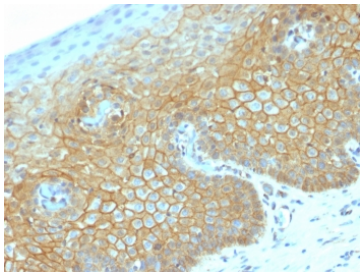
Recombinant b-Catenin Antibody [clone CTNNB1/2030R] (V3600)

Catalog No.	Formulation	Size
V3600-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3600-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3600SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3600IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

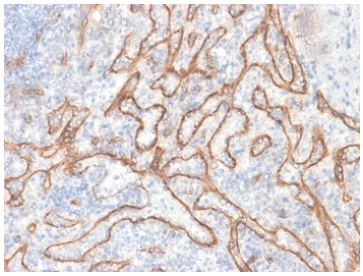
Recombinant RABBIT MONOCLONAL

Bulk quote request

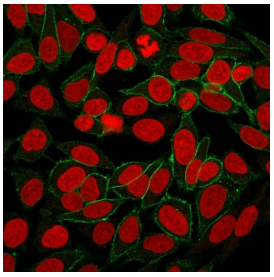
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CTNNB1/2030R
Purity	Protein A affinity chromatography
UniProt	P35222
Localization	Cell surface, cytoplasmic, cell junctions
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant b-Catenin antibody is available for research use only.



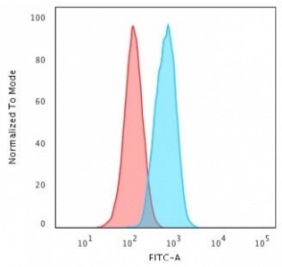
IHC testing of FFPE human cervical carcinoma with recombinant b-Catenin antibody (clone CTNNB1/2030R). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



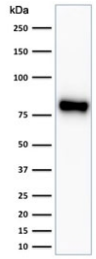
IHC testing of FFPE human tonsil tissue with recombinant b-Catenin antibody (clone CTNNB1/2030R). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



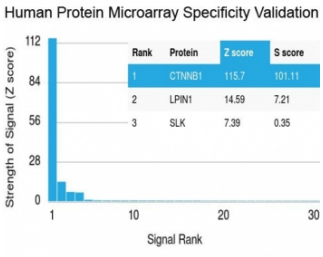
Immunofluorescent staining of PFA-fixed human HeLa cells with recombinant b-Catenin antibody (clone CTNNB1/2030R, green) and Reddot nuclear stain (red).



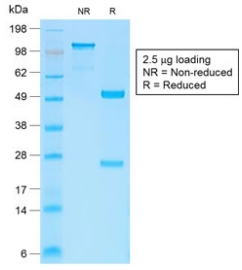
Flow cytometry testing of PFA-fixed human HeLa cells with recombinant b-Catenin antibody (clone CTNNB1/2030R); Red=isotype control, Blue= recombinant b-Catenin antibody.



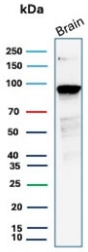
Western blot testing of human HeLa cell lysate with recombinant b-Catenin antibody (clone CTNNB1/2030R). Predicted molecular weight ~85 kDa, but routinely observed at 90-95 kDa.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant b-Catenin antibody (clone CTNNB1/2030R). These results demonstrate the foremost specificity of the CTNNB1/2030R 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.



SDS-PAGE analysis of purified, BSA-free recombinant b-Catenin antibody (clone CTNNB1/2030R) as confirmation of integrity and purity.



Western blot testing of human brain tissue lysate with recombinant b-Catenin antibody (clone CTNNB1/2030R). Predicted molecular weight ~85 kDa, but routinely observed at 90-95 kDa.

Description

Recombinant b-Catenin antibody is a specialized reagent for detecting beta catenin, a multifunctional protein encoded by the CTNNB1 gene. Beta catenin serves dual roles in cell adhesion and gene transcription. At the plasma membrane, it binds to cadherins, linking them to the actin cytoskeleton and maintaining epithelial integrity. In the nucleus, it functions as a transcriptional coactivator in the Wnt signaling pathway, where it regulates genes associated with development, proliferation, and cancer.

Beta catenin stability is tightly controlled by a destruction complex that targets it for degradation. Wnt signaling disrupts this process, allowing beta catenin to accumulate and translocate into the nucleus. Dysregulation of beta catenin levels leads to aberrant transcriptional activation, which is strongly linked to tumorigenesis in colorectal, liver, and other cancers. Because of these dual functions, beta catenin is a focal point in developmental biology and oncology.

The Recombinant b-Catenin antibody clone CTNNB1/2030R ensures specific and reproducible detection. Recombinant technology supports batch to batch consistency and reliable performance. Clone CTNNB1/2030R has been employed in research on epithelial adhesion, Wnt signaling, and tumor biology. Its versatility makes it useful for examining beta catenin localization in both membrane associated junctions and nuclear compartments.

Research using clone CTNNB1/2030R has clarified how beta catenin contributes to embryonic development, stem cell regulation, and carcinogenesis. Elevated nuclear beta catenin is associated with poor prognosis in several cancers, highlighting its diagnostic and prognostic value. The antibody continues to support efforts to understand how modulating beta catenin pathways may provide therapeutic opportunities.

NSJ Bioreagents provides this Recombinant b-Catenin antibody to support studies of signaling, adhesion, and cancer biology. The protein is also known as CTNNB1 antibody, cadherin associated protein beta antibody, armadillo repeat protein antibody, and Wnt signaling mediator antibody, reflecting the diverse nomenclature used in the literature.

Application Notes

Titration of the recombinant b-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

Human protein was used as the immunogen for the recombinant b-Catenin antibody.

Storage

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