

**KPTN Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP16710c****Specification**

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**KPTN Antibody (Center) - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | WB,E                        |
| Primary Accession | <a href="#">O9Y664</a>      |
| Other Accession   | <a href="#">NP_008990.2</a> |
| Reactivity        | Human                       |
| Host              | Rabbit                      |
| Clonality         | Polyclonal                  |
| Isotype           | Rabbit IgG                  |
| Calculated MW     | 48080                       |
| Antigen Region    | 245-273                     |

**KPTN Antibody (Center) - 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

**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.

**KPTN Antibody (Center) - 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

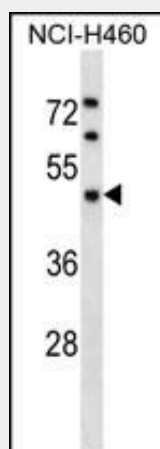
Lysosome membrane. Cell projection, lamellipodium. Cell projection, stereocilium {ECO:0000250|UniProtKB:A0A1D5PJ87}. Note=Localization to lysosomes is amino acid-independent (PubMed:28199306). Colocalizes with F-actin (PubMed:24239382).

### KPTN Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### KPTN Antibody (Center) - 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).

### KPTN Antibody (Center) - 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.

### KPTN Antibody (Center) - 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)