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CLASP2 Antibody (Y1019)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9035a

Specification

CLASP2 Antibody (Y1019) - Product Information

Application	**FC, WB,E**
Primary Accession	O75122
Other Accession	Q99JD4, Q8BRT1
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**141064**
Antigen Region	**998-1026**

CLASP2 Antibody (Y1019) - 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 998-1026 amino acids from human CLASP2.

Dilution
FC~~1:10~50
WB~~1:1000
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 (Y1019) is for research use only and not for use in diagnostic or therapeutic procedures.

CLASP2 Antibody (Y1019) - 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 (Y1019) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLASP2 Antibody (Y1019) - Images

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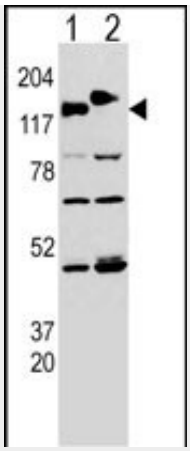
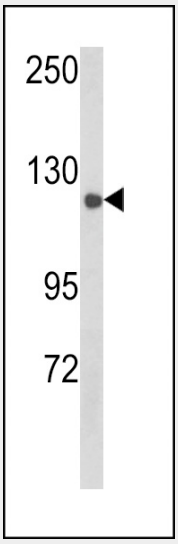
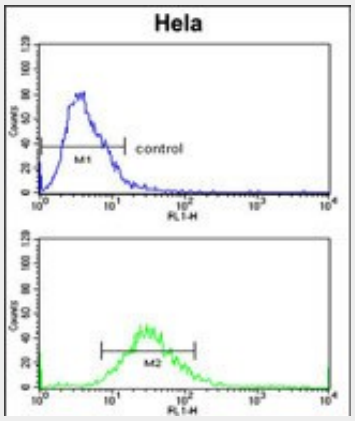


Western blot analysis of CLASP (arrow) using rabbit polyclonal CLASP Antibody (Y1019) (Cat. #AP9035a). 293 cell lysates transfected with the ACADL gene (Lane 1) and with the GFP-CLASP (Lane 2).



Western blot analysis of CLASP2 Antibody (Y1019) (Cat. #AP9035a) in mouse spleen tissue lysates (35ug/lane). CLASP2 (arrow) was detected using the purified Pab.



CLASP2 Antibody (Y1019) (Cat. #AP9035a) flow cytometric analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CLASP2 Antibody (Y1019) - Background

CLASP2 is 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 (Y1019) - References

Inkster,B., et.al., Neuroimage (2010) In press.