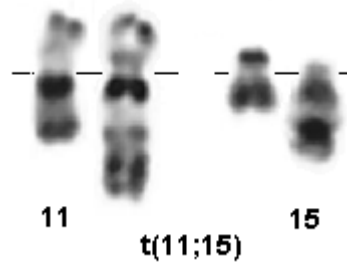


## t(11;15)(q23;q14)

### Identity



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

### Clinics and Pathology

**Disease** only 1 case with the ascertainment of AF15q14 involvement; a the very few other cases may or may not carry the same rearrangement

Phenotype /  
cell stem  
origin M4 ANLL in the AF15q14 case

**Clinics** a 48 yr old man with previous history of toxic exposure who died 4 mths after diagnosis

### Cytogenetics

Additional  
anomalies + mar

### Genes involved and Proteins

**Gene Name** [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

**Gene** [AF15q14](#)

## Name

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

## External links

Other database [t\(11;15\)\(q23;q14\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(11;15\)\(q23;q14\)](#) [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

**Frequency and prognostic significance of HRX rearrangements in infant acute lymphoblastic leukemia: a Pediatric Oncology Group study.**

Rubnitz JE, Link MP, Shuster JJ, Carroll AJ, Hakami N, Frankel LS, Pullen DJ, Cleary ML.

Blood 1994; 84: 570-573.

Medline [94297229](#)

**Translocation (11;15)(q23;q14) in three patients with acute non-lymphoblastic leukemia (ANLL): clinical, cytogenetic and molecular studies.**

Hernandez JM, Mecucci C, Beverloo HB, Selleri L, Wlodarska I, Stul M, Michaux L, Verhoef G, Van Orshoven A, Cassiman JJ, et al.

Leukemia 1995; 9: 1162-1166.

Medline [95356566](#)

**AF15q14, a novel partner gene fused to the MLL gene in an acute myeloid leukaemia with a t(11;15)(q23;q14)**

Hayette S, Tigaud I, Vanier A, Martel S, Corbo L, Charrin C, Beillard E, Deleage G, Magaud JP, Rimokh R.

Oncogene 2000; 19: 4446-4450.

Medline [20438193](#)

## Contributor(s)

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