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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
Clone Names	RB24069
Calculated MW	28585
Antigen Region	211-239

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

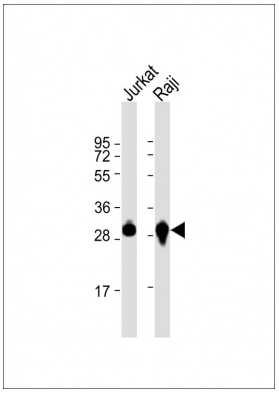
Implicated in a number of cellular processes, including proliferation, differentiation, caspase-dependent and caspase-independent apoptosis, suppression of transformation (tumor suppressor), inhibition of protein phosphatase 2A, regulation of mRNA trafficking and stability in association with ELAVL1,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

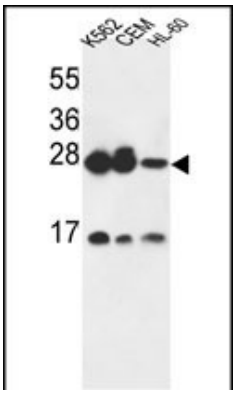
References

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)

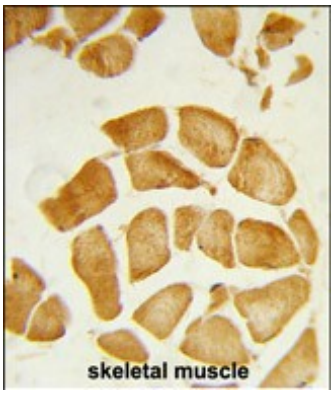
Images

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.