

MSANTD4 (C-16): sc-139377

BACKGROUND

MSANTD4 is a 345 amino acid protein encoded by a gene that maps to human chromosome 11q22.3. Chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by *HBB* gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the *WT1* gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

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3. Nousiainen, M., et al. 2006. Phosphoproteome analysis of the human mitotic spindle. *Proc. Natl. Acad. Sci. USA* 103: 5391-5396.
4. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
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7. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for *BSX* and *Neurogranin* in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: MSANTD4 (human) mapping to 11q22.3; *Msantd4* (mouse) mapping to 9 A1.

SOURCE

MSANTD4 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of MSANTD4 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139377 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MSANTD4 (C-16) is recommended for detection of MSANTD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MSANTD4 (C-16) is also recommended for detection of MSANTD4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MSANTD4 siRNA (h): sc-96620, *Msantd4* siRNA (m): sc-140492, MSANTD4 shRNA Plasmid (h): sc-96620-SH, *Msantd4* shRNA Plasmid (m): sc-140492-SH, MSANTD4 shRNA (h) Lentiviral Particles: sc-96620-V and *Msantd4* shRNA (m) Lentiviral Particles: sc-140492-V.

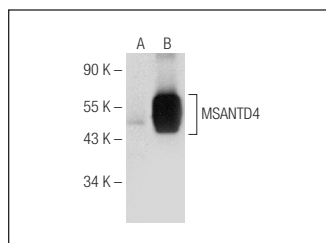
Molecular Weight of MSANTD4: 41 kDa.

Positive Controls: MSANTD4 (h2): 293T Lysate: sc-128929.

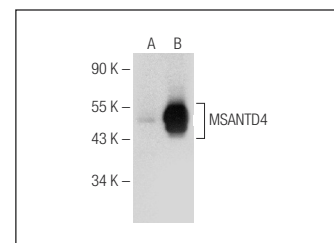
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MSANTD4 (C-16): sc-139377. Western blot analysis of MSANTD4 expression in non-transfected: sc-117752 (A) and human MSANTD4 transfected: sc-128929 (B) 293T whole cell lysates.



MSANTD4 (C-16): sc-139377. Western blot analysis of MSANTD4 expression in non-transfected: sc-117752 (A) and human MSANTD4 transfected: sc-115785 (B) 293T whole cell lysates.

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.