

γ -catenin (C-20): sc-1497



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. It has been shown that the transmembrane phosphatase PTP μ associates with catenin/cadherin complexes and may regulate complex signaling.

CHROMOSOMAL LOCATION

Genetic locus: JUP (human) mapping to 17q21.2; Jup (mouse) mapping to 11 D.

SOURCE

γ -catenin (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping C-terminus (h) of γ -catenin of human origin.

PRODUCT

Each vial contains 200 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-1497 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

γ -catenin (C-20) is recommended for detection of γ -catenin 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), 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).

γ -catenin (C-20)-R is also recommended for detection of γ -catenin in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for γ -catenin siRNA (h): sc-29324, γ -catenin siRNA (m): sc-29932, γ -catenin shRNA Plasmid (h): sc-29324-SH, γ -catenin shRNA Plasmid (m): sc-29932-SH, γ -catenin shRNA (h) Lentiviral Particles: sc-29324-V and γ -catenin shRNA (m) Lentiviral Particles: sc-29932-V.

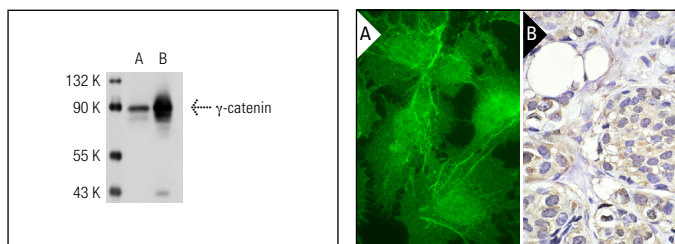
Molecular Weight of γ -catenin: 80-87 kDa.

Positive Controls: γ -catenin (m): 293T Lysate: sc-125099, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



γ -catenin (C-20)-R: sc-1497-R. Western blot analysis of γ -catenin expression in non-transfected: sc-117752 (A) and mouse γ -catenin transfected: sc-125099 (B) 293T whole cell lysates.

γ -catenin (C-20): sc-1497. Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue (B) showing membrane localization.

SELECT PRODUCT CITATIONS

- Arenas, M.I., et al. 2000. E-, N- and P-cadherin, and α -, β - and γ -catenin protein expression in normal, hyperplastic and carcinomatous human prostate. *Histochem. J.* 32: 659-667.
- Alami, J., et al. 2003. Differential expression of E-cadherin and β -catenin in primary and metastatic Wilms's tumours. *Mol. Pathol.* 56: 218-225.
- Krengel, S., et al. 2004. Cadherin expression pattern in melanocytic tumors more likely depends on the melanocyte environment than on tumor cell progression. *J. Cutan. Pathol.* 31: 1-7.
- Murtaugh, L.C., et al. 2005. β -catenin is essential for pancreatic acinar but not islet development. *Development* 132: 4663-4674.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try γ -catenin (A-6): sc-514115 or γ -catenin (H-1): sc-8415, our highly recommended monoclonal alternatives to γ -catenin (C-20).