

CEP72 (M-243): sc-134621

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. CEP72 (centrosomal protein 72kDa) is a 647 amino acid protein that localizes to the centrosome and centrosome-surrounding particles throughout the cell cycle. Involved in the recruitment of key centrosomal proteins to the centrosome, CEP72 provides centrosomal microtubule-nucleation activity on the γ Tubulin ring complexes and has critical roles in forming a focused bipolar spindle, which is needed for proper tension generation between sister chromatids. CEP72 exists as two alternatively spliced isoforms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Cep72 (mouse) mapping to 13 C1.

SOURCE

CEP72 (M-243) is a rabbit polyclonal antibody raised against amino acids 280-522 mapping within an internal region of CEP72 of mouse origin.

PRODUCT

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

APPLICATIONS

CEP72 (M-243) is recommended for detection of CEP72 of mouse and rat 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).

Suitable for use as control antibody for CEP72 siRNA (m): sc-142289, CEP72 shRNA Plasmid (m): sc-142289-SH and CEP72 shRNA (m) Lentiviral Particles: sc-142289-V.

Molecular Weight of CEP72: 72 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.