

KPTN Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16710c

Product Information

Application	WB, E
Primary Accession	Q9Y664
Other Accession	NP_008990.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36120
Calculated MW	48080
Antigen Region	245-273

Additional Information

Gene ID	11133
Other Names	Kaptin, Actin-associated protein 2E4, KPTN
Target/Specificity	This KPTN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 245-273 amino acids from the Central region of human KPTN.
Dilution	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	KPTN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KPTN (HGNC:6404)
Function	As part of the KICSTOR complex functions in the amino acid- sensing branch of the TORC1 signaling pathway. Recruits, in an amino acid-independent manner, the GATOR1 complex to the lysosomal membranes and allows its interaction with GATOR2 and the RAG GTPases. Functions upstream of the

RAG GTPases and is required to negatively regulate mTORC1 signaling in absence of amino acids. In absence of the KICSTOR complex mTORC1 is constitutively localized to the lysosome and activated. The KICSTOR complex is also probably involved in the regulation of mTORC1 by glucose.

Cellular Location

Lysosome membrane. Cell projection, lamellipodium. Cell projection, stereocilium {ECO:0000250|UniProtKB:A0A1D5PJB7}. Note=Localization to lysosomes is amino acid-independent (PubMed:28199306). Colocalizes with F-actin (PubMed:24239382).

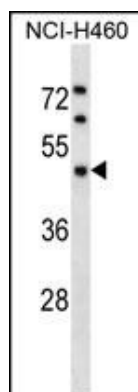
Background

KPTN may be involved in actin dynamics. May play a role in producing the sensory apparatus in hair cells. May play a role in actin rearrangements that accompany platelet activation and stereocilia formation.

References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Bearer, E.L., et al. Ann. Hum. Genet. 64 (PT 3), 189-196 (2000) :
Bearer, E.L., et al. Eur. J. Cell Biol. 78(2):117-126(1999)
Bearer, E.L. J. Neurosci. 12(3):750-761(1992)

Images



KPTN Antibody (Center) (Cat. #AP16710c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the KPTN antibody detected the KPTN protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.