Overview

Useful For
Detection of blood in feces
Evaluation of iron deficiency
Detection of bleeding as a complication of anticoagulant therapy and other medication regimens
This test is **not specific for** bowel cancer.

Method Name
Fluorescence Quantitation

NY State Available
Yes

Specimen

Specimen Type
Fecal

Specimen Required

Patient Preparation: Patient should refrain from ingesting red meat and aspirin-containing products (eg, Excedrin, Aspirin) for 3 days prior to specimen collection.

Collection Container/Tube: Spoon-like sampler from kit (T134)

Submission Container/Tube: Screw-capped tube

Specimen Volume: 1 g

Collection Instructions: Collect random specimen from a single defecation.

Specimen Minimum Volume
1 g

Reject Due To

<table>
<thead>
<tr>
<th>Condition</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross hemolysis</td>
<td>OK</td>
</tr>
</tbody>
</table>

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fecal</td>
<td>Refrigerated (preferred)</td>
<td>7 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ambient</td>
<td>7 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frozen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clinical and Interpretive

Clinical Information

Several noninvasive tests are available to detect gastrointestinal (GI) bleeding. However, guaiac type and immunochemical tests for occult bleeding are affected by the presence of reducing or oxidizing substances and are insensitive for the detection of upper GI tract (esophagogastric) bleeding, where most clinically significant occult GI bleeding occurs.

The HemoQuant test is the most reliable, noninvasive test currently available for detecting bleeding of the esophago-GI tract. Unlike other tests for blood in feces, this test detects both intact heme and porphyrins from partly degraded heme. Additionally, test results are not complicated by either the water content of the specimen or the presence of reducing or oxidizing substances. Furthermore, HemoQuant testing is sensitive to both proximal and distal sources of occult GI bleeding. HemoQuant is the most appropriate fecal occult blood test to use in the evaluation of iron deficiency.

Normally, one gram of feces may contain 0.0 - 2.0 mg hemoglobin (Hb); this corresponds to a daily loss of up to 2-mL blood. A demonstration of increased Hb in feces indicates bleeding in the alimentary tract (or ingestion of anticoagulants, aspirin, or red meat).

Reference Values

Normal:

< or = 2.0 mg total hemoglobin/g feces

Marginal:

2.1-4.0 mg total hemoglobin/g feces*

*2.1-4.0 mg Hb/g is considered marginally elevated, but not clinically significant, if red meat, warfarin, or aspirin was ingested 72 hrs prior to collection.

Elevated:

>4.0 mg total hemoglobin/g feces

Interpretation

Elevated levels are an indicator of the presence of blood in the feces, either from benign or malignant causes.

Cautions

Heme from ingested red meat will increase HemoQuant test values. Patients should be advised to avoid eating red meat for 3 days before collecting specimens. Fish and poultry may be substituted.

The elevated porphyrins of lead intoxication, erythrocytic protoporphyria and variegate porphyria may raise HemoQuant values in the absence of gut bleeding.

Recent studies have indicated that cancerous lesions in their early stages often do not bleed or bleed only intermittently.

Clinical Reference


Performance

Method Description
Hemoglobin and the heme released by hemoglobin degradation are converted to porphyrins. These porphyrins are quantified by fluorescence measurement after extraction of any interfering fluorescing substances. (Schwartz S, Dahl J, Ellefson M, Ahlquist D: The “HemoQuant” test: a specific and quantitative determination of heme [hemoglobin] in feces and other materials. Clin Chem 1983;29:2061-2067)

PDF Report
No

Specimen Retention Time
14 days

Performing Laboratory Location
Rochester

Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information
84126

LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ</td>
<td>Hemoquant, F</td>
<td>27396-1</td>
</tr>
<tr>
<td>Result ID</td>
<td>Test Result Name</td>
<td>Result LOINC Value</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>2410</td>
<td>Fecal Hemoglobin</td>
<td>27396-1</td>
</tr>
</tbody>
</table>