

# CEP126 (N-16): sc-168347

## 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. CEP126 (centrosomal protein 126kDa), also known as KIAA1377, is a 1,117 amino acid cytoplasmic protein expressed in brain, lung, skeletal muscle, kidney, pancreas, testis and ovary. Necessary for microtubules and mitotic spindle organization, CEP126 plays a role in cytokinesis and participates in primary cilium formation.

## REFERENCES

1. Lange, B.M., et al. 2000. Centriole duplication and maturation in animal cells. *Curr. Top. Dev. Biol.* 49: 235-249.
2. Palazzo, R.E., et al. 2000. Centrosome maturation. *Curr. Top. Dev. Biol.* 49: 449-470.
3. Pelletier, L., et al. 2006. Centriole assembly in *Caenorhabditis elegans*. *Nature* 444: 619-623.
4. Chen, T.C., et al. 2009. From midbody protein-protein interaction network construction to novel regulators in cytokinesis. *J. Proteome Res.* 8: 4943-4953.
5. Tipton, A.R., et al. 2012. Identification of novel mitosis regulators through data mining with human centromere/kinetochore proteins as group queries. *BMC Cell Biol.* 13: 15.
6. Lim, Y.M., et al. 2012. Exome sequencing identifies KIAA1377 and C5orf42 as susceptibility genes for monogenic amyotrophy. *Neuromuscul. Disord.* 22: 394-400.

## CHROMOSOMAL LOCATION

Genetic locus: CEP126 (human) mapping to 11q22.1; Cep126 (mouse) mapping to 9 A1.

## SOURCE

CEP126 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CEP126 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-168347 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

CEP126 (N-16) is recommended for detection of CEP126 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).

CEP126 (N-16) is also recommended for detection of CEP126 in additional species, including equine and porcine.

Suitable for use as control antibody for CEP126 siRNA (h): sc-96891, CEP126 siRNA (m): sc-140971, CEP126 shRNA Plasmid (h): sc-96891-SH, CEP126 shRNA Plasmid (m): sc-140971-SH, CEP126 shRNA (h) Lentiviral Particles: sc-96891-V and CEP126 shRNA (m) Lentiviral Particles: sc-140971-V.

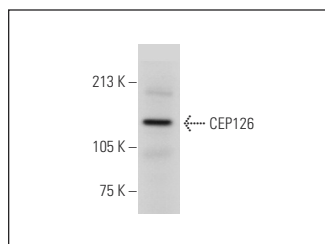
Molecular Weight of CEP126: 126 kDa.

Positive Controls: mouse testis extract: sc-2405.

## 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.

## DATA



CEP126 (N-16): sc-168347. Western blot analysis of CEP126 expression in mouse testis tissue extract.

## 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.