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KATNAL2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56549

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8IYT4
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61253
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KATNAL2
Epitope Specificity	401-500/538
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm; cytoskeleton.
SIMILARITY	Belongs to the AAA ATPase family. Katanin p60 subunit A1 subfamily. A-like 2 sub-subfamily. Contains 1 LisH domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Microtubules are polymers of alpha and beta subunits that form the mitotic spindle and assist in the organization of membranous organelles during interphase. Katanin is a heterodimer complex that severs microtubules in an ATP-dependent manner. The severing of microtubules by the Katanin complex may promote reorganization of cellular microtubule arrays and release of microtubules from the centrosome following nucleation. The Katanin complex is composed of a 60 kDa subunit (Katanin p60 A1) and a 80 kDa accessory protein (Katanin p80 B1). Katanin p60 A1 is responsible for the severing and disassembly of microtubules, while Katanin p80 B1 targets the complex to the centrosome. Katanin p60 A1 and Katanin p80 B1 belong to the AAA ATPase family, which also includes the Katanin p60 A1-like proteins, Katanin p60 AL1 and Katanin p60 AL2.

Additional Information

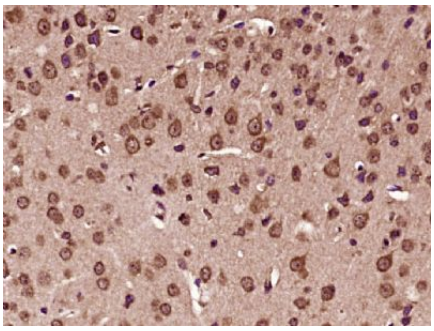
Gene ID	83473
Other Names	Katanin p60 ATPase-containing subunit A-like 2 {ECO:0000255|HAMAP-Rule:MF_03025}, Katanin p60 subunit A-like 2 {ECO:0000255|HAMAP-Rule:MF_03025}, 5.6.1.1 {ECO:0000255|HAMAP-Rule:MF_03025}, p60 katanin-like 2 {ECO:0000255|HAMAP-Rule:MF_03025}, KATNAL2 {ECO:0000255|HAMAP-Rule:MF_03025}

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	KATNAL2 {ECO:0000255|HAMAP-Rule:MF_03025}
Function	Severs microtubules in vitro in an ATP-dependent manner. This activity may promote rapid reorganization of cellular microtubule arrays.
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000255|HAMAP- Rule:MF_03025}. Cytoplasm. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole Note=Localizes within the cytoplasm, partially overlapping with microtubules in interphase and to the mitotic spindle and spindle poles during mitosis.

Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KATNAL2) Polyclonal Antibody, Unconjugated (AP56549) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.