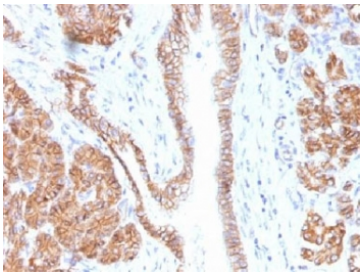
Beta Catenin Antibody [clone CTNNB1/1508] (V3243)

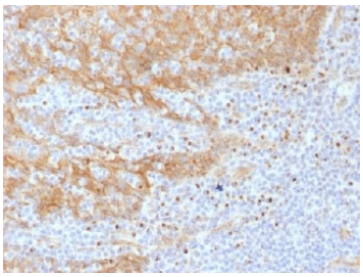
Catalog No.	Formulation	Size
V3243-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3243-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3243SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

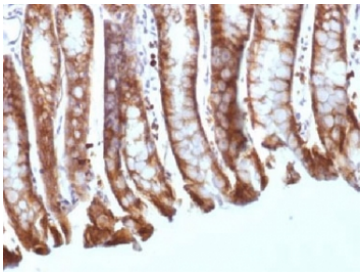
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CTNNB1/1508
Purity	Protein G affinity chromatography
UniProt	P35222
Localization	Cell surface, cytoplasmic, cell junctions
Applications	Immunohistochemistry (FFPE) : 0.1-0.2ug/ml for 30 min at RT
Limitations	This Beta Catenin antibody is available for research use only.



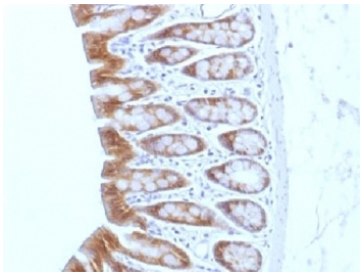
IHC testing of FFPE human pancreas tissue with Beta Catenin antibody (clone CTNNB1/1508). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min.



IHC testing of FFPE human tonsil tissue with Beta Catenin antibody (clone CTNNB1/1508). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min.



IHC testing of FFPE mouse colon tissue with Beta Catenin antibody (clone CTNNB1/1508). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min.



IHC testing of FFPE rat colon tissue with Beta Catenin antibody (clone CTNNB1/1508). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min.

Description

Beta Catenin antibody is a key reagent for exploring the multifunctional protein beta catenin, encoded by the CTNNB1 gene. Beta catenin acts both as a component of the cadherin adhesion complex at the cell membrane and as a transcriptional coactivator in the canonical Wnt signaling pathway. Through these dual roles, it regulates cell adhesion, proliferation, and differentiation, making it a central subject in developmental biology and cancer research.

At the cell membrane, beta catenin binds to the cytoplasmic domain of cadherins, linking them to the actin cytoskeleton via alpha catenin. This interaction maintains epithelial cell layer integrity and supports tissue architecture. When cadherin mediated adhesion is disrupted, cytoplasmic beta catenin levels increase, potentially allowing the protein to translocate into the nucleus. In this role, beta catenin interacts with TCF and LEF transcription factors to drive expression of Wnt target genes, including those that control cell cycle progression and stem cell renewal.

The Beta Catenin antibody clone CTNNB1/1508 provides specific detection of this pivotal protein, ensuring consistent recognition across tissues and model systems. Clone CTNNB1/1508 has been employed in studies investigating embryonic patterning, tissue regeneration, and tumor progression. Its specificity makes it particularly useful in experiments focused on the dynamic localization of beta catenin, where shifts between membrane, cytoplasmic, and nuclear pools signal important changes in cellular behavior.

Aberrant activation of Wnt signaling through stabilized beta catenin is a hallmark of many cancers, including colorectal, hepatocellular, and ovarian carcinomas. Research using this antibody has clarified how mutations in CTNNB1 or inactivating alterations of the APC gene disrupt normal protein turnover, leading to excessive nuclear accumulation and uncontrolled transcription of growth promoting genes. Beyond oncology, beta catenin plays essential roles in stem cell niches, bone development, and neurogenesis, ensuring its continued importance across biomedical research.

NSJ Bioreagents provides this Beta Catenin antibody to support rigorous investigations into signaling, adhesion, and disease. Scientists may also find the protein described under alternate terms such as CTNNB1 antibody, armadillo repeat

containing protein antibody, cadherin associated protein beta antibody, and cell adhesion molecule associated protein antibody. These names reflect the multiple contexts in which beta catenin operates and highlight its broad biological impact.

Application Notes

Optimal dilution of the Beta Catenin antibody to be determined by the researcher.

Immunogen

A partial human recombinant protein was used as the immunogen for the Beta Catenin antibody.

Storage

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