SANTA CRUZ BIOTECHNOLOGY, INC.

CLASP1 (N-20): sc-33474



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.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

CLASP1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CLASP1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLASP1 (N-20) 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), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (N-20) 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.

Positive Controls: CLASP1 (h): 293T Lysate: sc-115296 or NIH/3T3 whole cell lysate: sc-2210.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





CLASP1 (N-20): sc-33474. Western blot analysis of CLASP1 expression in non-transfected: sc-117752 (A) and human CLASP1 transfected: sc-115296 (B) 293T whole cell lysates.

CLASP1 (N-20): sc-33474. Western blot analysis of CLASP1 expression in NIH/3T3 whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **CLASP1 (D-8): sc-390159**, our highly recommended monoclonal alternative to CLASP1 (N-20).