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Katna1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI13395

Product Information

Application	WB
Primary Accession	Q9WV86
Other Accession	NM_011835, NP_035965
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55949

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
Format	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.

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.

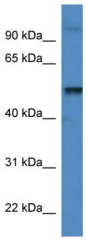
Cellular Location

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}

References

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

Images



WB Suggested Anti-Katna1 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Spleen

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.