

MN1 (A-4): sc-390869

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.

CHROMOSOMAL LOCATION

Genetic locus: MN1 (human) mapping to 22q12.1; Mn1 (mouse) mapping to 5 F.

SOURCE

MN1 (A-4) is a mouse monoclonal antibody raised against amino acids 1021-1320 mapping at the C-terminus of MN1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-390869 X, 200 µg/0.1 ml.

MN1 (A-4) is available conjugated to agarose (sc-390869 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390869 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390869 PE), fluorescein (sc-390869 FITC), Alexa Fluor[®] 488 (sc-390869 AF488), Alexa Fluor[®] 546 (sc-390869 AF546), Alexa Fluor[®] 594 (sc-390869 AF594) or Alexa Fluor[®] 647 (sc-390869 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390869 AF680) or Alexa Fluor[®] 790 (sc-390869 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

MN1 (A-4) is recommended for detection of MN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for MN1 siRNA (h): sc-106742, MN1 siRNA (m): sc-149485, MN1 shRNA Plasmid (h): sc-106742-SH, MN1 shRNA Plasmid (m): sc-149485-SH, MN1 shRNA (h) Lentiviral Particles: sc-106742-V and MN1 shRNA (m) Lentiviral Particles: sc-149485-V.

MN1 (A-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

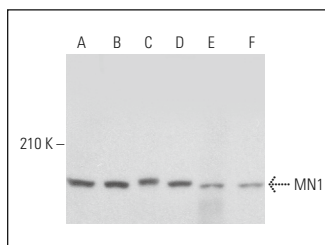
Molecular Weight of MN1: 136 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

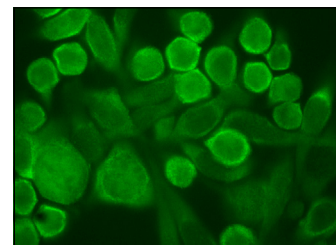
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



MN1 (A-4): sc-390869. Western blot analysis of MN1 expression in F9 (A), NIH/3T3 (B), HEL 92.1.7 (C) and AT3B-1 (D) whole cell lysates and mouse testis (E) and rat testis (F) tissue extracts.



MN1 (A-4) Alexa Fluor[®] 488: sc-390869 AF488. Direct immunofluorescence staining of formalin-fixed SW480 cells showing nuclear or cytoplasmic localization. Blocked with UltraCruz[®] Blocking Reagent: sc-516214.

SELECT PRODUCT CITATIONS

- He, Q., et al. 2020. Isoform-specific involvement of Brpf1 in expansion of adult hematopoietic stem and progenitor cells. *J. Mol. Cell Biol.* 12: 359-371.
- Liu, W., et al. 2022. Transcriptome sequencing of LMP2A-transfected gastric cancer cells identifies potential biomarkers in EBV-associated gastric cancer. *Virus Genes* 58: 515-526.

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 for detailed protocols and support products.

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