MN1 (N-20): sc-27348

SANTA CRUZ®

BIOTECHNOLOGY

The Power to Question

BACKGROUND

The MN1 gene, which resides on chromosome 22, encodes a 1,319 amino acid protein. The ETV6/TEL gene has been reported to fuse to MN1. The MN1-TEL fusion protein, encoded by the translocation (12;22)(p13;q11) in myeloid leukemia, is a transcription factor with transforming activity. Defects in MN1 (meningioma 1) may be a cause of meningiomas, slowly growing benign tumors derived from the arachnoidal cap cells of the leptomeninges, the soft coverings of the brain and spinal cord.

REFERENCES

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2. Conchon, M., et al. 1997. Two unbalanced translocations, t(12;22)(p13;q11) and t(12;?)(p13;?), in an aggressive chronic B-cell leukemia: TEL gene analysis using FISH. Cancer Genet. Cytogenet. 95: 137-140.

3. Buijs, A., et al. 2000. The MN1-TEL fusion protein, encoded by the translo-cation (12;22)(p13;q11) in myeloid leukemia, is a transcription factor with transforming activity. Mol. Cell. Biol. 20: 9281-9293.

4. Galmarini, C.M., et al. 2003. Drug resistance associated with loss of p53 involves extensive alterations in microtubule composition and dynamics. Br. J. Cancer 88: 1793-1799.

5. van Wely, K.H., et al. 2003. The MN1 oncoprotein synergizes with coacti-vators RAC3 and p300 in RAR-RXR-mediated transcription. Oncogene 22: 699-709.

6. Belloni, E., et al. 2004. A new complex rearrangement involving the ETV6, LOC115548, and MN1 genes in a case of acute myeloid leukemia. Genes Chromosomes Cancer 41: 272-277.

7. Valle, V.D., et al. 2004. Expression of the MN1-TEL fusion protein in the human UCSD/AML1 leukemic cell line. Leukemia 18: 1558-1560.

8. SWISS-PROT/TrEMBL (Q10571). World Wide Web URL: http://www. expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

Genetic locus: MN1 (human) mapping to 22q12.1.

SOURCE

MN1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MN1 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-27348 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

MN1 (N-20) is recommended for detection of MN1 of 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).

MN1 (N-20) is also recommended for detection of MN1 in additional species, including equine and canine.

Suitable for use as control antibody for MN1 siRNA (h): sc-106742, MN1 shRNA Plasmid (h): sc-106742-SH and MN1 shRNA (h) Lentiviral Particles: sc-106742-V.

Molecular Weight of MN1: 136 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) Immunofluo-rescence: 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.

PROTOCOLS

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

MONOS
Satisfation
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Try **MN1 (A-4): sc-390869**, our highly recommended monoclonal alternative to MN1 (N-20).