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KATNA1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP18785a

Specification

KATNA1 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	O75449
Other Accession	Q4R407, NP_008975.1
Reactivity	**Human**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**55965**
Antigen Region	**59-85**

KATNA1 Antibody (N-term) - 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}

Target/Specificity
This KATNA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-85 amino acids from the N-terminal region of human KATNA1.

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
KATNA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KATNA1 Antibody (N-term) - 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.

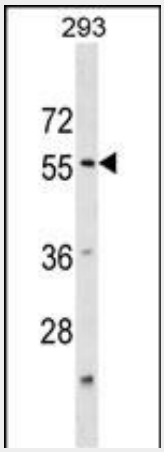
Cellular Location
Cytoplasm. Midbody. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000255|HAMAP-Rule:MF_03023} Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, spindle. Note=Predominantly cytoplasmic (PubMed:9658175). Localized diffusely in the cytoplasm during 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) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KATNA1 Antibody (N-term) - Images



KATNA1 Antibody (N-term)(Cat. #AP18785a) western blot analysis in 293 cell line lysates

(35ug/lane).This demonstrates the KATNA1 antibody detected the KATNA1 protein (arrow).

KATNA1 Antibody (N-term) - 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) - 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) :