SANTA CRUZ BIOTECHNOLOGY, INC.

MNAB (P-17): sc-165028

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MNAB (membrane-associated nucleic acid-binding protein), also known as RC3H2 (RING finger and CCCH-type zinc finger domain-containing protein 2) or RNF164 (RING finger protein 164), is a 1,191 amino acid protein that contains one RING-type zinc finger and a C3H1-type zinc finger. Existing as six alternatively spliced isoforms, MNAB is expressed in small intestine, ovary, spleen and testis, and localizes to the perinuclear space. MNAB binds DNA and is encoded by a gene that maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

1. Siess, D.C., et al. 2000. A human gene coding for a membrane-associated nucleic acid-binding protein. J. Biol. Chem. 275: 33655-33662.
2. Burmeister, T., et al. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
3. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
4. Zeitz, M.J., et al. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. Chromosome Res. 17: 305-319.
5. Markson, G., et al. 2009. Analysis of the human E2 ubiquitin conjugating enzyme protein interaction network. Genome Res. 19: 1905-1911.
6. Gold-von Simson, G., et al. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. Pediatr. Res. 65: 341-346.
7. Axelrod, F.B., et al. 2010. Neuroimaging supports central pathology in familial dysautonomia. J. Neurol. 257: 198-206.

CHROMOSOMAL LOCATION

Genetic locus: RC3H2 (human) mapping to 9q33.2; Rc3h2 (mouse) mapping to 2 B.

SOURCE

MNAB (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MNAB 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-165028 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-165028 X, 200 µg/0.1 ml.

APPLICATIONS

MNAB (P-17) is recommended for detection of MNAB 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); non cross-reactive with Roquin.

MNAB (P-17) is also recommended for detection of MNAB in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for MNAB siRNA (h): sc-92465, MNAB siRNA (m): sc-149486, MNAB shRNA Plasmid (h): sc-92465-SH, MNAB shRNA Plasmid (m): sc-149486-SH, MNAB shRNA (h) Lentiviral Particles: sc-92465-V and MNAB shRNA (m) Lentiviral Particles: sc-149486-V.

MNAB (P-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MNAB isoforms: 132/54/57/118/24/96 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or Raji whole cell lysate: sc-364236.

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.