δ-catenin (C-20): sc-16512



The Power to Question

BACKGROUND

The catenins, α , β and γ , are proteins which bind to the highly conserved, intracellular cytoplasmic tail of E-cadherin. Together, the catenin/cadherin complexes play an important role mediating cellular adhesion. α -catenin was initially described as an E-cadherin associated protein, and since has been shown to associate with other members of the cadherin family, such as N-cadherin and P-cadherin. β -catenin associates with the cytoplasmic portion of E-cadherin, which is necessary for the function of E-cadherin as an adhesion molecule. β -catenin has also been found in complexes with the tumor suppressor protein APC. γ -catenin, also known as plakoglobin, binds with α -catenin and N-cadherin. δ -catenin interacts with presenilin 1 and is expressed in the brain. The gene encoding δ -catenin maps to human chromosome 5p15.2. A hemizygous loss of the gene encoding δ -catenin leads to the mental retardation associated with cri-du-chat syndrome. In addition, the transmembrane phosphatase PTPm associates with catenin/cadherin complexes and may regulate complex signaling.

CHROMOSOMAL LOCATION

Genetic locus: CTNND2 (human) mapping to 5p15.2; Ctnnd2 (mouse) mapping to 15 B2.

SOURCE

 δ -catenin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of δ -catenin of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16512 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

 δ -catenin (C-20) is recommended for detection of δ -catenin, also known as catenin δ -2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

 $\delta\text{-catenin}$ (C-20) is also recommended for detection of $\delta\text{-catenin}$, also known as catenin $\delta\text{-2}$ in additional species, including equine, canine and bovine.

Suitable for use as control antibody for δ -catenin siRNA (h): sc-43021, δ -catenin siRNA (m): sc-43022, δ -catenin shRNA Plasmid (h): sc-43021-SH, δ -catenin shRNA Plasmid (m): sc-43022-SH, δ -catenin shRNA (h) Lentiviral Particles: sc-43021-V and δ -catenin shRNA (m) Lentiviral Particles: sc-43022-V.

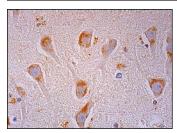
Molecular Weight of δ-catenin: 133 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or PC-12 cell lysate: sc-2250.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



δ-catenin (C-20): sc-16512. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells and glial cells.

SELECT PRODUCT CITATIONS

 Rodova, M., et al. 2004. Regulation of the rapsyn promoter by kaiso and δ-catenin. Mol. Cell. Biol. 24: 7188-7196.

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 or our catalog for detailed protocols and support products.



Try **δ-catenin (40.1): sc-81793**, our highly recommended monoclonal aternative to δ-catenin (C-20).

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