

CEP76 (K-19): sc-84788

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. The CEP76 (centrosomal protein of 76 kDa) gene encodes a protein of 659 amino acids. The CEP76 protein is homologous among several species including human, mouse, rat and *xenopus*, suggesting a conserved function.

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. Pelletier, L., O'Toole, E., Schwager, A., Hyman, A.A. and Müller-Reichert, T. 2006. Centriole assembly in *Caenorhabditis elegans*. *Nature* 444: 619-623.
4. 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: CEP76 (human) mapping to 18p11.21; Cep76 (mouse) mapping to 18 E1.

SOURCE

CEP76 (K-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CEP76 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84788 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.

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.

APPLICATIONS

CEP76 (K-19) is recommended for detection of CEP76 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CEP57, CEP192 and CEP290.

CEP76 (K-19) is also recommended for detection of CEP76 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CEP76 siRNA (h): sc-72867, CEP76 siRNA (m): sc-142290, CEP76 shRNA Plasmid (h): sc-72867-SH, CEP76 shRNA Plasmid (m): sc-142290-SH, CEP76 shRNA (h) Lentiviral Particles: sc-72867-V and CEP76 shRNA (m) Lentiviral Particles: sc-142290-V.

Molecular Weight of CEP76: 76 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.