

PE anti-β Catenin 1 (CTNNB1) Antibody

Catalog# / Size	844605 / 25 tests 844606 / 100 tests
Clone	12F7
Regulatory Status	RUO
Other Names	Catenin (Cadherin-Associated Protein), Beta 1, 88 kD, CTNNB1, TNNB, MRD19, armadillo, catenin beta-1
Isotype	Mouse IgG1, κ
Description	β-catenin is part of a complex of proteins that constitute adherens junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. The encoded protein also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. β-catenin also plays a key role in Wnt signaling pathways and thus is involved in neural differentiation, synaptic plasticity, neurodegenerative disease, and prevention of apoptosis. Finally, this protein binds to the product of the adenomatous polyposis coli (APC) gene, which is mutated in the adenomatous polyposis of the colon. Mutations in this gene are a cause of colorectal cancer (CRC), pilomatixoma (PTR), medulloblastoma (MDB), and ovarian cancer.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant β-catenin (N-terminal fragment) fused to MBP.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze .
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Nuclear™ Transcription Factor Staining Protocol .
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy ⁴ and immunohistochemical staining ³ . For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 844603) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/μg).
Additional Product Notes	NOTE: For flow cytometric staining with this clone, True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401) offers improved staining and is highly recommended.
Application References	1. Sacco P, <i>et al.</i> 1995. <i>J. Biol. Chem.</i> 270:20201. (WB) 2. Johnson KR, <i>et al.</i> 1993. <i>Exp. Cell Res.</i> 207:252. 3. Gupta K, <i>et al.</i> 2012. <i>J. Ped. Hem. Onc.</i> 34:320. (IHC-P) 4. Radice G, <i>et al.</i> 1997. <i>Dev. Bio.</i> 181:64. (IHC-P)
(PubMed link indicates BioLegend citation)	
RRID	AB_2832858 (BioLegend Cat. No. 844605)

Antigen Details

Structure	88 kD armadillo repeat containing protein with an unstructured N and C terminal.
Distribution	β -catenin localizes to cell-cell contacts (adherens junctions) and the cell membrane as well as the cytoplasmic pool of protein. β -catenin can also translocate to the nucleus and is in interphase found in puncta at the proximal end of centrioles. In mitosis, it localizes to the centrosomes at the spindle.
Function	Wnt signaling pathway, regulation of cell-cell adhesion, neurogenesis, transcription, transcription regulation, early embryonic patterning, asymmetric cell division, stem cell renewal, and the epithelial to mesenchymal transition.
Interaction	Wnt signaling pathway, apoptotic cleavage of cellular proteins, and EphB-EphrinB signaling.
Biology Area	Cell Adhesion, Cell Biology, Neuroscience, Signal Transduction, Synaptic Biology
Molecular Family	Adhesion Molecules
Antigen References	1. Hirano S, <i>et al.</i> 2012. <i>Physiol. Rev.</i> 92:597.
Gene ID	1499

Related Protocols

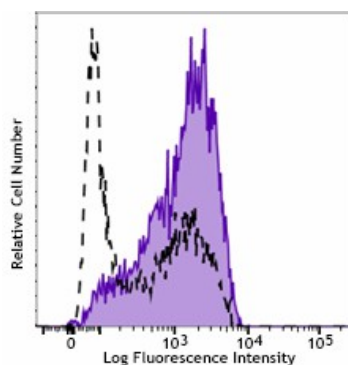
[True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)

[True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)

Other Formats

Purified anti- β Catenin 1 (CTNNB1), Ultra-LEAF™ Purified anti- β Catenin 1 (CTNNB1), PE anti- β Catenin 1 (CTNNB1), APC anti- β Catenin 1 (CTNNB1)

Product Data



Human colon adenocarcinoma cell line SW480 treated (open histogram) or untreated (filled histogram) with tankyrase inhibitor XAV939 for 18 hours, then treated with True-Nuclear™ Transcription Factor Buffer set (Cat. No. 424401) and stained with anti- β Catenin 1 (clone 12F7) PE.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587