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PHAP III Antibody

Catalog # ASC10196

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9BTT0
Other Accession	NP_112182, 13569879
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	30692
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PHAP III antibody can be used for detection of PHAP III by Western blot at 1 □g/mL. A band at approximately 35 kDa can be detected. Antibody can also be used for immunohistochemistry starting at 2 □g/mL. For immunofluorescence start at 10 □g/mL.

Additional Information

Gene ID	81611
Other Names	PHAP III Antibody: LANPL, LANP-L, Acidic leucine-rich nuclear phosphoprotein 32 family member E, LANP-like protein, acidic (leucine-rich) nuclear phosphoprotein 32 family, member E
Target/Specificity	ANP32E; PHAP III has no cross-reaction to PHAP I and PHAP I2a.
Reconstitution & Storage	PHAP III antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PHAP III Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANP32E
Function	Histone chaperone that specifically mediates the genome-wide removal of histone H2A.Z/H2AZ1 from the nucleosome: removes H2A.Z/H2AZ1 from its normal sites of deposition, especially from enhancer and insulator regions. Not involved in deposition of H2A.Z/H2AZ1 in the nucleosome. May stabilize the evicted H2A.Z/H2AZ1-H2B dimer, thus shifting the equilibrium towards dissociation and the off-chromatin state (PubMed:24463511). Inhibits activity of protein phosphatase 2A (PP2A). Does not inhibit protein phosphatase 1.

	May play a role in cerebellar development and synaptogenesis.
Cellular Location	Cytoplasm. Nucleus.
Tissue Location	Expressed in peripheral blood leukocytes, colon, small intestine, prostate, thymus, spleen, skeletal muscle, liver and kidney.

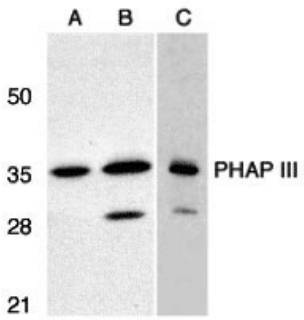
Background

PHAP III Antibody: Apoptosis is related to many diseases and development. Caspase-9 plays a central role in cell death induced by a variety of apoptosis activators. Cytochrome c, after released from mitochondria, binds to Apaf-1, which forms an apoptosome that in turn binds to and activate procaspase-9. Activated caspase-9 cleaves and activates the effector caspases (caspase-3, -6 and -7), which are responsible for the proteolytic cleavage of many key proteins in apoptosis. The tumor suppressor putative HLA-DR-associated proteins (PHAPs) were recently identified as important regulators of mitochondrion apoptosis. PHAP appears to facilitate apoptosome-medicated caspase-9 activation and to stimulate the mitochondrial apoptotic pathway. PHAP was also shown to oppose both Ras- and Myc-medicated cell transformation.

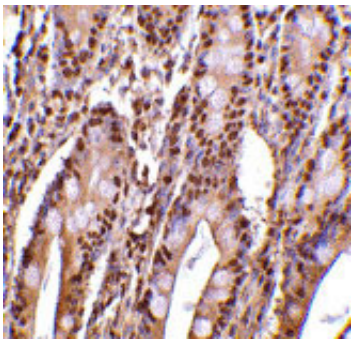
References

Jiang X, Kim HE, Shu H, Zhao Y, Zhang H, Kofron J, Donnelly J, Burns D, Ng SC , Rosenberg S, Wang X. Distinctive roles of PHAP proteins and prothymosin-α in a death regulatory pathway. Science. 2003;299(5604):223-6.
Nicholson DW, Thornberry NA. Apoptosis. Life and death decisions. Science. 2003 10;299(5604):214-5.

Images

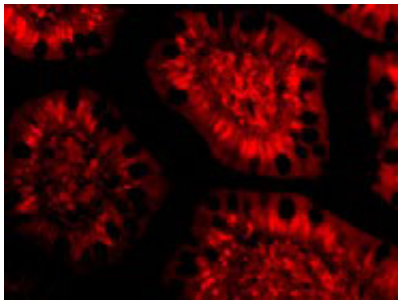


Western blot analysis of PHAP III expression in human A549 (A) and HepG2 (B) cells, and rat testis (C) with PHAP antibody III at 1 µg/mL.



Immunohistochemistry of PHAP III in human small intestine tissue with PHAP III antibody at 2 µg/mL.

Immunofluorescence of PHAP III in Human Small Intestine cells with PHAP III antibody at 10 µg/mL.



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