

t (4; 11) (q21; q23); (MLL-AF4)

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(Real Time PCR)	Negative / Positive

Comments

Precursor B-cell Acute Lymphoblastic Leukemia (ALL) accounts for 85% Acute leukemias in children and 20% in adults. Most patients with ALL show an abnormal clone by conventional cytogenetic studies. The common chromosome translocations in pediatric ALL include t(1;19) (q23 ;p13.3); TCF3-PBX1(E2A- PBX1), t(12; 21) (p13;q22); ETV6-RUNX1(TEL-AML1) & MLL gene rearrangement. All these translocations are important to detect as they are important prognostic markers. The t(4;11)(q21;q23) results in the MLL-AF4 fusion gene and is the most frequent MLL translocation in ALL but is rare in AML. Detection of translocation t(4;11) is seen in 4-6% cases in children and adults. It is generally associated with a poor prognosis.

Uses

- Quantifying disease before treatment and after therapy for patients with ALL
- Assessing residual disease after treatment