SANTA CRUZ BIOTECHNOLOGY, INC.

CEP97 (S-14): sc-100028

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Leucine-rich repeats (LRRs) are 20-30 amino acid motifs that mediate protein-protein interactions. The primary function of these motifs is to provide a versatile structural framework for the formation of these protein-protein interactions. LRRs are present in a variety of proteins with diverse structure and function, including innate immunity and nervous system development. Several human diseases are associated with mutations in the genes encoding LRR-containing proteins. CEP97 (centrosomal protein of 97 kDa), also known as LRRIQ2 (leucine-rich repeat and IQ domain-containing protein 2), is an 865 amino acid protein that contains 6 LRR repeats and one IQ domain, through which it binds calmodulin (CaM I). Localized to the centromere, CEP97 plays a role in cytokinesis and is required for correct spindle formation. CEP97 is also responsible for the recruitment of CEP110, a protein that is necessary for centrosomal duplication, to the centrosome. There are two isoforms of CEP110 which are produced as a result of alternative splicing events.

REFERENCES

1. Kobe, B., et al. 1994. The leucine-rich repeat: a versatile binding motif. Trends Biochem. Sci. 19: 415-421.
2. Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.

CHROMOSOMAL LOCATION

Genetic locus: CEP97 (human) mapping to 3q12.3.

SOURCE

CEP97 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CEP97 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-100028 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CEP97 (S-14) is recommended for detection of CEP97 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with family member LRRIQ1.

Suitable for use as control antibody for CEP97 siRNA (h): sc-78324, CEP97 shRNA Plasmid (h): sc-78324-SH and CEP97 shRNA (h) Lentiviral Particles: sc-78324-V.

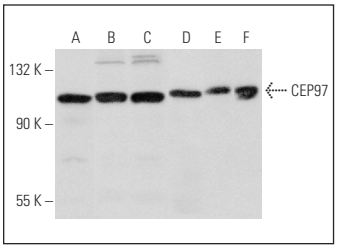
Molecular Weight of CEP97: 97 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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



CEP97 (S-14): sc-100028. Western blot analysis of CEP97 expression in Jurkat (**A**), HeLa (**B**), HEK293 (**C**), HL-60 (**D**) and Hep G2 (**E**) whole cell lysates and human tonsil tissue extract (**F**).

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.