

# CEP63 (G-16): sc-99844

## BACKGROUND

Centrosomes are the major microtubule-organizing centers of mammalian cells. They are composed of a centriole pair and surrounding microtubule-nucleating material termed pericentriolar material (PCM). Bipolar mitotic spindle assembly relies on two intertwined processes: centriole duplication and centrosome maturation. Failure to properly orchestrate centrosome duplication and maturation is subsequently linked to spindle defects, which can result in aneuploidy and promote cancer progression. Downregulation of the CEP63 gene may contribute to the progression of bladder cancer. The CEP63 (centrosomal protein of 63 kDa) gene encodes a protein of 703 amino acids that is alternatively spliced into 4 isoforms.

## REFERENCES

1. Lange, B.M., Faragher, A.J., March, P. and Gull, K. 2000. Centriole duplication and maturation in animal cells. *Curr. Top. Dev. Biol.* 49: 235-249.
2. Palazzo, R.E., Vogel, J.M., Schnackenberg, B.J., Hull, D.R. and Wu, X. 2000. Centrosome maturation. *Curr. Top. Dev. Biol.* 49: 449-470.
3. Buim, M.E., Soares, F.A., Sarkis, A.S. and Nagai, M.A. 2005. The transcripts of SFRP1, CEP63 and EIF4G2 genes are frequently downregulated in transitional cell carcinomas of the bladder. *Oncology* 69: 445-454.
4. Pelletier, L., O'Toole, E., Schwager, A., Hyman, A.A. and Müller-Reichert, T. 2006. Centriole assembly in *Caenorhabditis elegans*. *Nature* 444: 619-623.
5. Zhu, F., Lawo, S., Bird, A., Pinchev, D., Ralph, A., Richter, C., Müller-Reichert, T., Kittler, R., Hyman, A.A. and Pelletier, L. 2008. The mammalian SPD-2 ortholog CEP192 regulates centrosome biogenesis. *Curr. Biol.* 18: 136-141.

## CHROMOSOMAL LOCATION

Genetic locus: CEP63 (human) mapping to 3q22.2; Cep63 (mouse) mapping to 9 F1.

## SOURCE

CEP63 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CEP63 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-99844 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.

## PROTOCOLS

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

## APPLICATIONS

CEP63 (G-16) is recommended for detection of CEP63 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); non cross-reactive with other CEP family members.

CEP63 (G-16) is also recommended for detection of CEP63 in additional species, including canine and porcine.

Suitable for use as control antibody for CEP63 siRNA (h): sc-78069, CEP63 siRNA (m): sc-142286, CEP63 shRNA Plasmid (h): sc-78069-SH, CEP63 shRNA Plasmid (m): sc-142286-SH, CEP63 shRNA (h) Lentiviral Particles: sc-78069-V and CEP63 shRNA (m) Lentiviral Particles: sc-142286-V.

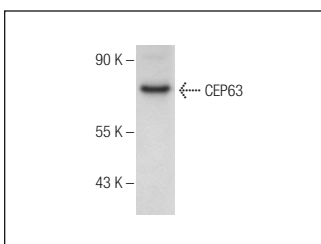
Molecular Weight of CEP63: 63 kDa.

Positive Controls: mouse prostate extract: sc-364249.

## 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



CEP63 (G-16): sc-99844. Western blot analysis of CEP63 expression in mouse prostate tissue extract.

## RESEARCH USE

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