SANTA CRUZ BIOTECHNOLOGY, INC.

NAP1L3 (V-14): sc-131620

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Proper nucleosome assembly is critical for compacting DNA into chromatin. NAP1 (nucleosome assembly protein 1) is a nuclear protein that acts as a transcriptional regulator and functions in nucleosome assembly. NAP1L3 (nucleosome assembly protein 1-like 3), also known as MB20 or NPL3, is a 506 amino acid nuclear protein belonging to the nucleosome assembly protein (NAP) family. Expressed in human brain with weak expression in heart, NAP1L3 is encoded by a gene mapping to human chromosome Xq21.32, which is in close proximity to a region closely linked to several X-linked mental retardation syndromes. Containing nearly 153 million base pairs and housing over 1,000 genes, chromosome X acts in conjunction with chromosome Y to determine sex. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 300117. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Uprichard, J. and Perry, D.J. 2002. Factor X deficiency. Blood Rev. 16: 97-110.
4. Sharpe, L.T., et al. 2006. Advantages and disadvantages of human dichromacy. J. Vis. 6: 213-223.
5. Helderman-van den Enden, A.T., et al. 2009. Recurrence risk due to germ line mosaicism: Duchenne and Becker muscular dystrophy. Clin. Genet. 75: 465-472.
6. Mullaney, R. and Murphy, D. 2009. Turner syndrome: neuroimaging findings: structural and functional. Dev. Disabil. Res. Rev. 15: 279-283.
7. Makishima, T., et al. 2009. Otolaryngologic markers for the early diagnosis of Turner syndrome. Int. J. Pediatr. Otorhinolaryngol. 73: 1564-1567.

CHROMOSOMAL LOCATION

Genetic locus: NAP1L3 (human) mapping to Xq21.32; Nap1l3 (mouse) mapping to X E3.

SOURCE

NAP1L3 (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NAP1L3 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-131620 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NAP1L3 (V-14) is recommended for detection of NAP1L3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other NALP1L family members.

NAP1L3 (V-14) is also recommended for detection of NAP1L3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NAP1L3 siRNA (h): sc-91058, NAP1L3 siRNA (m): sc-149825, NAP1L3 shRNA Plasmid (h): sc-91058-SH, NAP1L3 shRNA Plasmid (m): sc-149825-SH, NAP1L3 shRNA (h) Lentiviral Particles: sc-91058-V and NAP1L3 shRNA (m) Lentiviral Particles: sc-149825-V.

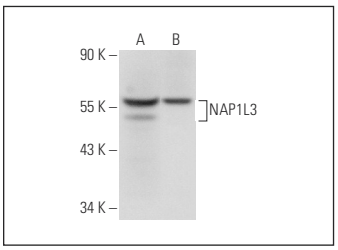
Molecular Weight of NAP1L3: 58 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, NCI-H460 whole cell lysate: sc-364235 or HeLa whole cell lysate: sc-2200.

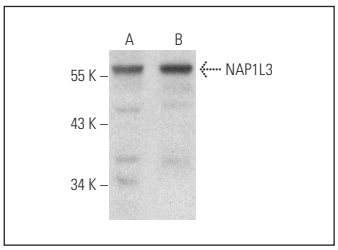
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



NAP1L3 (V-14): sc-131620. Western blot analysis of NAP1L3 expression in NCI-H460 (**A**) and HeLa (**B**) whole cell lysates.



NAP1L3 (V-14): sc-131620. Western blot analysis of NAP1L3 expression in 293 (**A**) and LNCaP (**B**) 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.