

## PML-RARA GENE REARRANGEMENT, QUANTITATIVE PCR

PML-RARA GENE REARRANGEMENT,  
QUANTITATIVE PCR  
(Real Time PCR)

PML – RARA

%

### Note:

1. Sensitivity of the assay is 0.01% when copies of ABL detected is 100,000
2. Limit of detection is 10 copies of PML-RARA fusion gene transcripts per PCR
3. This is an in-house developed assay designed as per EAC (Europe Against Cancer) protocol
4. This assay detects translocations bcr 1, bcr 2 & bcr 3 but does not indicate the type of translocation
5. Test conducted on Whole blood / Bone Marrow.

### Comment

Acute Promyelocytic Leukemia ( APL) is characterized by a unique reciprocal chromosomal translocation t ( 15;17) ( q22;q11-12) and its underlying fusion gene PML / RARA rearrangement. The fusion is seen between Promyleocytic (PML) gene on chromosome 15 and RARA gene on chromosome 17. Based on PML breakpoint location, the PML RARA transcripts subtype bcr 1 & bcr 2 ( Long transcript type) and bcr 3 ( Short transcript type) may be formed.

### Uses

- This is a quantitative assay for monitoring response to therapy
- For diagnostic identification of PML RARA in cases of Acute Promyelocytic Leukemia
- To assess molecular resistance & predict response to treatments containing ATRA and / or ATO