

CEP78 (D-15): sc-246261

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. CEP78 (centrosomal protein of 78 kDa) is a 689 amino acid protein that has 3 LRR (leucine-rich) repeats and is likely associated with centrosomes. There are four isoforms of CEP78 that are produced as a result of alternative splicing events.

REFERENCES

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6. 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: CEP78 (human) mapping to 9q21.2; Cep78 (mouse) mapping to 19 A.

SOURCE

CEP78 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CEP78 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-246261 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

CEP78 (D-15) is recommended for detection of CEP78 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 other CEP family members.

CEP78 (D-15) is also recommended for detection of CEP78 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for CEP78 siRNA (h): sc-92846, CEP78 siRNA (m): sc-142291, CEP78 shRNA Plasmid (h): sc-92846-SH, CEP78 shRNA Plasmid (m): sc-142291-SH, CEP78 shRNA (h) Lentiviral Particles: sc-92846-V and CEP78 shRNA (m) Lentiviral Particles: sc-142291-V.

Molecular Weight of CEP78: 76/80/78/19 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.

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.