

## t(11;17)(q23;p13)

### Identity

**Note** the translocation may be hidden, and can present as a del(11)(q23)

### Clinics and Pathology

**Disease** acute non lymphocytic leukemia (ANLL), acute lymphocytic leukemia (ALL)

**Clinics** poorly known: a few cases, but without ascertainment of GAS7 involvement (a gene in 17p13); they are cases of MDS in transformation, ANLL, bi-phenotypic leukemia, and ALL; one the other hand, one case of t(11;17) with MLL and GAS7 involvements has been described: a 13-year-old boy, with a M4 treatment-related ANLL and a karyotype with an apparent del(11)(q23) (a cryptic t(11;17)(q23;p13)); four months later the patient died

### Genes involved and Proteins

**Gene Name**

[MLL](#)

**Location** 11q23

**Dna / Rna** 21 exons, spanning over 100 kb; 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**

[GAS7](#)

**Location** 17p13

**Dna / Rna** genomic sequence 167 kb; 14 exons

**Protein** expression in quiescent/terminally differentiated cells, especially in the brain

### Result of the chromosomal anomaly

**Hybrid gene Description** 5' MLL-3' GAS7; breakpoint in MLL intron 8, in MLL bcr; GAS7 breakpoint upstream of exon 1; fusion of mLL exon 7 or exon 8 to GAS7 exon 2

### External links

Other database [t\(11;17\)\(q23;p13\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(11;17\)\(q23;p13\)](#) [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

#### Ten novel 11q23 chromosomal partner sites. European 11q23 Workshop participants.

Harrison CJ, Cuneo A, Clark R, Johansson B, Lafage-Pochitaloff M, Mugneret F, Moorman AV, Secker-Walker LM.

Leukemia. 1998;12: 811-822.

Medline [9593286](#)

#### Detection of leukemia-associated MLL-GAS7 translocation early during chemotherapy with DNA topoisomerase II inhibitors.

Megonigal MD, Cheung NKV, Rappaport EF, Nowell PC, Wilson RB, Jones DH, Addya K, Leonard DGB, KushnerBH, Williams TM, Lange BJ, Felix CA.

Proc Natl Acad Sci USA 2000; 97: 2814-2819.

Medline [20183971](#)

### Contributor(s)

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