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CLASP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50795

Product Information

Application	WB, IHC
Primary Accession	Q7Z460
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	169451

Additional Information

Gene ID	23332
Other Names	CLIP-associating protein 1, Cytoplasmic linker-associated protein 1, Multiple asters homolog 1, Protein Orbit homolog 1, hOrbit1, CLASP1, KIAA0622, MAST1
Dilution	WB~~ 1:1000 IHC~~1:50~100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

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

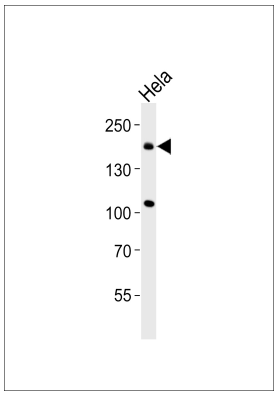
Background

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.

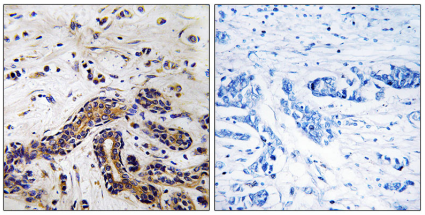
References

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).

Images



Western blot analysis of lysate from Hela cell line,using CLASP1 Antibody(AP50795). AP50795 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.



Immunohistochemistry analysis of paraffin-embedded human testis tissue, using CLASP1 antibody.