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KD-Validated Anti-Katanin catalytic subunit A1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1481

Product Information

Application	WB, FC
Primary Accession	O75449
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB4765
Calculated MW	55965
Gene Name	KATNA1
Aliases	KATNA1; Katanin Catalytic Subunit A1; Katanin P60 (ATPase Containing) Subunit A 1; Katanin P60 ATPase-Containing Subunit A1; Katanin P60 Subunit A1; P60 Katanin; Katanin P60 (ATPase-Containing) Subunit A 1; EC 5.6.1.1; EC 3.6.4.3
Immunogen	A synthesized peptide derived from human p60 katanin

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}, 5.6.1.1 {ECO:0000255|HAMAP-Rule:MF_03023}, p60 katanin {ECO:0000255|HAMAP-Rule:MF_03023}, KATNA1 {ECO:0000255|HAMAP-Rule:MF_03023}

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}

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