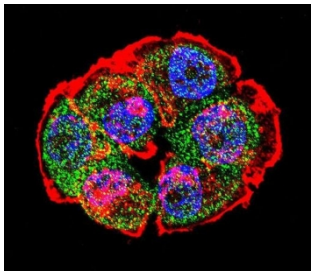
Catenin Beta Antibody for IF / CTNNB1 Immunofluorescence Antibody (F54317)

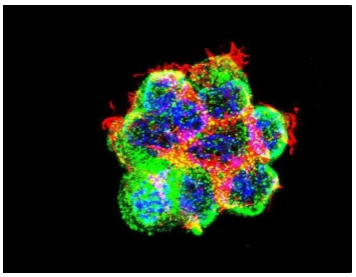
Catalog No.	Formulation	Size
F54317-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54317-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

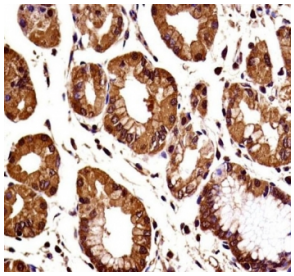
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P35222
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry (FFPE) : 1:25 Immunofluorescence : 1:25 Flow Cytometry : 1:25 (1x10e6 cells)
Limitations	This Catenin Beta Antibody for IF / CTNNB1 Immunofluorescence Antibody is available for research use only.



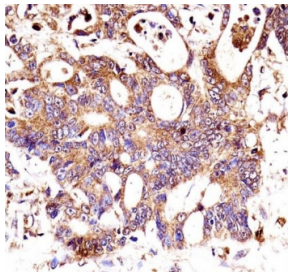
Catenin Beta Antibody T-47D Cell IF. Immunofluorescence analysis of fixed and permeabilized human T-47D cells using Catenin Beta antibody shows prominent green fluorescence at cell borders with additional cytoplasmic punctate signal, consistent with CTNNB1 / Catenin beta-1 localization at adherens junctions and intracellular pools. Co-staining with anti-actin (red) highlights cytoskeletal organization, while DAPI nuclear stain (blue) marks nuclei, providing structural context for beta-catenin distribution.



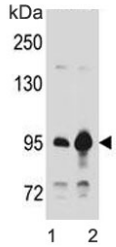
Catenin Beta Antibody HEK293 Cell IF. Immunofluorescence analysis of fixed and permeabilized human HEK293 cells using Catenin Beta antibody shows strong green fluorescence outlining cell borders with diffuse cytoplasmic signal, consistent with CTNNB1 / Catenin beta-1 localization at adherens junctions and intracellular pools. Co-staining with anti-actin (red) highlights cytoskeletal architecture, while DAPI nuclear stain (blue) marks nuclei, providing spatial context for beta-catenin distribution.



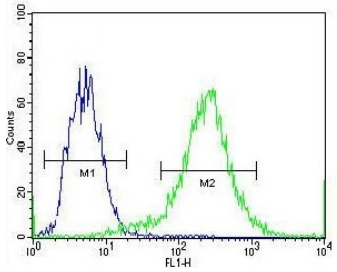
Catenin Beta Antibody Human Stomach Tissue Immunohistochemistry. IHC testing of FFPE human stomach tissue with Catenin Beta antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Catenin Beta Antibody Human Colon Carcinoma Immunohistochemistry. IHC testing of FFPE human colon carcinoma tissue with Catenin Beta antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Catenin Beta Antibody WB. Western blot testing of human 1) 293 and 2) T-47D cell lysate with Catenin Beta antibody. Predicted molecular weight ~85 kDa, but routinely observed at 90-95 kDa.



Catenin Beta Antibody FACS. Flow cytometry testing of fixed and permeabilized human 293 cells with Catenin Beta antibody; Blue=isotype control, Green= Catenin Beta antibody.

Description

Catenin beta-1 (CTNNB1) is a multifunctional protein with highly dynamic subcellular localization, making it well suited for visualization by immunofluorescence. The Catenin Beta Antibody for IF enables high-resolution detection of CTNNB1 within cells, supporting analysis of cell-cell junctions, cytoplasmic distribution, and spatial organization of beta-catenin protein. CTNNB1 is encoded on chromosome 3p22.1 and belongs to the armadillo repeat protein family, which contains multiple protein interaction domains that facilitate binding to cadherins, transcription factors, and regulatory complexes.

The Catenin Beta Antibody for IF, also referred to as Beta-catenin antibody and CTNNB1 antibody in the literature, recognizes a protein that localizes predominantly to the plasma membrane under basal conditions. In epithelial cells, beta-

catenin associates with E-cadherin at adherens junctions, forming a structural link to the actin cytoskeleton. In immunofluorescence assays, this localization is typically visualized as distinct peripheral staining outlining cell borders. In addition to membrane-associated pools, CTNNB1 is also present in the cytoplasm, where it can be observed as diffuse intracellular fluorescence depending on cellular state.

This Catenin Beta Antibody for IF is uniquely positioned for studies requiring detailed visualization of CTNNB1 distribution within individual cells. In commonly used cell models such as T-47D and HEK293, beta-catenin staining highlights cell-cell contacts while also revealing intracellular signal that reflects protein turnover and redistribution. Subtle changes in localization, including increased cytoplasmic accumulation or reduced junctional staining, can provide insight into cellular signaling conditions and protein regulation.

CTNNB1 also functions as a key mediator of Wnt signaling, where stabilization of the protein leads to intracellular accumulation and redistribution from membrane-associated pools. While nuclear localization is associated with transcriptional activation, many experimental conditions show intermediate localization patterns that are effectively captured by immunofluorescence imaging. This makes CTNNB1 antibody-based IF analysis a powerful approach for assessing protein dynamics and signaling-related changes in situ.

The rabbit polyclonal format of this antibody supports broad epitope recognition, enhancing signal detection and enabling consistent visualization across different cell types and fixation conditions. This Catenin Beta Antibody for IF is suitable for detecting CTNNB1 expression in research applications requiring detailed imaging of protein localization and cellular architecture. It supports evaluation of both structural roles at adherens junctions and signaling-associated redistribution within cells.

This antibody complements our Beta-Catenin Antibody / CTNNB1 Antibody (clone CTNNB1/2030R) for broader analysis of CTNNB1 expression and localization.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Catenin Beta Antibody for IF / CTNNB1 Immunofluorescence Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 692-721 from the human protein was used as the immunogen for the Catenin Beta antibody.

Storage

Aliquot the Catenin Beta antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Beta-catenin IF antibody, CTNNB1 immunofluorescence antibody, Catenin beta-1 IF antibody, Beta catenin ICC antibody, CTNNB1 fluorescence antibody