

# Phospho-CLASP1(T656) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3586a

## Specification

# Phospho-CLASP1(T656) Antibody - Product Information

Application Primary Accession	<b>DB,E</b> 07Z460
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

## Phospho-CLASP1(T656) Antibody - 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.

# Phospho-CLASP1(T656) Antibody - 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

# Phospho-CLASP1(T656) Antibody - Protocols

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

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

## Phospho-CLASP1(T656) Antibody - 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.

## Phospho-CLASP1(T656) Antibody - 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 .

## Phospho-CLASP1(T656) Antibody - 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) **Phospho-CLASP1(T656) Antibody - Citations** 

• <u>Comparative phosphoproteomic analysis of checkpoint recovery identifies new regulators of the DNA damage response.</u>