10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-CLASP1(T656) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3586a

Product Information

Application	DB, E
Primary Accession	Q7Z460
Reactivity	Human
Predicted	Mouse, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15588
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
Target/Specificity	This CLASP1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T656 of human CLASP1.
Dilution	DB~~1:500 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	Phospho-CLASP1(T656) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

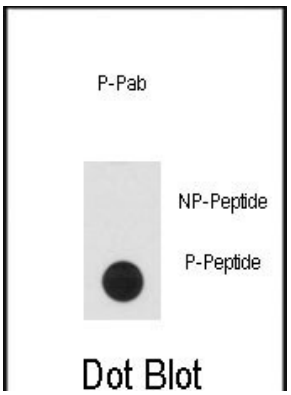
Background

CLASPs, such as CLASP1, are nonmotor microtubule-associated proteins that interact with CLIPs (e.g., CLIP170; MIM 179838). CLASP1 is involved in the regulation of microtubule dynamics at the kinetochore and throughout the spindle .

References

Tsvetkov,A.S., Cell Motil. Cytoskeleton 64 (7), 519-530 (2007)
Pereira,A.L., Mol. Biol. Cell 17 (10), 4526-4542 (2006)
Mimori-Kiyosue,Y., Genes Cells 11 (8), 845-857 (2006)

Images



Dot blot analysis of anti-Phospho-CLASP1-pT656 Antibody (Cat.#AP3586a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Citations

- Comparative phosphoproteomic analysis of checkpoint recovery identifies new regulators of the DNA damage response.

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