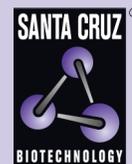


γ -catenin (H-1): sc-8415



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.

REFERENCES

- Knudsen, K.A., et al. 1995. Interaction of α -actinin with the cadherin/catenin cell-cell adhesion complex via α -catenin. *J. Cell Biol.* 130: 67-77.
- Breen, E., et al. 1995. Role of the E-cadherin/ α -catenin complex in modulating cell-cell and cell-matrix adhesive properties of invasive colon carcinoma cells. *Ann. Surg. Oncol.* 2: 378-385.

CHROMOSOMAL LOCATION

Genetic locus: JUP (human) mapping to 17q21.2.

SOURCE

γ -catenin (H-1) is a mouse monoclonal antibody raised against amino acids 30-109 mapping near the N-terminus of γ -catenin 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.

APPLICATIONS

γ -catenin (H-1) is recommended for detection of γ -catenin of 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).

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

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

Positive Controls: MCF7 whole cell lysate: sc-2206, A-431 whole cell lysate: sc-2201 or H4 cell lysate: sc-2408.

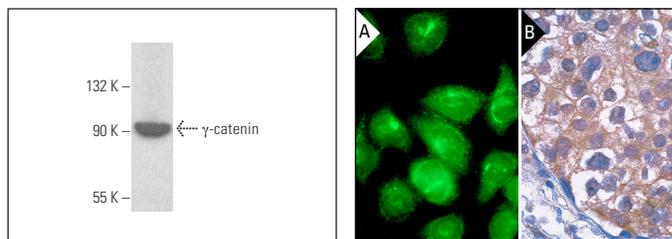
RESEARCH USE

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

STORAGE

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

DATA



γ -catenin (H-1): sc-8415. Western blot analysis of γ -catenin expression in MCF7 whole cell lysate.

γ -catenin (H-1): sc-8415. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cell junction localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma showing membrane localization (B).

SELECT PRODUCT CITATIONS

- Thelemann, A., et al. 2005. Phosphotyrosine signaling networks in epidermal growth factor receptor overexpressing squamous carcinoma cells. *Mol. Cell. Proteomics* 4: 356-376.
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- Lee, S.H., et al. 2008. Islet specific Wnt activation in human type II diabetes. *Exp. Diabetes Res.* 2008: 728763.
- Brackley, K.I., et al. 2011. Interactions between the Actin filament capping and severing protein gelsolin and the molecular chaperone CCT: evidence for nonclassical substrate interactions. *Cell Stress Chaperones* 16: 173-179.
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- Liu, B., et al. 2015. Expression profile of epithelial-mesenchymal transition markers in non-muscle-invasive urothelial carcinoma of the bladder: correlation with intravesical recurrence following transurethral resection. *Urol. Oncol.* 33: 110.e11-8.

PROTOCOLS

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