

CTNNB1 (C-19): sc-85512

BACKGROUND

CTNNB1 (catenin, β like 1), also known as NAP (nuclear-associated protein) or P14L, is an evolutionarily conserved protein with structural homology to members of the armadillo family, including β -catenin. CTNNB1 is expressed in a variety of tissues with highest expression levels found in heart, spleen, testis, placenta, thyroid and skeletal muscle. Localizing to the nucleus, CTNNB1 contains a bipartite nuclear localization signal, an acidic domain, a leucine-isoleucine zipper, an acidic domain and phosphorylation sites. Via its C-terminus, CTNNB1 is believed to play a role in apoptosis. In addition, multiple SNPs (single nucleotide polymorphisms) in the CTNNB1 have been associated with fat mass and body mass index (BMI), suggesting a possible role for CTNNB1 in the development of obesity.

REFERENCES

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- Loukopoulos, P., et al. 2007. Genome-wide array-based comparative genomic hybridization analysis of pancreatic adenocarcinoma: identification of genetic indicators that predict patient outcome. *Cancer Sci.* 98: 392-400.
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CHROMOSOMAL LOCATION

Genetic locus: CTNNB1 (human) mapping to 20q11.23; Ctnnb1 (mouse) mapping to 2 H1.

SOURCE

CTNNB1 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of CTNNB1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85512 P, (100 μ g 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

CTNNB1 (C-19) is recommended for detection of CTNNB1 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).

CTNNB1 (C-19) is also recommended for detection of CTNNB1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for CTNNB1 siRNA (h): sc-77045, CTNNB1 siRNA (m): sc-142622, CTNNB1 shRNA Plasmid (h): sc-77045-SH, CTNNB1 shRNA Plasmid (m): sc-142622-SH, CTNNB1 shRNA (h) Lentiviral Particles: sc-77045-V and CTNNB1 shRNA (m) Lentiviral Particles: sc-142622-V.

Molecular Weight of CTNNB1: 65 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.