Overview

Useful For
Detection of blood in feces

HemoQuant is the most appropriate fecal occult blood test to use in the evaluation of iron deficiency

Other useful applications include the detection of bleeding as a complication of anticoagulant therapy and other medication regimens

Method Name
Fluorescence Quantitation

NY State Available
Yes

Specimen

Specimen Type
Fecal

Specimen Required
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.

Additional Information: Patient should be instructed to refrain from red meat and aspirin for 3 days prior to specimen collection.

Specimen Minimum Volume
1 g

Reject Due To

| Gross hemolysis | OK |

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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<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>
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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 proximal gut 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.

Reference Values
Normal:
< or = 2.0 mg total hemoglobin/g feces

Marginal:
2.0-3.0 mg total hemoglobin/g feces
2.0-4.0 mg total hemoglobin/g feces*

Elevated:
>3.0 mg total hemoglobin/g feces
>4.0 mg total hemoglobin/g feces*

*Alternative reference values for persons who have ingested red meat or aspirin during any of the 3 days preceding specimen collection.

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

This test is not specific for bowel cancer.

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 intoxication porphyria, erythrocytic protoporphyrria, 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
Test Definition: HQ
Hemoquant, F


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

Day(s) and Time(s) Test Performed
Monday through Saturday; 2 p.m.

Analytic Time
1 day

Maximum Laboratory Time
2 days

Specimen Retention Time
14 days at -20deg.C

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
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<td>Hemoquant, F</td>
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<table>
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