

Test: FLT3 ITD Mutation Detection

**Date:** November 3, 2008

**Test Overview:**

The FMS-Related Tyrosine Kinase 3, 13q12 gene (FLT3) is a member of the type II receptor tyrosine kinase class III family. Internal tandem duplication (ITD) within this gene can occur in acute myeloid leukemia (AML). The presence of FLT3 ITD mutation is a major determinant of patient response to therapy and outcome.

**Clinical Significance:**

A positive result indicates the presence of FLT3 ITD. A negative result does not entirely exclude an abnormal *FLT3* gene. Results of this test must always be interpreted in the context of clinicopathologic and relevant data, and should not be used alone for a diagnosis of malignancy. This test is not intended to detect minimal residual disease.

**Method:**

DNA Amplification and capillary electrophoresis

**Availability:**

Monday-Friday; Results in 7 days.

**Specimen:**

Whole blood or  
Bone Marrow or  
Unstained Bone Marrow Smears

**Collect:**

5.0 mL whole blood in EDTA (Lavender) tube or  
3.0 mL Bone Marrow in EDTA (Lavender) tube or  
3-5 Unstained Bone Marrow slides  
Transport to laboratory within 48 hours of collection.

**Volume:**

5.0 mL whole blood or 3-5 unstained Bone Marrow slides

**Transport:**

Refrigerate.

**Unacceptable Conditions:**

Heparin tube.

**Reference Range:**

With report

**CPT Codes:**

83890; 83898; 83909; 83912

**Additional Information:**

Client list fee: \$300