ANP32A Antibody (Center)<br>Affinity Purified Rabbit Polyclonall Antibody (Pab)<br>Catalog \# AP13728c

## Specification

## ANP32A Antibody (Center) - Product Information

Application
Primary Accession
Other Accession
Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

WB, IHC-P,E
P39687
Q6PAF6, P51122, NP 006296.1
Human
Bovine, Xenopus
Rabbit
Polyclonal
Rabbit IgG
28585
133-162

## ANP32A Antibody (Center) - 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 133-162 amino acids from the Central region of human ANP32A.

## Dilution

WB~~1:2000
IHC-P~~1:10~50

## 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 $2-8^{\circ} \mathrm{C}$ for up to 2 weeks. For long term storage store at $-20^{\circ} \mathrm{C}$ in small aliquots to prevent freeze-thaw cycles.

## Precautions

ANP32A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## ANP32A Antibody (Center) - 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:16341127, PubMed:11360199, PubMed:18439902, PubMed:10400610). 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

## ANP32A Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ANP32A Antibody (Center) - Images


All Ianes : Anti-ANP32A Antibody (Center) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Raji whole cell lysate Lane 4: Daudi whole cell lysate Lysates/proteins at $20 \mu \mathrm{~g}$ 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 (Center) (Cat. \#AP13728c)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ANP32A Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

## ANP32A Antibody (Center) - 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. Plays a role in E4F1-mediated transcriptional repression.

## ANP32A Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Habrukowich, C., et al. J. Biol. Chem. 285(35):26825-26831(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)

Valdes, A.M., et al. Arthritis Rheum. 60(7):2046-2054(2009)
Matilla, A., et al. Cerebellum 4(1):7-18(2005)

