



OHSU Clinical Genetics Laboratories
Shipping Address: 2525 SW 3rd Avenue, Suite 350
Portland, OR 97201

Phone: (503) 494-5400

Fax: (503) 494-6922

Biochemical Genetics Laboratory

Cytogenetics Laboratory

Molecular Diagnostic Center

FLT3: AML Mutation testing

MOLECULAR DIAGNOSTIC CENTER

Rationale for testing: Kinase activating mutations of the FLT3 gene occur in a significant subset of acute myelogenous leukemias (AMLs) and confer a poor prognosis. The most common mutation (and the one detected in our lab) is an internal tandem duplication (ITDs) in exon 11 of the FLT3 gene (juxtamembrane domain), present in ~20-30% of all AMLs. If present, novel targeted therapies directed at this activated tyrosine kinase may be of clinical benefit.

Specimen: ACD or EDTA whole blood; Bone marrow (fresh, unfixed)

Handling: Transport at room temperature to arrive at the Molecular Diagnostic Center within 24 hours; if sample cannot arrive within 24 hours, refrigerate until sample can be transported, then transport at room temperature.

Special Requirement: In order to detect FLT3 mutations, acceptable specimens of blood or bone marrow must have a minimum of 20% blast cells. Samples with less than 20% blasts will not be analyzed. A copy of the CBC w/diff or a Hematopathology report showing blast cell load would be ideal.

Synonyms: FLT, FLT3, AML mutation, ITD (internal tandem duplications) mutation, FLT3 mutation

Other terms:

AML: acute myelogenous leukemias

PCR-based study

Tyrosine kinase gene

Exon 11 of the FLT3 gene

Juxtamembrane domain

Fees: See attached fee schedule

Turn Around Time: 2 weeks

CPT CODES: 82486, 83896, 83892, 83898, 83912