

Rabbit Anti-CLASP1 antibody

SL7792R

Product Name:	CLASP1
Chinese Name:	细胞连接相关蛋白1抗体
Alias:	CLAP1_HUMAN; clasp1; CLIP associating protein 1; CLIP associating protein CLASP1; CLIP-associating protein 1; Cytoplasmic linker associated protein 1; Cytoplasmic linker-associated protein 1; hOrbit1; MAST1; Multiple asters 1; Multiple asters homolog 1; Protein Orbit homolog 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	169kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CLASP1:30-130/1538
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

Function:

Microtubule plus-end tracking protein that promotes thestabilization of dynamic microtubules. Involved in the nucleation of noncentrosomal microtubules originating from the trans-Golginetwork (TGN). Required for the polarization of the cytoplasmicmicrotubule arrays in migrating cells towards the leading edge of the cell. May act at the cell cortex to enhance the frequency of the cytoplasmic plus-endsto cortical platforms composed of ERC1 and PHLDB2. This cortical microtubule stabilizing activity is regulated at least in part byphosphatidylinositol 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.

Subunit:

Interacts with CLIP2, ERC1, MAPRE1, MAPRE3, microtubules, PHLDB2 and RSN. The interaction with ERC1 may be mediated by PHLDB2. Interacts with GCC2; recruits CLASP1 to Golgi membranes. Interacts with MACF1 (By similarity).

Subcellular Location:

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, centrosome. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Golgi apparatus, trans-Golginetwork (Probable). Note=Localizes to microtubule plus ends. Localizes to centrosomes, kinetochores and the mitotic spindle fromprometaphase. Subsequently localizes to the spindle midzone fromanaphase and to the midbody from telophase. In migrating cellslocalizes to the plus ends of microtubules within the cell body andto the entire microtubule lattice within the lamella. Localizes to the cell cortex and this requires ERC1 and PHLDB2

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

Similarity:

Belongs to the CLASP family. Contains 7 HEAT repeats.

SWISS:

O7Z460

Gene ID:

23332

Database links:

Entrez Gene: 23332Human

Entrez Gene: 76707Mouse

Entrez Gene: 304740Rat

Omim: 605852Human

SwissProt: Q7Z460Human

SwissProt: Q80TV8Mouse

Unigene: 469840Human

Unigene: 708183Human

Unigene: 138740Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.