

KPTN Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP16710c

Specification

KPTN Antibody (Center) Blocking Peptide - Product Information

Primary Accession

09Y664

KPTN Antibody (Center) Blocking Peptide - Additional Information

Gene ID 11133

Other Names

Kaptin, Actin-associated protein 2E4, KPTN

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KPTN Antibody (Center) Blocking Peptide - 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).

KPTN Antibody (Center) Blocking Peptide - Protocols

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



• Blocking Peptides

KPTN Antibody (Center) Blocking Peptide - Images

KPTN Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)