

PHAP1 / ANP32A Antibody (clone 2G11-4A5)

Mouse Monoclonal Antibody Catalog # ALS14414

Specification

PHAP1 / ANP32A Antibody (clone 2G11-4A5) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IF, IHC <u>P39687</u> Human Mouse Monoclonal 29kDa KDa

PHAP1 / ANP32A Antibody (clone 2G11-4A5) - 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 Human PHAP1

Reconstitution & Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions PHAP1 / ANP32A Antibody (clone 2G11-4A5) is for research use only and not for use in diagnostic or therapeutic procedures.

PHAP1 / ANP32A Antibody (clone 2G11-4A5) - 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:11360199, PubMed:10400610, PubMed:10400610, PubMed:10400610). Promotes apoptosis by favouring the activation of caspase-9/CASP9 and allowing apoptosome formation (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:<a href="http://www.uniprot.org/citations/11830591"

target="_blank">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

Volume 50 μl

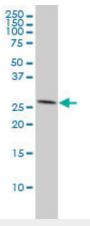
PHAP1 / ANP32A Antibody (clone 2G11-4A5) - Protocols

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

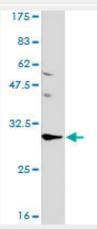
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PHAP1 / ANP32A Antibody (clone 2G11-4A5) - Images

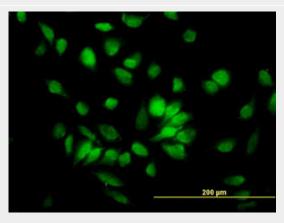




ALS14414 Western blot of ANP32A expression in HeLa.

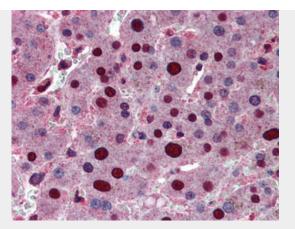


ALS14414 Western blot of ANP32A expression in Daudi.

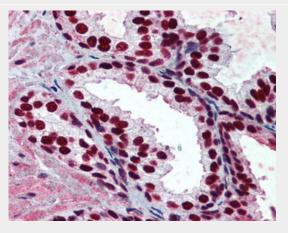


Immunofluorescence of monoclonal antibody to ANP32A on HeLa cell. [antibody concentration 10 ug/ml]





Anti-ANP32A antibody IHC of human liver.



Anti-ANP32A antibody IHC of human prostate.

PHAP1 / ANP32A Antibody (clone 2G11-4A5) - 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 (clone 2G11-4A5) - 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).