

# CEP350 (S-15): sc-161481

## BACKGROUND

CEP350 (centrosome-associated protein 350) is a 3,117 amino acid protein that is required for anchoring microtubules to the centrosomes and for microtubule network integrity. As part of a ternary complex with SAS-6 and CENP-J, CEP350 plays an essential role in centriole growth by stabilizing a procentriolar seed. CEP350 modulates PPAR $\alpha$  activity by recruiting it to discrete subcellular compartments, therefore influencing events in fatty acid metabolism. Expressed in testis, kidney, placenta, brain, heart, skeletal muscle, pancreas, liver and lung, CEP350 is phosphorylated during mitosis. In rare and aggressive myeloproliferative disorders, a gene translocation results in a Flg-FOP fusion protein, resulting in constitutive kinase activity at the centrosome. CEP-350 is responsible for Flg-FOP localization to the centrosome, which leads to activation of PI 3-kinase and PLC  $\gamma$ 1 and, consequently, inappropriate signaling resulting in continuous cell growth.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CEP350 (human) mapping to 1q25.2; Cep350 (mouse) mapping to 1 G3.

## SOURCE

CEP350 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CEP350 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-161481 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CEP350 (S-15) is recommended for detection of CEP350 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.

CEP350 (S-15) is also recommended for detection of CEP350 in additional species, including equine and avian.

Suitable for use as control antibody for CEP350 siRNA (h): sc-78702, CEP350 siRNA (m): sc-142282, CEP350 shRNA Plasmid (h): sc-78702-SH, CEP350 shRNA Plasmid (m): sc-142282-SH, CEP350 shRNA (h) Lentiviral Particles: sc-78702-V and CEP350 shRNA (m) Lentiviral Particles: sc-142282-V.

Molecular Weight of CEP350: 351 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.