SANTA CRUZ BIOTECHNOLOGY, INC.

CTTNBP2NL (F-7): sc-514226

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CTTNBP2NL (CTTNBP2 N-terminal like) is a 639 amino acid protein that is encoded by a gene that maps to human chromosome 1p13.2. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

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2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders—cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
4. Lans, H., et al. 2006. Cell biology: aging nucleus gets out of shape. Nature 440: 32-34.
5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. Schizophr. Bull. 32: 409-416.
7. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.

CHROMOSOMAL LOCATION

Genetic locus: CTTNBP2NL (human) mapping to 1p13.2; Cttnbp2nl (mouse) mapping to 3 F2.2.

SOURCE

CTTNBP2NL (F-7) is a mouse monoclonal antibody raised against amino acids 514-578 mapping near the C-terminus of CTTNBP2NL of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CTTNBP2NL (F-7) is recommended for detection of CTTNBP2NL 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 CTTNBP2NL siRNA (h): sc-88565, CTTNBP2NL siRNA (m): sc-142631, CTTNBP2NL shRNA Plasmid (h): sc-88565-SH, CTTNBP2NL shRNA Plasmid (m): sc-142631-SH, CTTNBP2NL shRNA (h) Lentiviral Particles: sc-88565-V and CTTNBP2NL shRNA (m) Lentiviral Particles: sc-142631-V.

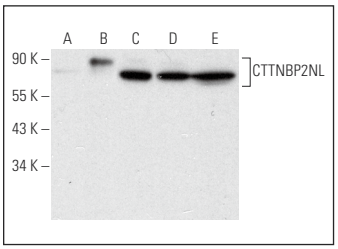
Molecular Weight of CTTNBP2NL: 70 kDa.

Positive Controls: CTTNBP2NL (h3): 293T Lysate: sc-112235, K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

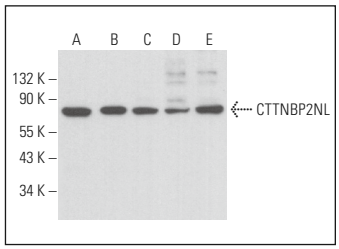
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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



CTTNBP2NL (F-7): sc-514226. Western blot analysis of CTTNBP2NL expression in non-transfected 293T: sc-117752 (**A**), human CTTNBP2NL transfected 293T: sc-112235 (**B**), K-562 (**C**), MCF7 (**D**) and MDA-MB-435S (**E**) whole cell lysates.



CTTNBP2NL (F-7): sc-514226. Western blot analysis of CTTNBP2NL expression in K-562 (**A**), ZR-75-1 (**B**), A549 (**C**), RAW 264.7 (**D**) and AMJ2-C8 (**E**) whole cell lysates.

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.