# SANTA CRUZ BIOTECHNOLOGY, INC.

# NAP1L3 (P-14): sc-131618



#### 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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#### CHROMOSOMAL LOCATION

Genetic locus: NAP1L3 (human) mapping to Xq21.32; Nap1I3 (mouse) mapping to X E3.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### SOURCE

NAP1L3 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NAP1L3 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131618 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

NAP1L3 (P-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), 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.

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.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

# **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.