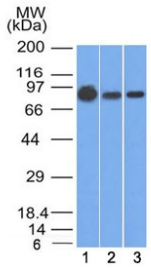
Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody [clone 9F2] (V3210)

Catalog No.	Formulation	Size
V3210-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3210-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3210SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

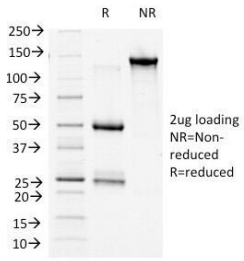
Citations (9)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	9F2
Purity	Protein G affinity chromatography
UniProt	P35222
Localization	Cell surface, cytoplasmic, cell junctions
Applications	Flow Cytometry : 0.5-1ug/10^6 cells Immunofluorescence : 1-2ug/ml Western Blot : 0.5-1ug/ml
Limitations	This Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody is available for research use only.



Beta-Catenin Reproducibility Control Antibody Human Cell Line WB. Western blot analysis of 1) human A431, 2) A549, and 3) MCF7 cell lysates using Beta-Catenin Antibody (clone 9F2) detects a consistent band at approximately 90-95 kDa across all samples, aligning with the predicted molecular weight of Catenin beta-1 / CTNNB1 at ~85 kDa with a characteristic upward shift during SDS-PAGE. The uniform banding pattern across multiple epithelial and cancer cell lines supports reproducible detection of CTNNB1, consistent with phosphorylation-associated modulation of beta-catenin electrophoretic mobility.



SDS-PAGE Analysis of Purified, BSA-Free b-Catenin Antibody (clone 9F2). Confirmation of Integrity and Purity of the Antibody.

Description

Catenin beta-1 (CTNNB1) is a multifunctional protein that plays essential roles in cell adhesion and Wnt signaling, making it a widely studied target across many areas of biological research. The Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody (clone 9F2) is associated with extensive use in peer-reviewed studies and is positioned to support experimental validation and reproducibility. CTNNB1 is encoded on chromosome 3p22.1 and belongs to the armadillo repeat protein family, characterized by multiple protein interaction domains that enable binding to cadherins, transcription factors, and regulatory complexes.

The Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody, also referred to as CTNNB1 antibody and Catenin beta-1 antibody in the literature, recognizes a protein that functions in both structural and signaling contexts. At the plasma membrane, beta-catenin associates with E-cadherin and other cadherins to maintain adherens junction integrity and epithelial architecture. Through interaction with alpha-catenin, CTNNB1 links these adhesion complexes to the actin cytoskeleton, supporting tissue organization and stability.

In addition to its structural role, beta-catenin acts as a central effector of canonical Wnt signaling. Under basal conditions, CTNNB1 is regulated by the destruction complex, which includes APC, AXIN, GSK3beta, and CK1, leading to phosphorylation, ubiquitination, and proteasomal degradation. Activation of Wnt signaling stabilizes beta-catenin, allowing it to accumulate and translocate to the nucleus, where it regulates gene expression through interaction with TCF/LEF transcription factors. This tightly controlled balance between degradation and accumulation is critical for normal cellular function.

This Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody is uniquely positioned for studies requiring validation of CTNNB1 detection across experiments. The extensive publication history associated with clone 9F2 supports its use as a comparative or confirmatory reagent alongside other antibodies, enabling researchers to verify expression patterns, localization, and signaling responses. Its consistent performance across multiple study types contributes to reliable interpretation of beta-catenin biology.

Dysregulation of CTNNB1 is implicated in numerous cancers, including colorectal carcinoma, hepatocellular carcinoma, breast cancer, and melanoma, where altered protein stability leads to accumulation and aberrant signaling. Beta-catenin antibody detection is therefore frequently used to assess pathway activation, tumor progression, and differentiation status. The use of a reproducibility-focused antibody clone enhances confidence in these analyses and supports cross-validation of experimental findings.

The mouse monoclonal clone 9F2 provides stable and consistent detection of CTNNB1, supporting research applications that require reproducible and comparable results across different experimental conditions. This antibody targets beta-catenin for studies focused on understanding CTNNB1 function in adhesion, signaling, and disease. Its role as a validation-oriented reagent complements other CTNNB1 antibodies used in discovery-based research.

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

Application Notes

Titration of the Beta-Catenin Antibody / CTNNB1 Reproducibility Control Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Chicken Beta-Catenin was used as the immunogen for the b-Catenin antibody.

Storage

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

Alternate Names

Beta-catenin reproducibility antibody, CTNNB1 control antibody, Catenin beta-1 antibody clone 9F2, Beta catenin validation antibody, CTNNB1 consistency control antibody

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