

CEP97 (N-17): sc-100027

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 LRR1Q2 (leucine-rich repeat and IQ domain-containing protein 2), is an 865 amino acid protein that contains six 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.

CHROMOSOMAL LOCATION

Genetic locus: CEP97 (human) mapping to 3q12.3; Cep97 (mouse) mapping to 16 C1.1.

SOURCE

CEP97 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CEP97 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-100027 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CEP97 (N-17) is recommended for detection of CEP97 of mouse, rat and 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 LRR1Q1.

CEP97 (N-17) is also recommended for detection of CEP97 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CEP97 siRNA (h): sc-78324, CEP97 siRNA (m): sc-142292, CEP97 shRNA Plasmid (h): sc-78324-SH, CEP97 shRNA Plasmid (m): sc-142292-SH, CEP97 shRNA (h) Lentiviral Particles: sc-78324-V and CEP97 shRNA (m) Lentiviral Particles: sc-142292-V.

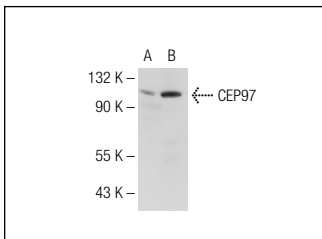
Molecular Weight of CEP97: 97 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

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 (N-17): sc-100027. Western blot analysis of CEP97 expression in HeLa (A) and NIH/3T3 (B) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CEP97 (B-4): sc-515526**, our highly recommended monoclonal alternative to CEP97 (N-17).