

PHAP1 / ANP32A Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS12675

Specification

PHAP1 / ANP32A Antibody (C-Terminus) - Product Information

Application IF, IHC Primary Accession P39687

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 29kDa KDa

PHAP1 / ANP32A Antibody (C-Terminus) - 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

PHAP antibody can be used for detection of PHAP I and PHAP III.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

PHAP1 / ANP32A Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PHAP1 / ANP32A Antibody (C-Terminus) - 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- acetyltransferase 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

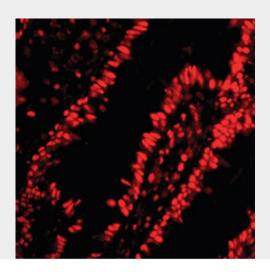
Expressed in all tissues tested. Highly expressed in kidney and skeletal muscle, moderate levels of expression in brain, placenta and pancreas, and weakly expressed in lung. Found in all regions of the brain examined (amygdala, caudate nucleus, corpus callosum, hippocampus and thalamus), with highest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

PHAP1 / ANP32A Antibody (C-Terminus) - Protocols

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

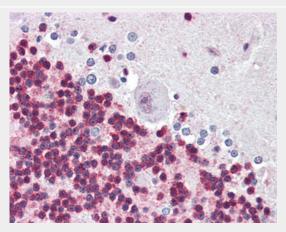
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PHAP1 / ANP32A Antibody (C-Terminus) - Images

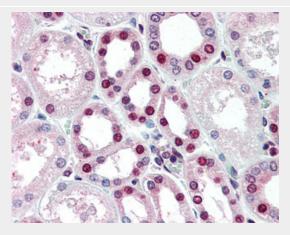




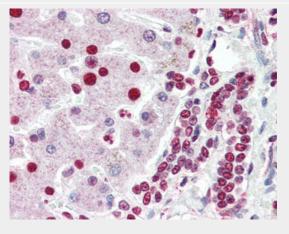
Immunofluorescence of PHAP in human small intestine tissue with PHAP antibody at 20 ug/ml.



Anti-ANP32A antibody IHC of human brain, cerebellum.



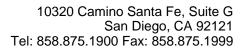
Anti-ANP32A antibody IHC of human kidney.



Anti-ANP32A antibody IHC of human liver.

PHAP1 / ANP32A Antibody (C-Terminus) - 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.





PHAP1 / ANP32A Antibody (C-Terminus) - References

Vaesen M.,et al.Biol. Chem. Hoppe-Seyler 375:113-126(1994). Li M.,et al.Biochemistry 35:6998-7002(1996). Chen T.-H.,et al.Mol. Biol. Cell 7:2045-2056(1996). Matilla A.,et al.Nature 389:974-978(1997). Ota T.,et al.Nat. Genet. 36:40-45(2004).