

ANP32A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9520b

Product Information

Application WB, IHC-P, E **Primary Accession** P39687 **Other Accession** P51122 Reactivity Human **Predicted** Bovine Host Rabbit Clonality Polyclonal Isotype Rabbit IgG RB24069 **Clone Names** 28585 **Calculated MW** 211-239 **Antigen Region**

Additional Information

Gene ID 8125

Other Names Acidic leucine-rich nuclear phosphoprotein 32 family member A, Acidic

nuclear phosphoprotein pp32, pp32, Leucine-rich acidic nuclear protein, LANP, Mapmodulin, Potent heat-stable protein phosphatase 2A inhibitor I1PP2A, Putative HLA-DR-associated protein I, PHAPI, ANP32A, C15orf1, LANP,

MAPM, PHAP1

Target/Specificity This ANP32A antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 211-239 amino acids from the

C-terminal region of human ANP32A.

Dilution WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

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 ANP32A Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name ANP32A

Synonyms

C15orf1, LANP, MAPM, PHAP1

Function

Multifunctional protein that is involved in the regulation of many processes including tumor suppression, apoptosis, cell cycle progression or transcription (PubMed: 10400610, PubMed: 11360199, PubMed: 16341127, PubMed:18439902). Promotes apoptosis by favouring the activation of caspase-9/CASP9 and allowing apoptosome formation (PubMed: 18439902). In addition, plays a role in the modulation of histone acetylation and transcription as part of the INHAT (inhibitor of histone acetyltransferases) complex. Inhibits the histone- acetyltranferase activity of EP300/CREBBP (CREB-binding protein) and EP300/CREBBP-associated factor by histone masking (PubMed: 11830591). Preferentially binds to unmodified histone H3 and sterically inhibiting its acetylation and phosphorylation leading to cell growth inhibition (PubMed: 16341127). Participates in other biochemical processes such as regulation of mRNA nuclear-to-cytoplasmic translocation and stability by its association with ELAVL1 (Hu-antigen R) (PubMed:18180367). Plays a role in E4F1-mediated transcriptional repression as well as inhibition of protein phosphatase 2A (PubMed: 15642345, PubMed: 17557114).

Cellular Location

Nucleus. Cytoplasm Endoplasmic reticulum. Note=Translocates to the cytoplasm during the process of neuritogenesis (By similarity). Shuttles between nucleus and cytoplasm. {ECO:0000250, ECO:0000269 | PubMed:18180367}

Tissue Location

Expressed in all tissues tested. Highly expressed in kidney and skeletal muscle, moderate levels of expression in brain, placenta and pancreas, and weakly expressed in lung. Found in all regions of the brain examined (amygdala, caudate nucleus, corpus callosum, hippocampus and thalamus), with highest levels in amygdala

Background

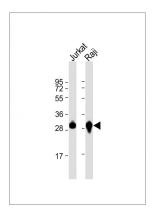
Implicated in a number of cellular processes, including proliferation, differentiation, caspase-dependent and caspase-independent apoptosis, suppression of transformation (tumor suppressor), inhibition of protein phosphatase 2A, regulation of mRNA trafficking and stability in association with ELAVL1, and inhibition of acetyltransferases as part of the INHAT (inhibitor of histone acetyltransferases) complex. ANP32A plays a role in E4F1-mediated transcriptional repression.

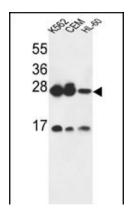
References

Valdes, A.M., et al. Arthritis Rheum. 60(7):2046-2054(2009) Pan, W., et al. J. Biol. Chem. 284(11):6946-6954(2009) de Chiara, C., et al. FEBS J. 275(10):2548-2560(2008) Kim, H.E., et al. Mol. Cell 30(2):239-247(2008) Matilla, A., et al. Cerebellum 4(1):7-18(2005)

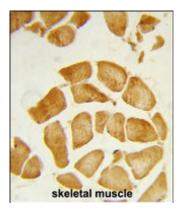
Images

All lanes: Anti-ANP32A Antibody (C-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





ANP32A Antibody (C-term) (Cat. #AP9520b) western blot analysis in K562,CEM,HL-60 cell line lysates (35ug/lane).This demonstrates the ANP32A antibody detected the ANP32A protein (arrow).



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with ANP32A Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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