



FNIP1 mouse mAb

Catalog No	YP-mAb-19414
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	FNIP1 KIAA1961
Immunogen	Synthesized peptide derived from human FNIP1. AA range:188-258
Specificity	This antibody detects endogenous levels of FNIP1 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FNIP1 KIAA1961;Folliculin-interacting protein 1
Observed Band	
Calculated Molecular Weight	128kD
Cell Pathway	Lysosome membrane . Cytoplasm , cytosol . Localizes to lysosome membrane in amino acid-depleted conditions and relocalizes to the cytosol upon refeeding (PubMed:29848618) . Colocalizes with FLCN in the cytoplasm (PubMed:18663353) . .
Tissue Specificity	Strong expression is found in the heart , liver placenta , muscle , nasal mucosa , salivary gland and uvula and moderate expression in kidney and lung. Higher levels detected in clear cell renal cell carcinoma (RCC) and chromophobe RCC than in normal kidney tissue.
Function	Binding partner of the GTPase-activating protein FLCN: involved in the cellular response to amino acid availability by regulating the mTORC1 signaling cascade controlling the MiT/TFE factors TFEB and TFE3 . 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 (By similarity) . Upon amino acid restimulation , disassembly of the LFC complex



liberates the GTPase-activating activity of FLCN , leading to activation of mTORC1 and subsequent cytoplasmic retention of TFEB and TFE3 (By similarity) . Required to promote FLCN recruitment to lysosomes and interaction with Rag GTPases . Together with FLCN , regulates autophagy: following phosphorylation by ULK1 , interacts with GABARAP and promotes autophagy . In addition to its role in mTORC1 signaling , also acts as a co-chaperone of HSP90AA1/Hsp90: following gradual phosphorylation by CK2 , inhibits the ATPase activity of HSP90AA1/Hsp90 , leading to activate both kinase and non-kinase client proteins of HSP90AA1/Hsp90 . Acts as a scaffold to load client protein FLCN onto HSP90AA1/Hsp90 . Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1 , thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins . Also acts as a core component of the reductive stress response by inhibiting activation of mitochondria in normal conditions: in response to reductive stress , the conserved Cys degron is reduced , leading to recognition and polyubiquitylation by the CRL2 (FEM1B) complex , followed by proteasomal (By similarity) . Required for B-cell development (By similarity) .

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images