FIP1L1-PDGFRA Fusion Transcript Detectio

RNA-PCR

Indication

For determining the presence or absence of the FIP1L1-PDGFRA fusion transcript produced by a that is seen in some cases of hypereosinophilic syndrome and systemic mast cell disease. This test residual disease detection following therapy.

Methodology

RNA is analyzed for FIP1L1-PDGFRA fusions by reverse transcription nested PCR.

Test Parameters

A control RNA sequence is amplified in parallel as a control for sample quality.

Turnaround Time

Five to 10 working days

Sample Requirements

- 10 ml peripheral blood in purple top tube (EDTA Vacutainer), sent by overnight express mai

  or

- 2-5 ml of bone marrow aspirate in purple top tube (EDTA Vacutainer), sent by overnight ex

  or

- 10 μg of purified RNA or cDNA, sent by overnight express mail on dry ice

CPT Codes

83891 (RNA isolation), 83902, 83898, 83909, 83912

FISH, HES/Leukemia, 4q12 Rearrangement (FIP1L1-PDGFRA) 1(

CPT Code(s): 88271 (x3), 88275, 88291

This test was developed and its performance characteristics have been determined by Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administ The FDA has determined that such clearance or approval is not necessary. Performar characteristics refer to the analytical performance of the test.

Preferred Specimen(s)

3 mL bone marrow in transport media

Minimum Volume

1 mL

Alternate Specimen(s)

Bone marrow **or** whole blood collected in a sodium heparin (green-top), sodium hepar blue-top) or sodium heparin lead-free (tan-top) tube

Instructions

Bone marrow: 1-3 mL in transport medium (preferred) or sodium heparin (green-top)
Whole blood: 3-5 mL collected in a sodium heparin (green-top) tube

Ship at room temperature. **Do not freeze.**
Specimen viability decreases during transit. Send specimen to testing lab for viability determination. **Do not reject.**

Transport Container

Transport media

Transport Temperature

Room temperature

Specimen Stability

Room temperature: See Instructions
Refrigerated: See Instructions
Frozen: Unacceptable

Methodology

Fluorescence in situ Hybridization (FISH)

Performing Laboratory

Quest Diagnostics Nichols Institute-San Juan Capistrano, CA

33608 Ortega Highway

San Juan Capistrano, CA 92675-2042

Setup Schedule

Set up: Mon-Sat; Report available: 7 days

Reference Range(s)

See Medical Report

Clinical Significance

FIP1L1-PDGFRa fusion (rearrangement of 4q12; interstitial deletion of CHIC2 region) observed in diverse eosinophilia-associated hematologic disorders. The cases with FI PDGFRa fusion show an excellent response to the tyrosine kinase inhibitor imatinib m (Metzgeroth et al, 2007)

(The CPT codes provided are based on AMA guidelines and are for informational purposes only coding is the sole responsibility of the billing party. Please direct any questions regarding coding payer being billed.)