

AF9 (3C11): sc-293339

BACKGROUND

The MLL (ALL-1, HRX) gene influences myelomonocytic differentiation, and different chromosomal translocations can result in a range of MLL fusion proteins that mediate leukemia. Frequent translocation partners of MLL include ELL, ENL, AF4, AF6 and AF9. ELL (elongation factor RNA polymerase II, Men) encodes an RNA polymerase II elongation factor that is implicated in t(11;19)(q23;p13.1) translocation in myeloid leukemias. AF9 (MLLT3, YEATS3) fusion with the MLL gene results in a t[(9;11)(p22;q23)] translocation, which is associated with *de novo* acute myelogenous leukemia (AML). ENL (MLLT1, LTG19, YEATS1, 11-19 leukemia protein) is capable of activating transcription from synthetic reporter genes in both lymphoid and myeloid cells. The t[(11;19)(q23;p13)] translocation results in the MLL-ENL fusion protein, which is commonly found in infant acute leukemias of both the myeloid and lymphoid lineage.

REFERENCES

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- Pramparo, T., et al. 2005. Loss-of-function mutation of the AF9/MLLT3 gene in a girl with neuromotor development delay, cerebellar ataxia and epilepsy. *Hum. Genet.* 118: 76-81.

CHROMOSOMAL LOCATION

Genetic locus: MLLT3 (human) mapping to 9p21.3; Mllt3 (mouse) mapping to 4 C4.

SOURCE

AF9 (3C11) is a mouse monoclonal antibody raised against amino acids 1-568 representing full length AF9 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

AF9 (3C11) is recommended for detection of AF9 of mouse, rat and 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).

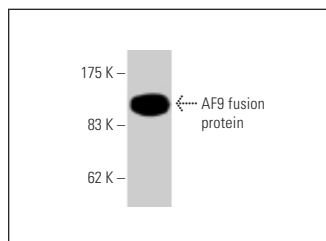
Suitable for use as control antibody for AF9 siRNA (h): sc-44793, AF9 siRNA (m): sc-44794, AF9 shRNA Plasmid (h): sc-44793-SH, AF9 shRNA Plasmid (m): sc-44794-SH, AF9 shRNA (h) Lentiviral Particles: sc-44793-V and AF9 shRNA (m) Lentiviral Particles: sc-44794-V.

Molecular Weight of AF9: 63 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, UltraCruz® Blocking Reagent: sc-516214 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



AF9 (3C11): sc-293339. Western blot analysis of human recombinant AF9 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.