

CLASP1 (C-15): sc-33476

BACKGROUND

Members of the CLASP family, including CLASP1, are mammalian microtubule plus-end binding proteins that interact with CLIPs in order to stabilize the microtubule structures in transfected cells. CLASP1 localizes near the distal end of growing spindle microtubules during mitosis and is a component of the outer corona region of kinetochores. CLASP proteins stabilize microtubules by promoting pauses and restricting MT growth. Defects in CLASP1 cause collapse of the spindle, attachment of kinetochores to short microtubules, and other abnormal mitotic behaviors.

REFERENCES

1. Lemos, C.L., et al. 2000. Mast, a conserved microtubule-associated protein required for bipolar mitotic spindle organization. *EMBO J.* 19: 3668-3682.
2. Akhmanova, A., et al. 2001. CLASPs are CLIP-115 and -170 associating proteins involved in the regional regulation of microtubule dynamics in motile fibroblasts. *Cell* 104: 923-935.
3. Maiato, H., et al. 2003. How do kinetochores CLASP dynamic microtubules? *Cell Cycle* 2: 511-514.
4. Maiato, H., et al. 2003. Human CLASP1 is an outer kinetochore component that regulates spindle microtubule dynamics. *Cell* 113: 891-904.
5. Mimori-Kiyosue, Y., et al. 2005. CLASP1 and CLASP2 bind to EB1 and regulate microtubule plus-end dynamics at the cell cortex. *J. Cell Biol.* 168: 141-153.
6. Venables, J.P., et al. 2005. Upregulation of the ubiquitous alternative splicing factor Tra2 β causes inclusion of a germ cell-specific exon. *Hum. Mol. Genet.* 14: 2289-2303.

CHROMOSOMAL LOCATION

Genetic locus: CLASP1 (human) mapping to 2q14.2; Clasp1 (mouse) mapping to 1 E2.3.

SOURCE

CLASP1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CLASP1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33476 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

CLASP1 (C-15) is recommended for detection of CLASP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CLASP1 (C-15) is also recommended for detection of CLASP1 in additional species, including equine, canine, bovine, porcine and avian.

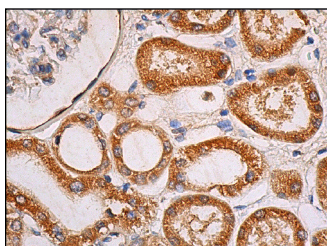
Suitable for use as control antibody for CLASP1 siRNA (h): sc-44348, CLASP1 siRNA (m): sc-44352, CLASP1 shRNA Plasmid (h): sc-44348-SH, CLASP1 shRNA Plasmid (m): sc-44352-SH, CLASP1 shRNA (h) Lentiviral Particles: sc-44348-V and CLASP1 shRNA (m) Lentiviral Particles: sc-44352-V.

Molecular Weight of CLASP1: 150 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CLASP1 (C-15): sc-33476. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **CLASP1 (D-8): sc-390159**, our highly recommended monoclonal alternative to CLASP1 (C-15).