

CLASP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7181b

Specification

CLASP2 Antibody (C-term) - Product Information

Application WB, IHC-P,E **Primary Accession** 075122 NP 055912 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 141064 Antigen Region 946-975

CLASP2 Antibody (C-term) - Additional Information

Gene ID 23122

Other Names

CLIP-associating protein 2, Cytoplasmic linker-associated protein 2, Protein Orbit homolog 2, hOrbit2, CLASP2, KIAA0627

Target/Specificity

This CLASP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 946-975 amino acids from the C-terminal region of human CLASP2.

Dilution

WB~~1:1000 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CLASP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLASP2 Antibody (C-term) - 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.

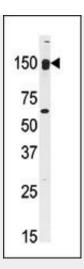
CLASP2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

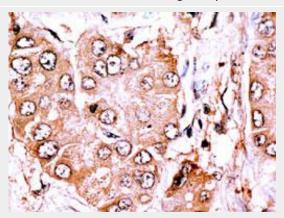
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLASP2 Antibody (C-term) - Images





Western blot analysis of anti-CLASP2 Antibody (C-term) (Cat. #AP7181b) in mouse kidney tissue lysates (35ug/lane). CLASP2(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human Hepatocellular carcinoma reacted with anti-CLASP2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CLASP2 Antibody (C-term) - Background

Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules. 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. 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.

CLASP2 Antibody (C-term) - References

Pereira, A.L., Mol. Biol. Cell 17 (10), 4526-4542 (2006) Mimori-Kiyosue, Y., Genes Cells 11 (8), 845-857 (2006) Lansbergen, G., Dev. Cell 11 (1), 21-32 (2006)