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NAP1L1 Rabbit pAb

Catalog # AP97156

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P55209
Other Accession	P55209
Reactivity	Rat, Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45374
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NAP1L1
Epitope Specificity	101-200/391
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the nucleosome assembly protein (NAP) family.
Post-translational modifications	Polyglutamylated by TTLL4, a modification that occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Some residues may also be monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes 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. The binding of sequence-specific DNA binding proteins to human nucleosome assembly protein 1 may be an important step contributing to the activation of transcription. May be involved in modulating chromatin formation and contribute to regulation of cell proliferation.

Additional Information

Gene ID	4673
Other Names	NAP1; NAP1L; NRP; D10Ertd68e; NAP-1; NP1L1_HUMAN; NAP1L1; NAP-1-related protein (hNRP); NP1L1_MOUSE; Brain protein DN38; NAP-1-related protein; NP1L1_RAT; nucleosome assembly protein 1 like 1; nucleosome assembly protein 1-like 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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