

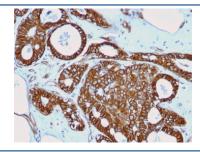
Recombinant Beta Catenin Antibody [clone rCTNNB1/2173] (V3601)

Catalog No.	Formulation	Size
V3601-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3601-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3601SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3601IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

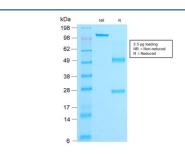
Recombinant MOUSE MONOCLONAL

Bulk quote request

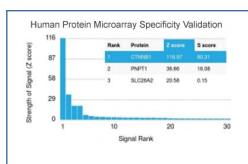
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rCTNNB1/2173
Purity	Protein G affinity chromatography
UniProt	P35222
Localization	Cell surface, cytoplasmic, cell junctions
Applications	Immunofluorescence : 1-3ug/ml Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant beta Catenin antibody is available for research use only.



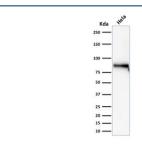
IHC testing of FFPE human breast cancer with recombinant beta Catenin antibody (clone rCTNNB1/2173). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant beta Catenin antibody (clone rCTNNB1/2173) as confirmation of integrity and purity.



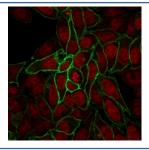
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant beta Catenin antibody (clone rCTNNB1/2173). These results demonstrate the foremost specificity of the rCTNNB1/2173 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Western blot testing of human HeLa cell lysate with recombinant beta Catenin antibody. Predicted molecular weight ~85 kDa, but routinely observed at 90-95 kDa.



Western blot testing of human brain tissue lysate with recombinant beta Catenin antibody. Predicted molecular weight ~85 kDa, but routinely observed at 90-95 kDa.



Immunofluorescent staining of human HeLa cells with recombinant beta Catenin antibody (clone rCTNNB1/2173, green) and Reddot nuclear stain (red).

Description

Recombinant Beta Catenin antibody is an essential reagent for detecting beta catenin, a key component of both adherens junctions and transcriptional signaling. Encoded by the CTNNB1 gene, beta catenin links cadherins to the actin cytoskeleton, reinforcing epithelial cohesion. In addition, it acts as a transcriptional regulator when stabilized and transported into the nucleus. These dual functions establish beta catenin as a central regulator of development and tumorigenesis.

Under homeostatic conditions, beta catenin is targeted for degradation by a destruction complex that includes APC, Axin, and GSK3. Wnt pathway activation inhibits this degradation, permitting beta catenin accumulation and nuclear translocation. Once in the nucleus, beta catenin associates with TCF/LEF transcription factors to activate genes involved in growth and differentiation. Misregulation of this pathway is implicated in cancers and developmental disorders.

The Recombinant Beta Catenin antibody clone rCTNNB1/2173 delivers high specificity and reproducibility. Recombinant manufacturing ensures uniform performance across research settings. Clone rCTNNB1/2173 has been widely applied in developmental biology, cancer research, and stem cell studies. Its consistent detection of beta catenin in both junctional and nuclear compartments makes it a versatile tool for diverse investigations.

Research employing clone rCTNNB1/2173 has provided insight into how beta catenin coordinates adhesion and signaling. Elevated nuclear beta catenin is a hallmark of Wnt driven tumors, including colorectal and hepatocellular carcinoma. The antibody supports studies of disease progression, prognosis, and therapeutic targeting strategies that focus on Wnt beta catenin signaling.

NSJ Bioreagents supplies this Recombinant Beta Catenin antibody to enable studies of cell adhesion and signaling. The protein is also referenced as CTNNB1 antibody, cadherin associated protein antibody, Wnt pathway transcription factor coactivator antibody, and beta armadillo repeat protein antibody, reflecting the range of alternate names used in the field.

Application Notes

Titration of the recombinant beta Catenin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Chicken beta Catenin protein was used as the immunogen for the recombinant beta Catenin antibody.

Storage

Store the recombinant beta Catenin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).