

Anti-CLASP2 Antibody (N-Terminus, clone KT69)

Rat Anti Mouse Monoclonal Antibody

Catalog # ALS17330

Product Information

Application	WB, IHC-P, IF
Primary Accession	O75122
Predicted	Human, Mouse
Host	Rat
Clonality	Monoclonal
Isotype	IgG2b
Clone Names	KT69
Calculated MW	141064
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	23122
Alias Symbol	CLASP2
Other Names	CLASP2, CLIP-associating protein 2, Protein Orbit homolog 2, HOrbit2, KIAA0627
Target/Specificity	Mouse CLASP2
Reconstitution & Storage	PBS, 0.1% sodium azide. Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.
Precautions	Anti-CLASP2 Antibody (N-Terminus, clone KT69) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CLASP2
Synonyms	KIAA0627
Function	Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules (PubMed: 26003921). Involved in the nucleation of noncentrosomal microtubules originating from the trans-Golgi network (TGN). Required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards the leading edge of the cell. May act at the cell cortex to enhance the frequency of rescue of depolymerizing microtubules by attaching their plus-ends to cortical platforms composed of ERC1 and PHLDB2 (PubMed: 16824950). This cortical microtubule stabilizing activity is regulated at least in part by phosphatidylinositol 3-kinase signaling. Also performs a

similar stabilizing function at the kinetochore which is essential for the bipolar alignment of chromosomes on the mitotic spindle (PubMed:[16866869](#), PubMed:[16914514](#)). Acts as a mediator of ERBB2- dependent stabilization of microtubules at the cell cortex.

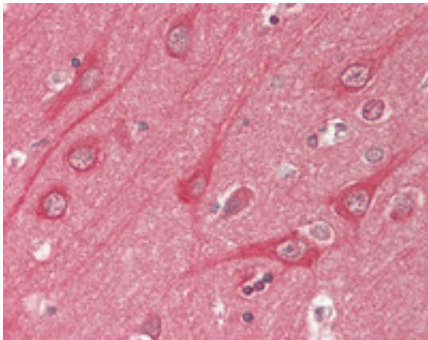
Cellular Location

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Golgi apparatus {ECO:0000250|UniProtKB:Q8BRT1}. Golgi apparatus, trans-Golgi network. Cell membrane. Cell projection, ruffle membrane. Cytoplasm, cell cortex. Note=Localizes to microtubule plus ends (PubMed:15631994). Localizes to centrosomes, kinetochores and the mitotic spindle from prometaphase. Subsequently localizes to the spindle midzone from anaphase and to the midbody from telophase (PubMed:16866869, PubMed:16914514). In migrating cells localizes to the plus ends of microtubules within the cell body and to the entire microtubule lattice within the lamella. Localizes to the cell cortex and this requires ERC1 and PHLDB2 (PubMed:16824950). Colocalizes with KANK1 at the cell cortex, likely recruited in cortical microtubule stabilization complexes (CMSC) at focal adhesions rims (PubMed:27410476). The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane

Tissue Location

Brain-specific.

Images



Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)

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