

# CSPP1 (S-14): sc-87662

## BACKGROUND

Centrosomes are dynamic organelles involved in many aspects of cell function and growth. Centrosomes act as microtubule organizing centers, and provide a site for concerted regulation of cell cycle progression. Duplication of centrosomes occurs once during each cell cycle and requires proper mitotic spindle formation and chromosome segregation. Defects in centrosome duplication or function are linked to many human diseases, including various forms of cancer. The centrosome and spindle pole-associated protein 1 (CSPP1) interacts with centrosomes and microtubules and may play a role in the regulation of G<sub>1</sub>/S-phase progression and spindle assembly. Two isoforms of CSPP1 exist as a result of alternative splicing events. Isoform 1 expression increases throughout the cell cycle and peaks in G<sub>2</sub>/M phase, whereas isoform 2 expression is highest in G<sub>1</sub> phase and decreases thereafter.

## REFERENCES

1. Cassimeris, L. and Skibbens, R.V. 2003. Regulated assembly of the mitotic spindle: a perspective from two ends. *Curr. Issues Mol. Biol.* 5: 99-112.
2. Doxsey, S., McCollum, D. and Theurkauf, W. 2005. Centrosomes in cellular regulation. *Annu. Rev. Cell Dev. Biol.* 21: 411-434.
3. Patzke, S., Hauge, H., Sioud, M., Finne, E.F., Sivertsen, E.A., Delabie, J., Stokke, T. and Aasheim, H.C. 2005. Identification of a novel centrosome/microtubule-associated coiled-coil protein involved in cell-cycle progression and spindle organization. *Oncogene* 24: 1159-1173.
4. Patzke, S., Stokke, T. and Aasheim, H.C. 2006. CSPP and CSPP-L associate with centrosomes and microtubules and differently affect microtubule organization. *J. Cell. Physiol.* 209: 199-210.
5. Mattison, C.P. and Winey, M. 2006. The centrosome cycle. *Results Probl. Cell Differ.* 42: 111-146.
6. Hauge, H., Patzke, S. and Aasheim, H.C. 2007. Characterization of the FAM110 gene family. *Genomics* 90: 14-27.

## CHROMOSOMAL LOCATION

Genetic locus: CSPP1 (human) mapping to 8q13.1; Csp1 (mouse) mapping to 1 A2.

## SOURCE

CSPP1 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CSPP1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-87662 P, (100 µg 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.

## APPLICATIONS

CSPP1 (S-14) is recommended for detection of CSPP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

CSPP1 (S-14) is also recommended for detection of CSPP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CSPP1 siRNA (h): sc-77463, CSPP1 siRNA (m): sc-142605, CSPP1 shRNA Plasmid (h): sc-77463-SH, CSPP1 shRNA Plasmid (m): sc-142605-SH, CSPP1 shRNA (h) Lentiviral Particles: sc-77463-V and CSPP1 shRNA (m) Lentiviral Particles: sc-142605-V.

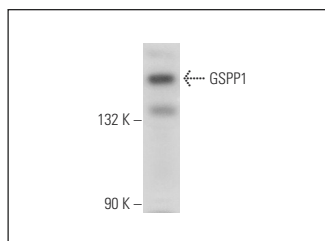
Molecular Weight of CSPP1: 142 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136.

## 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



CSPP1 (S-14): sc-87662. Western blot analysis of CSPP1 expression in HEK293 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.