

t(9;14)(q34;q32)

Clinics and Pathology

Disease	T cell acute lymphoblastic leukemia (T-ALL)
Epidemiology	only 1 case to date: a 16 yr old female patient
Cytology	high leukocytosis with 99% blasts with the phenotype of cortical thymocytes
Prognosis	yet unknown; the patient was in complete remission at 15 mths+.

Cytogenetics

Cytogenetics	cryptic translocation: the karyotype appeared normal
Morphological	
Cytogenetics	FISH is needed
Molecular	

Genes involved and Proteins

Gene Name	ABL1
Location	9q34
Gene Name	EML1

Result of the chromosomal anomaly

Hybrid gene 5' EML1 - 3' ABL1, fuses in frame exon 17 of EML1 to exon 2 of ABL1;
Description

Fusion Protein 190 kDa hybrid NH2 EML1 - COOH ABL1 protein, containing the
Description coiled-coil domain of EML1 and the kinase domain of ABL1.

Oncogenesis EML1-ABL1 tyrosine kinase activity constitutively activated.

External links

Other database [t\(9;14\)\(q34;q32\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(9;14\)\(q34;q32\)](#) [CancerChromosomes \(NCBI\)](#)

To be noted

Additional cases are needed to delineate the epidemiology of this rare entity:

you are welcome to submit a paper to our new [Case Report section](#).

Bibliography

Fusion of EML1 to ABL1 in T-cell acute lymphoblastic leukemia with cryptic t(9;14)(q34;q32).

De Keersmaecker K, Graux C, Odero MD, Mentens N, Somers R, Maertens J, Wlodarska I, Vandenberghe P, Hagemeijer A, Marynen P, Cools J.

Blood. 2005; 105: 4849-4852.

Medline [15713800](#)

Contributor(s)

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<http://www.infobiogen.fr/services/chromcancer/Anomalies/t0914q34q32ID1399.html>

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