

Leukaemia Section

Short Communication

t(11;15)(q23;q14)

Jean-Loup Huret, Christiane Charrin

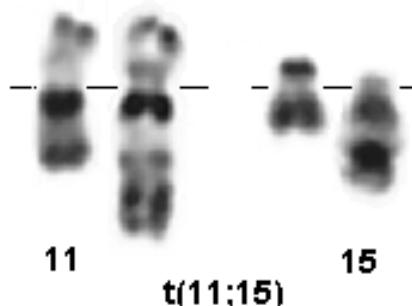
Genetics, Dept Medical Information, University of Poitiers, CHU Poitiers Hospital, F-86021 Poitiers, France (JLH), Service d'Hématologie, Hopital Edouard Herriot, Lyon, France (CC)

Published in Atlas Database: March 2000

Online updated version : <http://AtlasGeneticsOncology.org/Anomalies/t1115ID1199.html>
DOI: 10.4267/2042/37617

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 2.0 France Licence.
© 2000 *Atlas of Genetics and Cytogenetics in Oncology and Haematology*

Identity



t(11;15)(q23;q14) (R-banding) - Christiane Charrin.

Clinics and pathology

Disease

Only 1 case with the ascertainment of AF15q14 involvement; a few other cases may or may not carry the same rearrangement.

Phenotype/cell stem origin

M4 ANLL in the AF15q14 case.

Clinics

A 48 year old man with previous history of toxic exposure who died 4 mths after diagnosis.

Cytogenetics

Additional anomalies

+ mar.

Genes involved and proteins

MLL

Location

11q23

DNA/RNA

21 exons, spanning over 100 kb; 13-15 kb mRNA.

Protein

3969 amino acids; 431 kDa; contains two DNA binding motifs: a AT hook homologous to high mobility group proteins HMGI-(Y) and HMGI(C) that binds to the minor groove of DNA, and zinc fingers, a DNA methyl transferase motif, a bromodomain, and segments of homology with trithorax, in particular in the C-terminal SET domain.

AF15q14

Location

15q14

DNA/RNA

At least 10 exons; spans more than 35 kb.

Protein

1833 amino acids; 206 kDa; nuclear localization domain in the c-term.

References

- Rubnitz JE, Link MP, Shuster JJ, Carroll AJ, Hakami N, Frankel LS, Pullen DJ, Cleary ML. Frequency and prognostic significance of HRX rearrangements in infant acute lymphoblastic leukemia: a Pediatric Oncology Group study. Blood. 1994 Jul 15;84(2):570-3

Hernández JM, Mecucci C, Beverloo HB, Selleri L, Wlodarska I, Stul M, Michaux L, Verhoef G, Van Orshoven A, Cassiman JJ. Translocation (11;15)(q23;q14) in three patients with acute non-lymphoblastic leukemia (ANLL): clinical, cytogenetic and molecular studies. Leukemia. 1995 Jul;9(7):1162-6

Hayette S, Tigaud I, Vanier A, Martel S, Corbo L, Charrin C, Beillard E, Deleage G, Magaud JP, Rimokh R. AF15q14, a novel partner gene fused to the MLL gene in an acute myeloid

leukaemia with a *t(11;15)(q23;q14)*. Oncogene. 2000 Sep 7;19(38):4446-50

This article should be referenced as such:

Huret JL, Charrin C. *t(11;15)(q23;q14)*. Atlas Genet Cytogenet Oncol Haematol. 2000; 4(2):70-71.
