10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NAP1L1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1920b

Product Information

Application	WB, E
Primary Accession	P55209
Other Accession	Q9Z2G8, P28656, A6H767
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	45374
Antigen Region	1-30

Additional Information

Gene ID	4673
Other Names	Nucleosome assembly protein 1-like 1, NAP-1-related protein, hNRP, NAP1L1, NRP
Target/Specificity	This NAP1L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human NAP1L1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NAP1L1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NAP1L1
Synonyms	NRP
Function	Histone chaperone that plays a role in the nuclear import of H2A-H2B and

nucleosome assembly (PubMed:20002496, PubMed:21211722, PubMed:26841755). Also participates in several important DNA repair mechanisms: greatly enhances ERCC6-mediated chromatin remodeling which is essential for transcription-coupled nucleotide excision DNA repair (PubMed:28369616). Also stimulates homologous recombination (HR) by RAD51 and RAD54 which is essential in mitotic DNA double strand break (DSB) repair (PubMed:24798879). Plays a key role in the regulation of embryonic neurogenesis (By similarity). Promotes the proliferation of neural progenitors and inhibits neuronal differentiation during cortical development (By similarity). Regulates neurogenesis via the modulation of RASSF10; regulates RASSF10 expression by promoting SETD1A-mediated H3K4 methylation at the RASSF10 promoter (By similarity).

Cellular Location Nucleus. Chromosome {ECO:0000250|UniProtKB:P28656}. Melanosome. Cytoplasm. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Tissue Location Ubiquitously expressed.

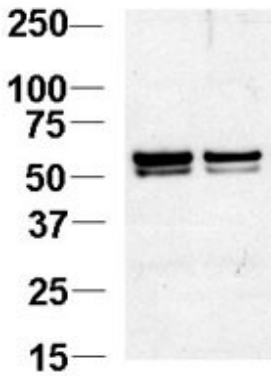
Background

NAP1L1 is a member of the nucleosome assembly protein (NAP) family. This protein participates in DNA replication and may play a role in modulating chromatin formation and contribute to the regulation of cell proliferation.

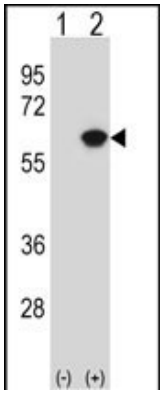
References

Rehtanz, M., et al., Mol. Cell. Biol. 24(5):2153-2168 (2004).
Simon, H.U., et al., Biochem. J. 297 (PT 2), 389-397 (1994) (): ().

Images



Western blot analysis of NAP1L1 Antibody (N-term) (Cat.#AP1920b) in Jurkat cell lysates. NAP1L1 was detected using the purified Pab at 1:1000. Data courtesy of Guoqiang Xu, Cornell University.



Western blot analysis of NAP1L1 (arrow) using rabbit polyclonal NAP1L1 Antibody (Cat.#AP1920b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the NAP1L1 gene.

Citations

- Global profiling of protease cleavage sites by chemoselective labeling of protein N-termini.
- Using a Fluorescent PCR-capillary Gel Electrophoresis Technique to Genotype CRISPR/Cas9-mediated Knockout Mutants in a High-throughput Format.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.