

MLLT11 (2A9-1B7): sc-517101

BACKGROUND

The gene encoding the Mixed-Lineage Leukemia (MLL) proteins is located on chromosome 11q23. Chromosomal translocations involving band 11q23 result in rogue activator proteins that are associated with approximately 10% of patients with acute lymphoblastic leukemia (ALL) and 5% of patients with acute myeloid leukemia (AML). Most patients affected are less than one year of age. MLLT11, also known as mixed-lineage leukemia translocated to 11 or AF1q, is a 90 amino acid MLL fusion partner. Based on the expression patterns of MLLT11, it is thought that MLLT11 plays a role in leukemogenesis and, specifically, the progression of acute monocytic leukemia (AML). Also, expressed in embryonic brain cortex, MLLT11 is upregulated during neuronal differentiation and is thought to play a role in the development of the central nervous system. Finally, MLLT11 has been shown to be differentially expressed in highly metastatic cells, in comparison with non-metastatic parent cells. Such findings suggest a role of MLLT11 in tumorigenesis.

REFERENCES

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3. So, C.W., et al. 2000. Analysis of MLL-derived transcripts in infant acute monocytic leukemia with a complex translocation (1;11;4)(q21;q23;p16). *Cancer Genet. Cytogenet.* 117: 24-27.
4. Tse, W., et al. 2004. Elevated expression of the AF1q gene, an MLL fusion partner, is an independent adverse prognostic factor in pediatric acute myeloid leukemia. *Blood* 104: 3058-3063.
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7. Skotheim, R.I., et al. 2006. Novel genomic aberrations in testicular germ cell tumors by array-CGH, and associated gene expression changes. *Cell. Oncol.* 28: 315-326.
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CHROMOSOMAL LOCATION

Genetic locus: MLLT11 (human) mapping to 1q21.3.

SOURCE

MLLT11 (2A9-1B7) is a mouse monoclonal antibody raised against amino acids 1-90 representing full length MLLT11 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MLLT11 (2A9-1B7) is recommended for detection of MLLT11 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

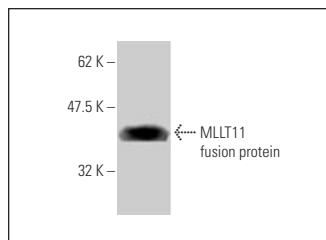
Suitable for use as control antibody for MLLT11 siRNA (h): sc-88150, MLLT11 shRNA Plasmid (h): sc-88150-SH and MLLT11 shRNA (h) Lentiviral Particles: sc-88150-V.

Molecular Weight of MLLT11: 10 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



MLLT11 (2A9-1B7): sc-517101. Western blot analysis of human recombinant MLLT11 fusion protein.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.