

CTNNBL1 (A-5): sc-376847

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

- Jabbour, L., et al. 2003. Sequence, gene structure, and expression pattern of CTNNBL1, a minor-class intron-containing gene—evidence for a role in apoptosis. *Genomics* 81: 292-303.
- Albertini, E., et al. 2004. Isolation of candidate genes for apomixis in *Poa pratensis* L. *Plant Mol. Biol.* 56: 879-894.
- 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.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

CTNNBL1 (A-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 457-487 within an internal region of CTNNBL1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CTNNBL1 (A-5) is available conjugated to agarose (sc-376847 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376847 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376847 PE), fluorescein (sc-376847 FITC), Alexa Fluor[®] 488 (sc-376847 AF488), Alexa Fluor[®] 546 (sc-376847 AF546), Alexa Fluor[®] 594 (sc-376847 AF594) or Alexa Fluor[®] 647 (sc-376847 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376847 AF680) or Alexa Fluor[®] 790 (sc-376847 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376847 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CTNNBL1 (A-5) is recommended for detection of CTNNBL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

CTNNBL1 (A-5) is also recommended for detection of CTNNBL1 in additional species, including canine.

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.

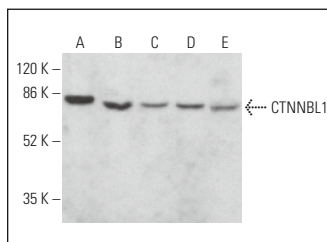
Molecular Weight of CTNNBL1: 65 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, F9 cell lysate: sc-2245 or A-10 cell lysate: sc-3806.

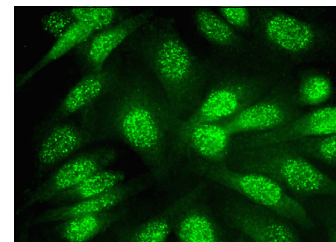
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CTNNBL1 (A-5): sc-376847. Western blot analysis of CTNNBL1 expression in HeLa (A), F9 (B), A-10 (C) and BC₃H1 (D) whole cell lysates and rat testis tissue extract (E).



CTNNBL1 (A-5): sc-376847. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear and cytoplasmic localization.

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.

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