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Product Information

Anti-KTN1
produced in rabbit, affinity isolated antibody

Product Number **K1769**

Product Description

Anti-KTN1 is produced in rabbit using as immunogen a synthetic peptide corresponding to a fragment of human KTN1 (GeneID: 3895), conjugated to KLH. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-KTN1 recognizes human KTN1. The antibody may be used in various immunochemical techniques including immunoblotting (~150 kDa), immunoprecipitation, and immunofluorescence. Detection of the KTN1 band by immunoblotting is specifically inhibited by the immunizing peptide.

Kinectin (KTN1) is a large integral membrane protein found in the endoplasmic reticulum (ER) that binds to kinesin and is involved in vesicle transport on microtubules. Various cellular organelles and vesicles are transported along the microtubules in the cytoplasm. Likewise, membrane recycling of the ER, Golgi assembly at the microtubule organizing center, and alignment of lysosomes along microtubules, are all related processes. Transport of organelles requires a special class of microtubule-associated proteins (MAPs). One of these is the molecular motor kinesin, an ATPase that moves vesicles unidirectionally toward the plus end of the microtubule. Another such MAP is kinectin, a kinesin-binding protein required for kinesin-driven motility. An antibody directed against kinectin have been shown to inhibit its binding to kinesin and to block plus-end directed vesicle motility. Several kinectin isoforms have been identified.[1-4]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1-2 μg/mL is recommended using a whole extract of human HeLa cells.

Immunoprecipitation: a working antibody amount of 2-5 μg is recommended using a lysate of Raji cells.

Immunofluorescence: an antibody working concentration of 2-5 μg/mL is recommended using human HeLa cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Yu, H. et al., *Mol. Biol. Cell*, **6**, 171-183 (1995).
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3. Santama, N. et al., *J. Cell Sci.*, **117**, 4537-4549 (2004).
4. Vedrenne, C., and Hauri, H.P., *Traffic*, **7**, 639-646 (2006).

VS,ST,KAA,PHC,MAM 03/19-1