SANTA CRUZ BIOTECHNOLOGY, INC.

CEP104 (D-14): sc-164760

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CEP104 (centrosomal protein 104kDa), also known as KIAA0562 or GlyBP, is a 925 amino acid protein that localizes to the cytoplasm. CEP104 contains two heat domains, two coiled coils and is post-translationally phosphorylated at serine residue 323. CEP104 exists as three alternatively spliced isoforms and maps to human chromosome 1. Chromosome 1 is the largest chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes, there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

CHROMOSOMAL LOCATION

Genetic locus: CEP104 (human) mapping to 1p36.32; Cep104 (mouse) mapping to 4 E2.

SOURCE

CEP104 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CEP104 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-164760 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

CEP104 (D-14) is recommended for detection of CEP104 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).

Suitable for use as control antibody for CEP104 siRNA (h): sc-78760, Cep104 siRNA (m): sc-141589, CEP104 shRNA Plasmid (h): sc-78760-SH, Cep104 shRNA Plasmid (m): sc-141589-SH, CEP104 shRNA (h) Lentiviral Particles: sc-78760-V and Cep104 shRNA (m) Lentiviral Particles: sc-141589-V.

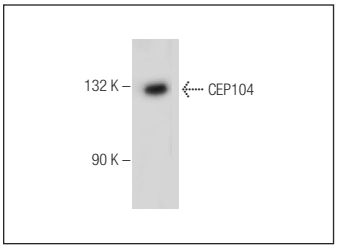
Molecular Weight of CEP104: 104/63/27 kDa.

Positive Controls: mouse brain extract: sc-2253.

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



CEP104 (D-14): sc-164760. Western blot analysis of CEP104 expression in mouse brain tissue extract.

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.

MONOS Satisfaction Guaranteed

Try **CEP104 (G-11): sc-514475** or **CEP104 (C-10): sc-515455**, our highly recommended monoclonal alternatives to CEP104 (D-14).