

CTNNAL1 (A-4): sc-390854

BACKGROUND

CTNNAL1 (catenin (cadherin-associated protein), α -like 1), also known as CLLP or α -CATU, is a 734 amino acid cytoplasmic peripheral membrane protein belonging to the vinculin/ α -catenin family. Expressed at high levels in adrenal gland and present at lower levels in neural tissues, CTNNAL1 may be involved in the regulation of Rho pathway signaling by providing a scaffold for the Lbc Rho guanine nucleotide exchange factor 1 (RhoGEF p115). It is suggested that CTNNAL1 is down-regulated in pancreatic carcinoma undergoing differentiation and apoptosis. Existing as three isoforms produced by alternative splicing events, CTNNAL1 may contribute to the wound repair and proliferation of human bronchial epithelial cells (HBEC).

REFERENCES

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- Janssens, B., et al. 1999. Human α -catulin, a novel α -catenin-like molecule with conserved genomic structure, but deviating alternative splicing. *Biochim. Biophys. Acta* 1447: 341-347.
- Park, B., et al. 2002. Association of Lbc Rho guanine nucleotide exchange factor with α -catenin-related protein, α -catulin/CTNNAL1, supports serum response factor activation. *J. Biol. Chem.* 277: 45361-45370.
- Merdek, K.D., et al. 2004. Distinct activities of the α -catenin family, α -catulin and α -catenin, on β -catenin-mediated signaling. *Mol. Cell. Biol.* 24: 2410-2422.
- Kupferman, M.E., et al. 2007. Molecular analysis of anoikis resistance in oral cavity squamous cell carcinoma. *Oral Oncol.* 43: 440-454.
- Xiang, Y., et al. 2008. Wound repair and proliferation of bronchial epithelial cells regulated by CTNNAL1. *J. Cell. Biochem.* 103: 920-930.

CHROMOSOMAL LOCATION

Genetic locus: CTNNAL1 (human) mapping to 9q31.3; Ctnnal1 (mouse) mapping to 4 B3.

SOURCE

CTNNAL1 (A-4) is a mouse monoclonal antibody raised against amino acids 46-345 mapping near the N-terminus of CTNNAL1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CTNNAL1 (A-4) is available conjugated to agarose (sc-390854 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390854 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390854 PE), fluorescein (sc-390854 FITC), Alexa Fluor[®] 488 (sc-390854 AF488), Alexa Fluor[®] 546 (sc-390854 AF546), Alexa Fluor[®] 594 (sc-390854 AF594) or Alexa Fluor[®] 647 (sc-390854 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390854 AF680) or Alexa Fluor[®] 790 (sc-390854 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CTNNAL1 (A-4) is recommended for detection of CTNNAL1 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).

Suitable for use as control antibody for CTNNAL1 siRNA (h): sc-92652, CTNNAL1 siRNA (m): sc-142621, CTNNAL1 shRNA Plasmid (h): sc-92652-SH, CTNNAL1 shRNA Plasmid (m): sc-142621-SH, CTNNAL1 shRNA (h) Lentiviral Particles: sc-92652-V and CTNNAL1 shRNA (m) Lentiviral Particles: sc-142621-V.

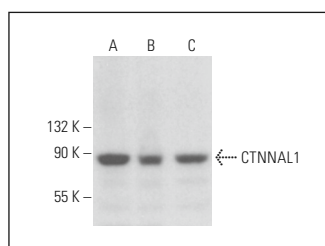
Molecular Weight of CTNNAL1: 82 kDa.

Positive Controls: F9 cell lysate: sc-2245, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

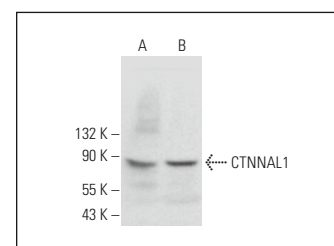
RECOMMENDED SUPPORT REAGENTS

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



CTNNAL1 (A-4): sc-390854. Western blot analysis of CTNNAL1 expression in HeLa (A), Hep G2 (B) and Caco-2 (C) whole cell lysates.



CTNNAL1 (A-4): sc-390854. Western blot analysis of CTNNAL1 expression in F9 (A) and P19 (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.

RESEARCH USE

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

PROTOCOLS

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