

Product Information

Anti- β -Catenin antibody, Mouse monoclonal
clone 15B8, purified from hybridoma cell culture

Product Number **SAB4200720**

Product Description

Anti- β -Catenin antibody, Mouse monoclonal (mouse IgG1 isotype) is derived from the 15B8 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with recombinant chicken β -Catenin.¹ The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti- β -Catenin antibody recognizes β -Catenin from human, mouse, rat, monkey, bovine, hamster, chicken² and canine origin. The antibody does not cross react with α -Catenin¹ or γ -Catenin (plakoglobin)³. Monoclonal Anti- β -Catenin is recommended to use in various immunochemical assays, including Immunoblotting (~94 kDa),⁴⁻⁵ Immunofluorescence,⁶ Immunohistochemistry⁷ and Immunoprecipitation.⁴

β -Catenin, also known as Catenin beta 1 or CTNNB1, is a member of the armadillo protein family. β -Catenin plays a dual function in the cell including cell-cell adhesion and as a component of the Wnt signaling pathway.⁸⁻¹⁰ In adherens junctions, β -Catenin associates with the cytoplasmic domain of the cadherin family adhesion receptors, anchoring them to the actin cytoskeleton and thus acting as structural protein. As a part of Wnt signaling pathway β -Catenin transduces Wnt signals by interacting with T cell factor (TCF)-family transcription factors to activate target genes. Wnt/ β -catenin signaling interacts with several cellular pathways in context-dependent ways, including Jak-STAT (Janus kinase-Signal transducer and activator of transcription) cytokine, TGF β (transforming growth factor- β), DNA damage and the Hippo signaling pathways.¹⁰ Furthermore, β -Catenin is involved in embryonic morphogenesis and tumorigenesis and is tightly regulated by phosphorylation and further degradation by the ubiquitin-proteasome system.¹¹

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.25–0.5 μ g/mL is recommended using Madin-Darby bovine kidney (MDBK) cell line extract.

Immunofluorescence: a working concentration of 5–10 μ g/ml is recommended using human breast adenocarcinoma MCF7 cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

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