

t(11;22)(q23;q13)

Identity

Note not to be confused with the [t\(11;22\)\(q23;q11\)](#), involving [MLL](#) and [hCDCrel](#)

Clinics and Pathology

Disease a case of therapy related leukemia, 2.5 yrs after the treatment of a non Hodgkin lymphoma

Phenotype /
cell stem
origin acute non lymphocytic leukemia

Prognosis unknown (relapse at 20 mths) but likely to be similar to the prognosis associated with other [11q23 therapy related leukemia](#)

Genes involved and Proteins

Gene Name

[MLL](#)

Location in 11q23

Dna / Rna 13-15 kb mRNA

Protein 431 kDa; contains two DNA binding motifs (a AT hook, and Zinc fingers), a DNA methyl transferase motif, a bromodomain; transcriptional regulatory factor; nuclear localisation

Gene Name

[P300](#)

Location 22q13

Dna / Rna 9 kb mRNA

Protein 264 kDa; widely expressed; possesses a nuclear localization signal, a poly-serine, a bromodomain, a poly-glu, a binding region for E1A adenovirus, and a poly-gln;. interact with transcriptional activators as well as repressors; involved (with [CBP](#)) in growth, differentiation , and apoptosis

Result of the chromosomal anomaly

Hybrid gene

chimeric mRNAs from both derivative chromosomes are found

Transcript

Fusion Protein the MLL/p300 fusion transcript encodes a protein of about 3000 amino acids, the N-term half comprising the AT hook and DNA methyltransferase (exons 1 to 9) from MLL and the C-term half comprising the acetyltransferase domain and the TFIIB-binding domain of p300, excluding the nuclear localisation signal and the bromodomain

External links

Other database [t\(11;22\)\(q23;q13\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(11;22\)\(q23;q13\)](#) [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

Adenoviral E1A-Associated Protein p300 Is Involved in Acute Myeloid Leukemia With t(11; 22)(q23; q13).

Ida K, Kitabayashi I, Taki T, Taniwaki M, Noro K, Yamamoto M , Ohki M, Hayashi Y. Blood 1997; 90: 4699-4704.

Medline [98052522](#)

Contributor(s)

Written 01-2000 Jean-Loup Huret

Citation

This paper should be referenced as such :

Huret JL . t(11;22)(q23;q13). Atlas Genet Cytogenet Oncol Haematol. January 2000

URL : <http://AtlasGeneticsOncology.org/Anomalies/t1122P300ID1121.html>

© *Atlas of Genetics and Cytogenetics in Oncology and Haematology*
