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FNIP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10654B

Specification

FNIP2 Antibody (C-term) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	Q9P278
Other Accession	NP_065891.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**122115**
Antigen Region	**776-804**

FNIP2 Antibody (C-term) - Additional Information

Gene ID 57600

Other Names
Folliculin-interacting protein 2, FNIP1-like protein, O6-methylguanine-induced apoptosis 1 protein, FNIP2, FNIPL, KIAA1450, MAPO1

Target/Specificity
This FNIP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 776-804 amino acids from the C-terminal region of human FNIP2.

Dilution
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
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
FNIP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FNIP2 Antibody (C-term) - Protein Information

Name FNIP2 {ECO:0000303|PubMed:18663353, ECO:0000312|HGNC:HGNC:29280}

Function Binding partner of the GTPase-activating protein FLCN: involved in the cellular response to amino acid availability by regulating the non-canonical mTORC1 signaling cascade controlling the MiT/TFE factors TFEB and TFE3 (PubMed:18663353, PubMed:31672913, PubMed:36103527). Required to promote FLCN recruitment to lysosomes and interaction with Rag GTPases, leading to activation of the non- canonical mTORC1 signaling (By similarity). In low-amino acid conditions, component of the lysosomal folliculin complex (LFC) on the membrane of lysosomes, which inhibits the GTPase-activating activity of FLCN, thereby inactivating mTORC1 and promoting nuclear translocation of TFEB and TFE3 (PubMed:31672913, PubMed:36103527). Upon amino acid restimulation, disassembly of the LFC complex liberates the GTPase- activating activity of FLCN, leading to activation of mTORC1 and subsequent inactivation of TFEB and TFE3 (PubMed:31672913). Together with FLCN, regulates autophagy: following phosphorylation by ULK1, interacts with GABARAP and promotes autophagy (PubMed:25126726). In addition to its role in mTORC1 signaling, also acts as a co-chaperone of HSP90AA1/Hsp90: inhibits the ATPase activity of HSP90AA1/Hsp90, leading to activate both kinase and non-kinase client proteins of HSP90AA1/Hsp90 (PubMed:18403135). Acts as a scaffold to load client protein FLCN onto HSP90AA1/Hsp90 (PubMed:18403135). Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (PubMed:18403135). May play a role in the signal transduction pathway of apoptosis induced by O6-methylguanine-mispaired lesions (By similarity).

Cellular Location
Lysosome membrane. Cytoplasm. Note=Colocalizes with FLCN in the cytoplasm.

Tissue Location
Widely expressed with highest levels in muscle, nasal mucosa, salivary gland, uvula, fat, liver, heart, placenta and pancreas (PubMed:18403135, PubMed:18663353, PubMed:27353360) Moderately expressed in the lung, small intestine, kidney and brain Lower levels detected in renal cell carcinoma than in normal kidney tissue (PubMed:18403135). Higher levels detected in oncocytoma tumors than in normal kidney. Higher levels detected in renal cell carcinoma tumors than in normal kidney tissue (PubMed:27353360)

FNIP2 Antibody (C-term) - 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

FNIP2 Antibody (C-term) - Images

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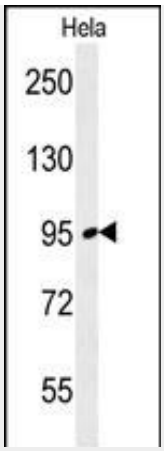
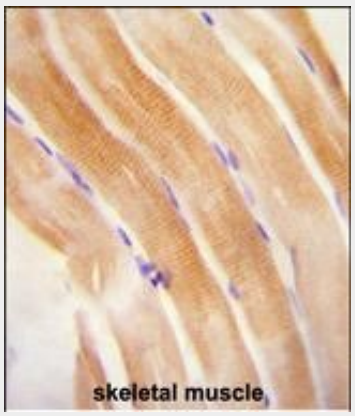
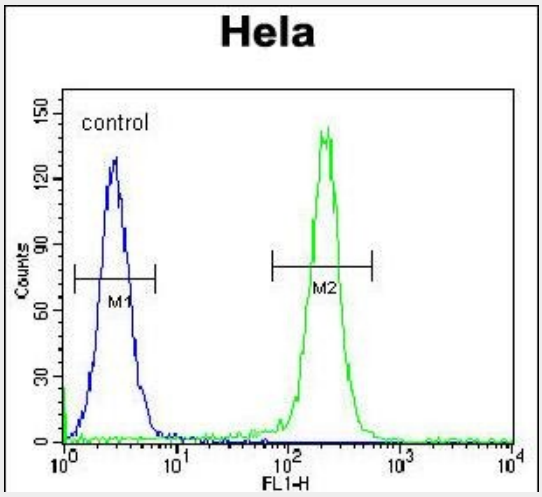


FNIP2 Antibody (C-term) (Cat. #AP10654b) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the FNIP2 antibody detected the FNIP2 protein (arrow).



FNIP2 antibody (C-term) (Cat. #AP10654b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FNIP2 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



FNIP2 Antibody (C-term) (Cat. #AP10654b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

FNIP2 Antibody (C-term) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Hasumi, H., et al. Gene 415 (1-2), 60-67 (2008) :