

MLLT6 (myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6)

Identity

Other names **AF17 (ALL1 fused gene from chromosome 17)**
 Hugo [MLLT6](#)
 Location 17q21
 proximal to [RARA](#), also in 17q21; [HLF](#) is even more distal in 17q22

DNA/RNA

Transcription 7.5 and 5 kb mRNA; coding sequence: 3.3 kb

Protein

Description 1093 amino acids; N- term - 3 Zn fingers (LAP type) and a leucine zipper - C-term; a leucine zipper is a dimerization motif
 Localisation nuclear
 Function transcriptional regulation factor
 Homology with AF10 and BR140, a gene sitting in 3p25

Implicated in

Entity t(11;17)(q23;q21) /ANLL --> MLL-[AF17](#)
 Disease ANLL and MDS
 Cytogenetics additional anomaly: +8
 Hybrid/Mutated Gene 5' MLL - 3' AF17
 Abnormal Protein N-term AT hook and DNA methyltransferase from MLL fused to the leucine zipper C-term of AF17

External links

Nomenclature

[Hugo](#) [MLLT6](#)
[GDB](#) [MLLT6](#)
[Entrez Gene](#) [MLLT6 4302](#) myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6

Cards

[Atlas](#) [AF17](#)
[GeneCards](#) [MLLT6](#)
[Ensembl](#) [MLLT6](#)
[CancerGene](#) [MLLT6](#)
[Genatlas](#) [MLLT6](#)
[GeneLynx](#) [MLLT6](#)
[eGenome](#) [MLLT6](#)
[euGene](#) [4302](#)

Genomic and cartography

[GoldenPath](#) [MLLT6 - 17q21](#) [chr17:34115401-34136966 + 17q12](#) (hg17-May_2004)
[Ensembl](#) [MLLT6 - 17q12 \[CytoView\]](#)
[NCBI](#) [Genes Cyto](#) [Gene Seq](#) [Map View - NCBI]
[OMIM](#) [Disease map \[OMIM\]](#)
[HomoloGene](#) [MLLT6](#)

Gene and transcription

[Genbank](#) [AF075118](#) [SRS] [AF075118](#) [ENTREZ]
[Genbank](#) [AK027133](#) [SRS] [AK027133](#) [ENTREZ]

Genbank	AK057058 [SRS] AK057058 [ENTREZ]
Genbank	AK092893 [SRS] AK092893 [ENTREZ]
Genbank	AL133659 [SRS] AL133659 [ENTREZ]
RefSeq	NM_005937 [SRS] NM_005937 [ENTREZ]
RefSeq	NT_086877 [SRS] NT_086877 [ENTREZ]
AceView	MLLT6 AceView - NCBI
TRASER	MLLT6 Traser - Stanford
Unigene	Hs.91531 [SRS] Hs.91531 [NCBI] HS91531 [spliceNest]
Protein : pattern, domain, 3D structure	
SwissProt	P55198 [SRS] P55198 [EXPASY] P55198 [INTERPRO]
Prosite	PS01359 ZF_PHD_1 [SRS] PS01359 ZF_PHD_1 [Expasy]
Prosite	PS50016 ZF_PHD_2 [SRS] PS50016 ZF_PHD_2 [Expasy]
Interpro	IPR011011 FYVE_PHD_ZnF [SRS] IPR011011 FYVE_PHD_ZnF [EBI]
Interpro	IPR001965 Znf_PHD [SRS] IPR001965 Znf_PHD [EBI]
CluSTr	P55198
Pfam	PF00628 PHD [SRS] PF00628 PHD [Sanger] pfam00628 [NCBI-CDD]
Smart	SM00249 PHD [EMBL]
Blocks	P55198
Polymorphism : SNP, mutations, diseases	
OMIM	600328 [map]
GENECLINICS	600328
SNP	MLLT6 [dbSNP-NCBI]
SNP	NM_005937 [SNP-NCI]
SNP	MLLT6 [GeneSNPs - Utah] MLLT6 [SNP - CSHL] MLLT6 [HGBASE - SRS]
General knowledge	
Family Browser	MLLT6 [UCSC Family Browser]
SOURCE	NM_005937
SMD	Hs.91531
SAGE	Hs.91531
Amigo	function DNA binding
Amigo	component nucleus
Amigo	process regulation of transcription, DNA-dependent
PubGene	MLLT6
Other databases	
Probes	
Probe	MLLT6 Related clones (RZPD - Berlin)
PubMed	
PubMed	3 Pubmed reference(s) in LocusLink

Bibliography

Leucine-zipper dimerization motif encoded by the AF17 gene fused to ALL-1 (MLL) in acute leukemia.

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 Medline [8058765](#)

Chromosome abnormalities in leukaemia: the 11q23 paradigm.

Young BD and Saha V.
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 Medline [97131386](#)

Molecular basis of 11q23 rearrangements in hematopoietic malignant proliferations.

Bernard OA and Berger R.
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 Medline [7542910](#)

11q23 rearrangements in acute leukemia

Rubnitz JE, et al

Leukemia. 1996 Jan;10(1):74-82. Review

Medline [96145214](#)

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Contributor(s)

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URL : <http://www.infobiogen.fr/services/chromcancer/Genes/AF17.html>

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