Gene Section
Short Communication

AF9 (ALL1 fused gene from chromosome 9)
Jean-Loup Huret

Genetics, Department of Medical Information, University of Poitiers, CHU Poitiers Hospital, F-86021 Poitiers, France

Published in Atlas Database: December 1997

Online version is available at: http://AtlasGeneticsOncology.org/Genes/AF9.html
DOI: 10.4267/2042/32050

This work is licensed under a Creative Commons Attribution-Non-commercial-No Derivative Works 2.0 France Licence. © 1997 Atlas of Genetics and Cytogenetics in Oncology and Haematology

Identity

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

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

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 example).

References


This article should be referenced as such: