SANTA CRUZ BIOTECHNOLOGY, INC.

CTNNBL1 (E-20): sc-85513



The Power to Question

BACKGROUND

CTNNBL1 (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. CTNNBL1 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,

CTNNBL1 contains a bipartite nuclear localization signal, an acidic domain, a leucine-isoleucine zipper, an acidic domain and phosphorylation sites. Via its C-terminus, CTNNBL1 is believed to play a role in apoptosis. In addition, multiple SNPs (single nucleotide polymorphisms) in the CTNNBL1 have been associated with fat mass and body mass index (BMI), suggesting a possible role for CTNNBL1 in the development of obesity.

REFERENCES

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- Halbleib, J.M., et al. 2007. Transcriptional modulation of genes encoding structural characteristics of differentiating enterocytes during development of a polarized epithelium *in vitro*. Mol. Biol. Cell. 18: 4261-4278.
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- Lee, L.T., et al. 2007. Discovery of growth hormone-releasing hormones and receptors in nonmammalian vertebrates. Proc. Natl. Acad. Sci. USA 104: 2133-2138.
- Liu, Y.J., et al. 2008. Genome-wide association scans identified CTNNBL1 as a novel gene for obesity. Hum. Mol. Genet. E-published.

CHROMOSOMAL LOCATION

Genetic locus: CTNNBL1 (human) mapping to 20q11.23; Ctnnbl1 (mouse) mapping to 2 H1.

SOURCE

CTNNBL1 (E-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CTNNBL1 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-85513 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CTNNBL1 (E-20) is recommended for detection of CTNNBL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 CTNNBL1 siRNA (h): sc-77045, CTNNBL1 siRNA (m): sc-142622, CTNNBL1 shRNA Plasmid (h): sc-77045-SH, CTNNBL1 shRNA Plasmid (m): sc-142622-SH, CTNNBL1 shRNA (h) Lentiviral Particles: sc-77045-V and CTNNBL1 shRNA (m) Lentiviral Particles: sc-142622-V.

Molecular Weight of CTNNBL1: 65 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

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