

Katna1 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al13395

Specification

Katna1 antibody - C-terminal region - Product Information

Application WB

Primary Accession 09WV86

NM 011835, NP 035965 Other Accession

Reactivity Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Guinea Pig, Dog

Predicted Human, Mouse, Rabbit, Pig, Horse, Bovine,

Dog

Host **Rabbit Polyclonal** Clonality Calculated MW 54kDa KDa

Katna1 antibody - C-terminal region - Additional Information

Other Names

Katanin p60 ATPase-containing subunit A1 {ECO:0000255|HAMAP-Rule:MF_03023}, Katanin p60 subunit A1 {ECO:0000255|HAMAP-Rule:MF 03023}, 3.6.4.3 {ECO:0000255|HAMAP-Rule:MF 03023}, Lipotransin, p60 katanin {ECO:0000255|HAMAP-Rule:MF 03023}, Katna1

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-Katna1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Katna1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Katna1 antibody - C-terminal region - Protein Information

Name Katna1

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. The function in regulating microtubule dynamics at spindle poles seems to depend on the association of the katanin KATNA1:KATNB1 complex with ASPM which recruits it to microtubules. Reversely



KATNA1:KATNB1 can enhance ASPM blocking activity on microtubule minus-end growth. 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

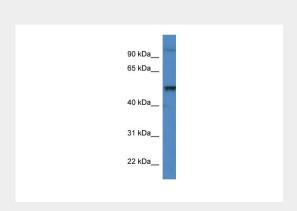
Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03023}. Midbody {ECO:0000255|HAMAP-Rule:MF_03023}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000255|HAMAP-Rule:MF_03023}. Cytoplasm, cytoskeleton, spindle pole {ECO:0000255|HAMAP-Rule:MF_03023}. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:O75449}. Note=Predominantly cytoplasmic Localized diffusely in the cytoplasm during the interphase. During metaphase is localized throughout the cell and more widely dispersed than the microtubules. In anaphase and telophase is localized at the midbody region. Also localized to the interphase centrosome and the mitotic spindle poles. Enhanced recruitment to the mitotic spindle poles requires microtubules and interaction with KATNB1 (By similarity). Localizes within the cytoplasm, partially overlapping with microtubules, in interphase and to the mitotic spindle and spindle poles during mitosis (By similarity). {ECO:0000250|UniProtKB:O75449, ECO:0000255|HAMAP-Rule:MF_03023}

Katna1 antibody - C-terminal region - 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 - C-terminal region - Images



WB Suggested Anti-Katna1 Antibody Titration: 1.0 µg/ml

Positive Control: Mouse Spleen

Katna1 antibody - C-terminal region - References

Syu L.-J., et al. Mol. Cell 4:109-115(1999). Karabay A., et al. J. Neurosci. 24:5778-5788(2004).