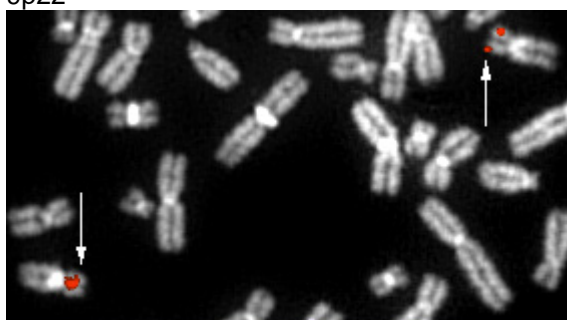


AF9 (ALL1 fused gene from chromosome 9)

MLLT3 (myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3)

Identity

Other names **LTG9**
MLLT3 (myeloid/lymphoid leukemia translocated to 3)
 Hugo **MLLT3**
 Location 9p22



bA336012

[AF9 \(9p22\)](#) - Courtesy Mariano Rocchi, [Resources for Molecular Cytogenetics](#).
 Laboratories willing to validate the probes are welcome : contact rocchi@biologia.uniba.it

DNA/RNA

Transcription 5 kb mRNA; coding sequence: 1.7 kb

Protein

Description 568 amino acids; 63 kDa; serine and proline rich in many places; possesses a nuclear targeting sequence
 Localisation nuclear
 Function transcription activator
 Homology with ENL (human)

Implicated in

Entity [t\(9;11\) \(p22;q23\)/ANLL -->MLL -AF9](#)
 Disease M5/M4 de novo and therapy related ANLL
 Prognosis the prognosis may not be as poor as in other 11q23 leukaemias in de novo cases; very poor prognosis in secondary ANLL cases
 Cytogenetics may be overlooked; often as a sole anomaly
 Hybrid/Mutated Gene variable breakpoints on both genes
 Abnormal Protein N-term -- AT hook and DNA methyltransferase from MLL fused to the 192 C-term amino acids from AF9 (as breakpoints are variable, this is only an exemple)

External links

Nomenclature
 Hugo [MLLT3](#)

[GDB](#) [MLLT3](#)
[Entrez Gene](#) [MLLT3 4300](#) myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3

Cards

[Atlas](#) [AF9](#)
[GeneCards](#) [MLLT3](#)
[Ensembl](#) [MLLT3](#)
[CancerGene](#) [MLLT3](#)
[Genatlas](#) [MLLT3](#)
[GeneLynx](#) [MLLT3](#)
[eGenome](#) [MLLT3](#)
[euGene](#) [4300](#)

Genomic and cartography

[GoldenPath](#) [MLLT3 - 9p22 chr9:20334968-20612450 - 9p21.3](#) (hg17-May_2004)
[Ensembl](#) [MLLT3 - 9p21.3 \[CytoView\]](#)
[NCBI](#) [Genes Cyto](#) [Gene Seq](#) [Map View - NCBI]
[OMIM](#) [Disease map \[OMIM\]](#)
[HomoloGene](#) [MLLT3](#)

Gene and transcription

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[AceView](#) [MLLT3](#) AceView - NCBI
[TRASER](#) [MLLT3](#) Traser - Stanford
[Unigene](#) [Hs.493585](#) [SRS] [Hs.493585](#) [NCBI] [HS493585](#) [spliceNest]

Protein : pattern, domain, 3D structure

[SwissProt](#) [P42568](#) [SRS] [P42568](#) [EXPASY] [P42568](#) [INTERPRO]
[Prosite](#) [PS51037 YEATS](#) [SRS] [PS51037 YEATS](#) [Expasy]
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[Pfam](#) [PF03366 YEATS](#) [SRS] [PF03366 YEATS](#) [Sanger] [pfam03366](#) [NCBI-CDD]
[Blocks](#) [P42568](#)

Polymorphism : SNP, mutations, diseases

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[SNP](#) [MLLT3](#) [dbSNP-NCBI]
[SNP](#) [NM_004529](#) [SNP-NCI]
[SNP](#) [MLLT3](#) [GeneSNPs - Utah] [MLLT3](#) [SNP - CSHL] [MLLT3](#) [HGBASE - SRS]

General knowledge

[Family Browser](#) [MLLT3](#) [UCSC Family Browser]
[SOURCE](#) [NM_004529](#)
[SMD](#) [Hs.493585](#)
[SAGE](#) [Hs.493585](#)
[Amigo](#) [component|nucleus](#)
[Amigo](#) [process|regulation of transcription, DNA-dependent](#)
[PubGene](#) [MLLT3](#)

Other databases

Probes

[Probe](#) [Cancer Cytogenetics \(Bari\)](#)
[Probe](#) [MLLT3 Related clones \(RZPD - Berlin\)](#)

PubMed

PubMed

3 Pubmed reference(s) in LocusLink

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Medline [96145214](#)

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URL : <http://www.infobiogen.fr/services/chromcancer/Genes/AF9.html>

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