

CLASP1 Antibody (aa1171-1220)

Rabbit Polyclonal Antibody Catalog # ALS16649

Specification

CLASP1 Antibody (aa1171-1220) - Product Information

Application IHC, WB
Primary Accession Q7Z460
Other Accession 23332

Reactivity Human, Mouse

Host Rabbit Clonality Polyclonal

Isotype IgG Calculated MW 169451

CLASP1 Antibody (aa1171-1220) - Additional Information

Gene ID 23332

Other Names

CLASP1, CLIP-associating protein 1, HOrbit1, Multiple asters homolog 1, KIAA0622, Multiple asters 1, Protein Orbit homolog 1

Target/Specificity

CLASP1 Antibody detects endogenous levels of total CLASP1 protein.

Reconstitution & Storage

PBS (without Mg2+, Ca2+), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.

Precautions

CLASP1 Antibody (aa1171-1220) is for research use only and not for use in diagnostic or therapeutic procedures.

CLASP1 Antibody (aa1171-1220) - Protein Information

Name CLASP1

Synonyms KIAA0622, MAST1

Function

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

Cellular Location

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore Cytoplasm, cytoskeleton, spindle. Golgi apparatus, trans-Golgi network. Note=Localizes to microtubule plus ends. Localizes to centrosomes, kinetochores and the mitotic spindle from prometaphase Subsequently localizes to the spindle midzone from anaphase and to the midbody from telophase. 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

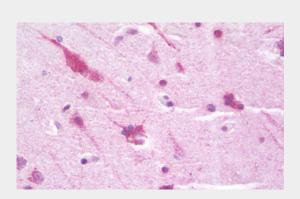
Volume 50 μl

CLASP1 Antibody (aa1171-1220) - Protocols

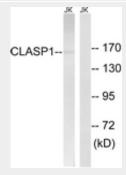
Provided below are standard protocols that you may find useful for product applications.

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

CLASP1 Antibody (aa1171-1220) - Images



Anti-CLASP1 antibody IHC staining of human brain, cortex.



Western blot of extracts from Jurkat cells, using CLASP1 Antibody.



CLASP1 Antibody (aa1171-1220) - Background

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

CLASP1 Antibody (aa1171-1220) - References

Maiato H.,et al.Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases. Hillier L.W.,et al.Nature 434:724-731(2005). Akhmanova A.,et al.Cell 104:923-935(2001). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Ishikawa K.,et al.DNA Res. 5:169-176(1998).