Test Definition: HEMMF

Hematologic Specified FISH

Overview

Useful For

The detection of specific chromosomal abnormalities in hematologic malignancies

Testing Algorithm

This test includes a charge for the probe application, analysis and professional interpretation of results for 1 probe set (2 individual fluorescence in situ hybridization probes). Additional charges will be incurred for all additional probe sets performed.

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
HEMMB	Probe, Each Additional (HEMMF)	No, (Bill Only)	No

Method Name

Fluorescence In Situ Hybridization (FISH)

NY State Available

Yes

Specimen

Specimen Type

Varies

Ordering Guidance

Consult with the laboratory before ordering this test.

The fluorescence in situ hybridization probes to be analyzed must be specified on the request when ordering, otherwise test processing may be delayed in order to determine the intended analysis. If specific probes are not provided, this test may be canceled by the laboratory.

Necessary Information

1. **A list of probes requested for analysis is required.**

2. A reason for testing should be submitted with each specimen. The laboratory will not reject testing if this information is not provided, but appropriate testing and interpretation may be compromised or delayed. If this information is not

provided, an appropriate indication for testing may be entered by Mayo Clinic Laboratories.

3. A pathology and/or flow cytometry report may be requested by the laboratory to optimize testing and aid in interpretation of results.

Specimen Required

Submit only 1 of the following specimens:

Preferred

Specimen Type: Bone marrow

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 2-3 mL

Collection Instructions:

1. It is preferable to send the first aspirate from the bone marrow collection.

2. Invert several times to mix bone marrow.

Acceptable

Specimen Type: Blood

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 6 mL

Collection Instructions: Invert several times to mix blood.

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Minimum Volume

Blood: 2 mL

Bone Marrow: 1 mL

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)		
	Refrigerated		

Clinical & Interpretive

Clinical Information

Fluorescence in situ hybridization using gene-specific probes and various probe strategies can help characterize chromosome abnormalities in hematologic malignancies for diagnostic, prognostic, and therapeutic purposes.

Reference Values

An interpretive report will be provided.

Interpretation

A neoplastic clone is detected when the percent of cells with an abnormality exceeds the normal reference range for any given probe.

The absence of an abnormal clone does not rule out the presence of a neoplastic disorder.

Cautions

This test is not approved by the US Food and Drug Administration, and it is best used as an adjunct to existing clinical and pathologic information.

Bone marrow is the preferred specimen type for this fluorescence in situ hybridization test. If bone marrow is not available, a blood specimen may be used if there are malignant cells in the blood specimen (as verified by a hematopathologist).

Clinical Reference

Swerdlow SH, Campo E, Harris NL, et al, eds.: WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues. IARC Press; 2017

Performance

Method Description

This test is performed using commercially available and laboratory-developed probes. For enumeration and BAP strategy probe sets, 100 interphase nuclei are scored; 200 interphase nuclei are scored when D-FISH probes are used. All results are expressed as the percent abnormal nuclei.(Unpublished Mayo method)

PDF Report

No

Specimen Retention Time

4 weeks

Performing Laboratory Location

Rochester

Fees & Codes

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 US Food and Drug Administration.

CPT Code Information

88271 x 2, 88275, 88291-FISH Probe, Analysis, Interpretation; 1 probe set

88271 x 2, 88275-FISH Probe, Analysis; each additional probe set (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
HEMMF	Hematologic Specified FISH	In Process

Result ID	Reporting Name	LOINC®
614267	Result Summary	50397-9
614268	Interpretation	69965-2
614269	Result Table	93356-4

614270	Result	62356-1
GC117	Reason for Referral	42349-1
GC118	Probes Requested	78040-3
GC119	Specimen	31208-2
614271	Source	31208-2
614272	Method	85069-3
614273	Additional Information	48767-8
614274	Disclaimer	62364-5
614275	Released By	18771-6