



Test Catalog

Diagnostic. Prognostic. Predictive. Predisposition.





MPN FISH Panel

Alternative Name

Myeloproliferative neoplasms

Methodology

FISH

Test Description

Probes: PDGFRA, CHIC2, FIP1L1 (4q12) | PDGFRb (5q33) | FGFR1 (8p11) | BCR/ABL1 t(9;22) including ASS1 (9q34) | Probes may be ordered separately.

Disease(s): Myeloproliferative neoplasms

Clinical Significance

The MPN FISH panel is indicated in the diagnosis of myeloproliferative neoplasms with eosinophilia and as a guide to therapeutic selection. Patients with BCR-ABL, PDGFRA or PDGFRB rearrangements are responsive to tyrosine kinase inhibitors. There currently is no established TKI therapy for diseases with FGFR1 rearrangement, but some promising new therapies have been reported. If these FISH studies are negative, that does not exclude a myeloproliferative neoplasm and molecular studies for JAK2 and/or MPL mutations should also be considered in the work-up of a possible myeloproliferative neoplasm.

Specimen Requirements

- **Bone Marrow Aspirate:** 1-2 mL sodium heparin tube. EDTA tube is acceptable.
- **Peripheral Blood:** 2-5 mL sodium heparin tube. EDTA tube is acceptable.
- **Fresh, Unfixed Tissue:** Tissue in RPMI.
- **Bone Marrow/ Peripheral Blood Smear or Fresh Tissue Touch Preparation Slides:** minimum 4 slides labeled with specimen type.
- **Fluids:** Equal parts RPMI to specimen volume.
- **Fixed Cell Suspension:** A client fixed cell suspension may be submitted for testing as long as it is received in 3:1 Methanol:Glacial Acetic Acid.
- **Paraffin Block or Cut Slides:** Not available.
- **Note:** Please exclude biopsy needles, blades, and other foreign objects from transport tubes. These can compromise specimen viability and yield, and create hazards for employees.

Storage & Transportation

Use cold pack for transport, making sure cold pack is not in direct contact with specimen. For fresh samples: ship same day as drawn whenever possible; specimens <72 hours old preferred.

CPT Code(s)*

88374x4 automated. Codes may differ if manual analysis is performed.

New York Approved

Yes

Level of Service

Technical, Global

Turnaround Time

3-5 days

NeoGenomics Laboratories is a specialized oncology reference laboratory providing the latest technologies, testing partnership opportunities, and interactive education to the oncology and pathology communities. We offer the complete spectrum of diagnostic services in molecular testing, FISH, cytogenetics, flow cytometry, and immunohistochemistry through our nation-wide network of CAP-accredited, CLIA-certified laboratories.

Committed to research as the means to improve patient care, we provide Pharma Services for pharmaceutical companies, in vitro diagnostic manufacturers, and academic scientist-clinicians. We promote joint publications with our client physicians. NeoGenomics welcomes your inquiries for collaborations. Please contact us for more information.

*The CPT codes provided with our test descriptions are based on AMA guidelines and are for informational purposes only. Correct CPT coding is the sole responsibility of the billing party.

Please direct any questions regarding coding to the payor being billed.



9490 NeoGenomics Way
Fort Myers, FL 33912
Phone: 239.768.0600/ Fax: 239.690.4237
neogenomics.com

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