

NAP1L1 (E-18): sc-74735



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. NAP1L1 (nucleosome assembly protein 1-like 1), also known as NRP, is a 391 amino acid member of the nucleosome assembly protein (NAP) family and may be involved in mediating chromatin formation. Localized to the nucleus and expressed throughout the body, NAP1L1 contains acidic domains which are thought to mediate NAP1L1-histone interaction. Due to its role in DNA replication, NAP1L1 is implicated as an important regulator of cell proliferation. NAP1L1 shares 54% sequence similarity with the *Saccharomyces cerevisiae* Nap1 protein and may be a genetic marker for intestinal carcinomas.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 164060. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Rehtanz, M., et al. 2004. Direct interaction between nucleosome assembly protein 1 and the papillomavirus E2 proteins involved in activation of transcription. *Mol. Cell. Biol.* 24: 2153-2168.
3. Okuwaki, M., et al. 2005. Assembly and disassembly of nucleosome core particles containing histone variants by human nucleosome assembly protein I. *Mol. Cell. Biol.* 25: 10639-10651.
4. Kidd, M., et al. 2006. The role of genetic markers—NAP1L1, MAGE-D2, and MTA1—in defining small-intestinal carcinoid neoplasia. *Ann. Surg. Oncol.* 13: 253-262.

CHROMOSOMAL LOCATION

Genetic locus: NAP1L1 (human) mapping to 12q21.2; Nap1l1 (mouse) mapping to 10 D1.

SOURCE

NAP1L1 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NAP1L1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-74735 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-74735 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

NAP1L1 (E-18) is recommended for detection of NAP1L1 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), immunohistochemistry (including paraffin-embedded sections) (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 NAP1L1 siRNA (h): sc-75871, NAP1L1 siRNA (m): sc-75872, NAP1L1 shRNA Plasmid (h): sc-75871-SH, NAP1L1 shRNA Plasmid (m): sc-75872-SH, NAP1L1 shRNA (h) Lentiviral Particles: sc-75871-V and NAP1L1 shRNA (m) Lentiviral Particles: sc-75872-V.

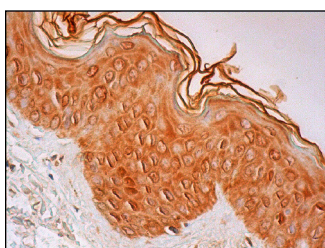
NAP1L1 (E-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NAP1L1: 45 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™ 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



NAP1L1 (E-18): sc-74735. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic and nuclear staining of fibroblasts, keratinocytes, Langerhans cells and melanocytes.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **NAP1L1 (2609C3a): sc-81328**, our highly recommended monoclonal alternative to NAP1L1 (E-18).