

Gene Section

Short Communication

ABI1 (Abl-Interactor 1)

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Published in Atlas Database: April 2000

Online updated version : <http://AtlasGeneticsOncology.org/Genes/ABI1ID233.html>

DOI: 10.4267/2042/37609

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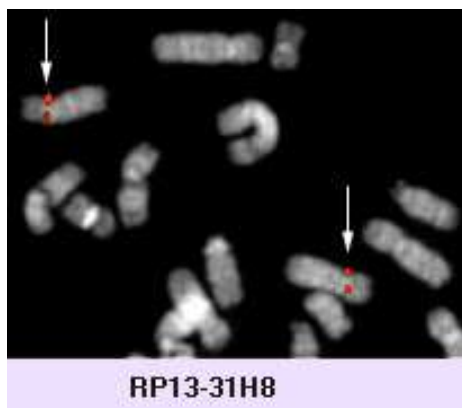
Identity

Other names: E3B1; eps8 SH3 domain binding protein; SSH3BP1

HGNC (Hugo): ABI1

Location: 10p11.2

Local order: Centromeric to the AF10 gene.



ABI1 (10p11) - Courtesy Mariano Rocchi, Resources for Molecular Cytogenetics.

DNA/RNA

Transcription

Different splicings (and different names for the gene).

Protein

Description

387 (ABI1) to 508 (e3B1) amino acids; 43 to 72 kDa; NH2- an homeodomain homologous region and a SH3 domain -COOH.

Expression

Wide, in adults and in the embryo.

Localisation

Cytosol.

Function

Cell growth inhibitor; interacts with ENL, another fusion partner of MLL, by binding it through its SH3 domain; the mouse Abi-1 protein is an AB-binding protein that suppresses v-ABL transforming activity.

Implicated in

t(10;11)(p11.2;q23) acute non lymphoblastic leukemia (ANLL) --> MLL-ABI1

Note

Only one case to date.

Disease

M4 ANLL in an infant.

Oncogenesis

MLL-ABI1 displays a transcriptional transactivator activity similar to MLL-ENL; they may act in a common oncogenic pathway.

References

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This article should be referenced as such:

Huret JL. ABI1 (Abl-Interactor 1). *Atlas Genet Cytogenet Oncol Haematol.* 2000; 4(2):55-56.
