

BCR/ABL t(9;22), p190 kD

(minor breakpoint)

Indication:: Detection of the t(9;22) mRNA in diagnosis and minimal residual disease monitoring of patients with Philadelphia chromosome positive acute lymphoblastic leukemias (ALL). For diagnosis and prognosis of adult and pediatric ALLs.

Testing Method: RNA is extracted from white blood cells in bone marrow and/or peripheral blood and reverse transcribed to cDNA. Real-time quantitative PCR is performed to amplify the BCR-ABL transcripts. Control gene transcripts are amplified in parallel for normalization.

Test Parameters: sensitivity of the assay is approximately one BCR-ABL bearing cell in 100,000 total cells. Levels detected in peripheral blood and bone marrow samples are generally equivalent.

Clinical Background: The BCR-ABL, m-bcr, p190 kD fusion transcript, type e1a1, is found in 25-30% cases of adult and 2-5% of childhood cases of ALL. Less frequently it is associated with AML.

Turnaround Time: 3-5 business days

Sample requirements:

- 3 ml peripheral blood in lavender top tube (EDTA) if received same day
- Bone marrow aspirate (anticoagulated with either heparin or EDTA and, if possible, placed into tissue culture medium)
- PAXgene tube for peripheral blood or bone marrow (RNA stabilized at room temperature up to 48 hrs or cold for longer periods if shipment delayed)

CPT Codes: 81207

Ship Specimens to:

Henry Ford Center for Precision Diagnostics
Henry Ford Hospital
Clinic Building, K6, Core Lab E-655
2799 W. Grand Blvd.
Detroit, MI 48202