

KATNA1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP18785a**Specification**

KATNA1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O75449](#)**KATNA1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 11104**Other Names**

Katanin p60 ATPase-containing subunit A1 {ECO:0000255|HAMAP-Rule:MF_03023}, Katanin p60 subunit A1 {ECO:0000255|HAMAP-Rule:MF_03023}, 3643 {ECO:0000255|HAMAP-Rule:MF_03023}, p60 katanin {ECO:0000255|HAMAP-Rule:MF_03023}, KATNA1 {ECO:0000255|HAMAP-Rule:MF_03023}

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.

KATNA1 Antibody (N-term) Blocking Peptide - Protein Information**Name** KATNA1 {ECO:0000255|HAMAP-Rule:MF_03023}**Function**

Catalytic subunit of a complex which severs microtubules in an ATP-dependent manner. Microtubule severing may promote rapid reorganization of cellular microtubule arrays and the release of microtubules from the centrosome following nucleation. Microtubule release from the mitotic spindle poles may allow depolymerization of the microtubule end proximal to the spindle pole, leading to poleward microtubule flux and poleward motion of chromosome. Microtubule release within the cell body of neurons may be required for their transport into neuronal processes by microtubule-dependent motor proteins. This transport is required for axonal growth.

Cellular Location

Cytoplasm. Midbody. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000255|HAMAP-Rule:MF_03023} Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, spindle. Note=Predominantly cytoplasmic (PubMed:9658175). Localized diffusely in the cytoplasm during the interphase (PubMed:10751153). During metaphase is localized throughout the cell and more widely dispersed than the microtubules. In anaphase and telophase is localized at the midbody region (PubMed:19261606). Also localized to the interphase

centrosome and the mitotic spindle poles (By similarity). Enhanced recruitment to the mitotic spindle poles requires microtubules and interaction with KATNB1 (PubMed:10751153). Localizes within the cytoplasm, partially overlapping with microtubules, in interphase and to the mitotic spindle and spindle poles during mitosis (PubMed:26929214). {ECO:0000255|HAMAP-Rule:MF_03023, ECO:0000269|PubMed:10751153, ECO:0000269|PubMed:19261606, ECO:0000269|PubMed:26929214, ECO:0000269|PubMed:9658175}

KATNA1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KATNA1 Antibody (N-term) Blocking Peptide - Images

KATNA1 Antibody (N-term) Blocking Peptide - Background

Microtubules, polymers of alpha and beta tubulin subunits, form the mitotic spindle of a dividing cell and help to organize membranous organelles during interphase. Katanin is a heterodimer that consists of a 60 kDa ATPase (p60 subunit A 1) and an 80 kDa accessory protein (p80 subunit B 1). The p60 subunit acts to sever and disassemble microtubules, while the p80 subunit targets the enzyme to the centrosome. This gene encodes the p80 subunit. This protein is a member of the AAA family of ATPases. [provided by RefSeq].

KATNA1 Antibody (N-term) Blocking Peptide - References

Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press :Iwaya, N., et al. J. Biol. Chem. 285(22):16822-16829(2010)Sudo, H., et al. Hum. Mol. Genet. 17(16):2524-2540(2008)Mungall, A.J., et al. Nature 425(6960):805-811(2003)Buster, D., et al. J. Cell. Sci. 115 (PT 5), 1083-1092 (2002) :