bowel movements, should be submitted. Many substances and conditions interfere with guaiac tests. Vitamin C (ascorbic acid) and antacids may cause false-negatives to guaiac tests. False-positive results may be caused by excessive dietary intake of vegetable peroxidases, especially horseradish. Drugs shown to be associated with gastrointestinal blood loss in normal subjects include salicylates (aspirin), corticosteroids, phenylbutazone, reserpine, antimetabolites, anticoagulants, cancer chemotherapeutic drugs, and all nonsteroidal anti-inflammatory drugs such as ibuprofen.

Methodology: Hemoccult® SENSE®

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

Hemocult® SENSE® (2009) package insert 11/2009, Beckman Coulter Inc, Brea, CA

Updates:

10/15/2012: Updated collection information to distinguish between types of specimen collections.

1/6/2014: Additional limitation information for Hemocult® SENSE® added.