



## Rabbit Anti-CLASP2 antibody

SL7793R

<b>Product Name:</b>	CLASP2
<b>Chinese Name:</b>	细胞连接相关蛋白2抗体
<b>Alias:</b>	CLASP 2; CLIP associating protein 2; Cytoplasmic linker associated protein 2; hOrbit2; KIAA0627; Multiple asters (Mast) like homolog 2; Protein Orbit homolog 2; CLAP2 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Horse,
<b>Applications:</b>	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.
<b>Molecular weight:</b>	141kDa
<b>Cellular localization:</b>	The nucleuscytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CLASP2:1201-1294/1294
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	CLASP2 is a microtubule plus end tracking protein that promotes the stabilization of dynamic microtubules and is required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards the leading edge of the cell. CLASP2 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. CLASP2 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 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. Acts as a mediator of ERBB2-dependent stabilization of microtubules at the cell cortex.

**Subunit:**

Interacts with CLIP2, ERC1, MAPRE3, microtubules, PHLDB2 and RSN. The interaction with ERC1 may be mediated by PHLDB2. Interacts with MAPRE1; probably required for targeting to the growing microtubule plus ends. Interacts with GCC2; recruits CLASP2 to Golgi membranes. Interacts with MACF1 (By similarity).

**Subcellular Location:**

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, centrosome. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Golgi apparatus. Golgi apparatus, trans-Golgi network. Cell membrane. Cell projection, ruffle membrane. 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. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane.

**Tissue Specificity:**

Brain-specific.

**Post-translational modifications:**

Phosphorylated by GSK3B. Phosphorylation by GSK3B may negatively regulate binding to microtubule lattices in lamella. Phosphorylated upon DNA damage, probably by ATM or ATR.

**Similarity:**

Belongs to the CLASP family.

Contains 5 HEAT repeats.

**SWISS:**

O75122

**Gene ID:**

23122

**Database links:**

[Entrez Gene: 23122](#)Human

[Omim: 605853](#)Human

[SwissProt: O75122](#)Human

[Unigene: 108614](#)Human

**Important Note:**

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

www.sunlongbiotech.com