abcam

Product datasheet

Anti-CLASP1 antibody [KT67] ab95372

KO VALIDATED

1 Image

Overview

Product name	Anti-CLASP1 antibody [KT67]
Description	Rat monoclonal [KT67] to CLASP1
Host species	Rat
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Fusion protein corresponding to Human CLASP1 (N terminal). Database link: **Q7Z460**
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	KT67
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab95372 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/5000. Predicted molecular weight: 169 kDa.

Target

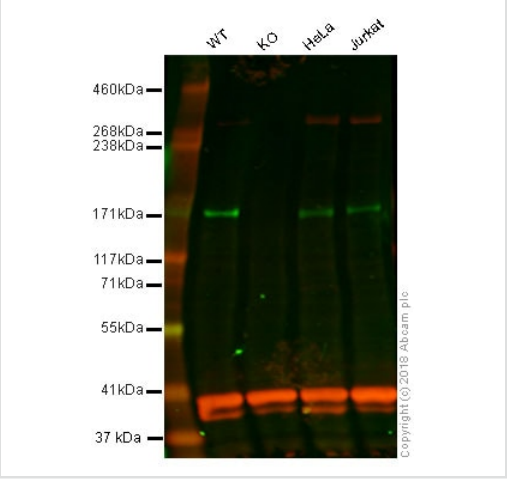
Function Microtubule plus-end tracking protein that promotes the stabilization of dynamic microtubules. Involved in the nucleation of noncentrosomal microtubules originating from the trans-Golgi network (TGN). Required for the polarization of the cytoplasmic microtubule arrays in migrating cells towards 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.

Sequence similarities Belongs to the CLASP family.
Contains 7 HEAT repeats.

Post-translational modifications Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization Cytoplasm > cytoskeleton. Cytoplasm > cytoskeleton > centrosome. Chromosome > centromere > kinetochore. Cytoplasm > cytoskeleton > spindle. Golgi apparatus > trans-Golgi network. 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.

Images



Western blot - Anti-CLASP1 antibody [KT67] (ab95372)

All lanes : Anti-CLASP1 antibody [KT67] (ab95372) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : CLASP1 knockout HAP1 whole cell lysate
Lane 3 : HeLa whole cell lysate
Lane 4 : Jurkat whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 169 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab95372 observed at 169 kDa. Red - loading control, **ab176560**, observed at 50 kDa.

ab95372 was shown to specifically react with CLASP1 in wild-type HAP1 cells as signal was lost in CLASP1 knockout cells. Wild-type and CLASP1 knockout samples were subjected to SDS-PAGE. Ab95372 and **ab176560** (Rabbit anti-alpha Tubulin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rat IgG H&L (IRDye® 800CW) (**ab253031**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

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