

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
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Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Fecal	Refrigerated (preferred)	7 days	
	Ambient	7 days	
	Frozen		

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 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

1. Ahlquist DA, McGill DB, Schwartz S, et al: HemoQuant, a new quantitative assay for fecal hemoglobin:

comparison with Hemocult. Ann Intern Med 1984;101:297-302

2. Ahlquist DA, Wieand HS, Moertel CG, et al: Accuracy of fecal occult blood screening for colorectal neoplasia: a prospective study using Hemocult and HemoQuant tests. JAMA 1993;269:1262-1267

3. Harewood GC, McConnell JP, Harrington JJ, et al: Detection of occult upper gastrointestinal bleeding: performance differences in fecal blood tests. Mayo Clin Proc 2002;77(1):23-28

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



Test ID	Test Order Name	Order LOINC Value
HQ	Hemoquant, F	27396-1

Result ID	Test Result Name	Result LOINC Value
9220	Hemoquant, F	27396-1
2410	Fecal Hemoglobin	27396-1
2413	Dietary Status	11320-9