

Datasheet for ABIN1882102

anti-MLLT10 antibody (AA 294-323)**2** Images**6** Publications[Go to Product page](#)

Overview

Quantity:	400 µL
Target:	MLLT10
Binding Specificity:	AA 294-323
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MLLT10 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	This MLLT10 (AF10) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 294-323 amino acids from the Central region of human MLLT10 (AF10).
Clone:	RB8383
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	MLLT10
Alternative Name:	MLLT10 (AF10) (MLLT10 Products)

Target Details

Background: Translocations affecting chromosome 11q23 involve many partner chromosome regions and occur in various leukemias. The 11q23 gene involved in the translocations is MLL. MLLT10 is the partner gene to MLL1 involved in t(10,11)(p12,q23) translocations. In an analysis of two leukemia patients, the in t(10,11)(p12,q23) translocation fuses MLL1, a SET domain containing histone methyltransferase, to the MLLT10 gene. The MLLT10 gene encodes a predicted 1,027-amino acid protein containing an N-terminal zinc finger and a C-terminal leucine zipper domain. The MLLT10 gene is one of the few MLL partner genes to be independently rearranged with a third gene in leukemia, the CALM gene in the t(10,11)(p12,q14) translocation. Chimeric fusion proteins MLL/AF10 and CALM/AF10 consistently retain the leucine zipper motif of MLLT10. The leucine zipper interacts with GAS41, a protein previously identified as the product of an amplified gene in a glioblastoma. GAS41 interacts with integrase interactor-1 (INI1), a component of the SWI/SNF complex, which acts to remodel chromatin and to modulate transcription. Retention of the leucine zipper in the MLL and CALM fusions suggested that a key feature of these chimeric proteins may be their ability to interfere in normal gene regulation through interaction with the adenosine triphosphate-dependent chromatin remodeling complexes.

Molecular Weight: 113320

NCBI Accession: [NP_001182555](#), [NP_001182556](#), [NP_001182557](#), [NP_001182559](#), [NP_004632](#)

UniProt: [P55197](#)

Application Details

Application Notes: IF: 1:10~50. WB: 1:1000

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C,-20 °C

Expiry Date: 6 months

Publications

Product cited in:

Benedikt, Baltruschat, Scholz, Bursen, Arrey, Meyer, Varagnolo, Müller, Karas, Dinger, Marschalek: "The leukemogenic AF4-MLL fusion protein causes P-TEFb kinase activation and altered epigenetic signatures." in: **Leukemia**, Vol. 25, Issue 1, pp. 135-44, (2011) ([PubMed](#)).

Cai, Gao, Sheng, Miao, Cui, Wang, Zong, Koide: "Characterization and potential function of a novel testis-specific nucleoporin BS-63." in: **Molecular reproduction and development**, Vol. 61, Issue 1, pp. 126-34, (2002) ([PubMed](#)).

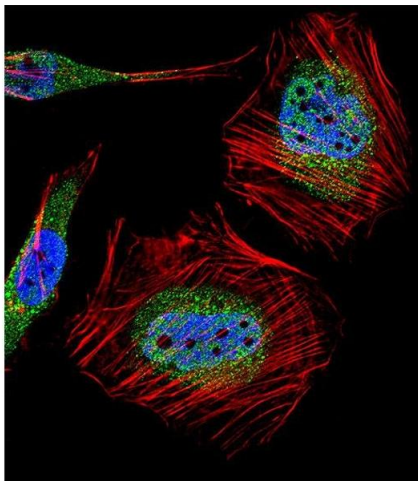
Perrin, Bloyer, Ferraz, Agrawal, Sinha, Dura: "The leucine zipper motif of the Drosophila AF10 homologue can inhibit PRE-mediated repression: implications for leukemogenic activity of human MLL-AF10 fusions." in: **Molecular and cellular biology**, Vol. 23, Issue 1, pp. 119-30, (2002) ([PubMed](#)).

Roll, Zattara-Cannoni, Bustos-Bernard, Curtillet, Michel, Vagner-Capodano: "Molecular and fluorescence in situ hybridization analysis of a 10;11 rearrangement in a case of infant acute monocytic leukemia." in: **Cancer genetics and cytogenetics**, Vol. 135, Issue 2, pp. 187-91, (2002) ([PubMed](#)).

Nakamura, Mori, Tada, Krajewski, Rozovskaia, Wassell, Dubois, Mazo, Croce, Canaani: "ALL-1 is a histone methyltransferase that assembles a supercomplex of proteins involved in transcriptional regulation." in: **Molecular cell**, Vol. 10, Issue 5, pp. 1119-28, (2002) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

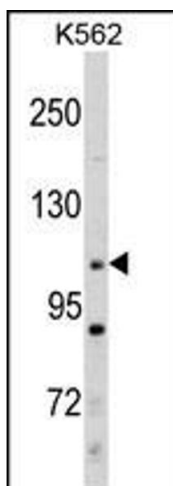
Images



Immunofluorescence

Image 1. Fluorescent confocal image of HeLa cell stained with MLLT10 (AF10) Antibody (Center) (ABIN1882102 and ABIN2850420). HeLa cells were fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.1 %, 10 min), then incubated with MLLT10 primary antibody (1:25, 1 h at 37 °C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 °C). Cytoplasmic actin was

counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/mL, 1 h at 37 °C). Nuclei were counterstained with DAPI (blue) (10 µg/mL, 10 min). MLLT10 immunoreactivity is localized to Nucleus significantly and Cytoplasm weakly.



Western Blotting

Image 2. Western blot analysis of MLLT10 (ABIN1882102 and ABIN2850420) in K562 cell line lysates (35 µg/lane). MLLT10 (arrow) was detected using the purified Pab.(2 µg/mL)