SANTA CRUZ BIOTECHNOLOGY, INC.

MLLT6 (D-20): sc-74976

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The Power to Question

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. The gene encoding MLLT6, also known as mixed-lineage leukemia translocated to 6 or AF17, is located on chromosome 17q12 and encodes a 1,093 amino acid protein that is thought to be involved in the translocations on chromosome 11q23. Localized to the nucleus, MLLT6 contains a leucine-zipper dimerization motif located 3' of the fusion point, and a cysteine-rich domain at the C-terminus. MLLT6 is thought to play a role in ALL by repressing the activity of the truncated ALL1 protein.

REFERENCES

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3. Prasad, R., et al. 1994. Leucine-zipper dimerization motif encoded by the AF17 gene fused to ALL-1 (MLL) in acute leukemia. Proc. Natl. Acad. Sci. USA 91: 8107-8111.
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7. Moore, S.D., et al. 2005. Acute myelocytic leukemia with t(11;17)(q23;q12-q21) involves a fusion of MLL and AF17. Cancer Genet. Cytogenet. 157: 87-89.
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CHROMOSOMAL LOCATION

Genetic locus: MLLT6 (human) mapping to 17q12; Mllt6 (mouse) mapping to 11 D.

SOURCE

MLLT6 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MLLT6 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-74976 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-74976 X, 200 µg/0.1 ml.

APPLICATIONS

MLLT6 (D-20) is recommended for detection of MLLT6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MLLT6 (D-20) is also recommended for detection of MLLT6 in additional species, including bovine and avian.

Suitable for use as control antibody for MLLT6 siRNA (h): sc-75800, MLLT6 siRNA (m): sc-75801, MLLT6 shRNA Plasmid (h): sc-75800-SH, MLLT6 shRNA Plasmid (m): sc-75801-SH, MLLT6 shRNA (h) Lentiviral Particles: sc-75800-V and MLLT6 shRNA (m) Lentiviral Particles: sc-75801-V.

MLLT6 (D-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MLLT6: 112 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.