

Rabbit beta-Catenin Polyclonal Antibody | anti-CTNNB1 antibody

beta-Catenin (Tyr-489)[gamma-Catenin (Tyr-480)], phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71609	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

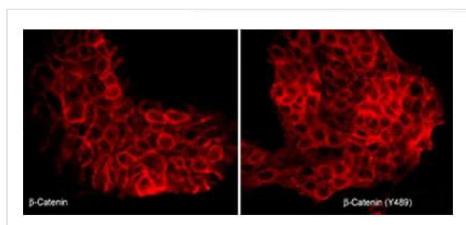
PRODUCT SYNONYMS

beta-Catenin; Polyclonal Antibody; beta-Catenin (Tyr-489)[gamma-Catenin (Tyr-480)]; phospho-specific Antibody; phospho-specific; Catenin 2 Tyr-489; anti-CTNNB1 antibody

PRODUCT SPECIFICATIONS

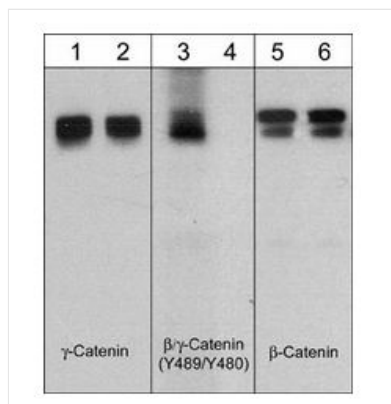
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to phospho-beta-Catenin (Tyr-654) peptide before affinity purification using phospho-beta-Catenin (Tyr-489) peptide (without carrier). The antibody detects 84 and 88kDa* proteins corresponding to the molecular mass of gamma-Catenin and beta-Catenin, respectively, on SDS-PAGE immunoblots of A431 cells treated with pervanadate, but does not detect these proteins in control cells.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CTNNB1 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-beta-Catenin (Tyr-489) synthetic peptide corresponds to amino acid residues around tyrosine 489 of human beta-Catenin. This peptide sequence is highly conserved in rat and mouse beta-Catenin, and has high homology to the conserved site in gamma-Catenin (Tyr-480).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of beta-Catenin in pervanadate-treated A431 cells. The cells were labeled with mouse monoclonal beta-Catenin (CM1181) or rabbit polyclonal beta-Catenin (Tyr-489) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.



WB (Western Blot)

Western blot analysis of A431 cells stimulated with pervanadate (1mM) for 30 min (lanes 1, 3, & 5) then treated with alkaline phosphatase (lanes 2, 4, & 6). The blot was probed with anti-gamma-Catenin (CM1111), anti-beta-Catenin (Tyr-489) conserved site (CP2961), or anti-beta-Catenin (CM1181).

ADDITIONAL INFORMATION

Related Product Information for anti-CTNNB1 antibody	beta-Catenin is a 92kDa protein that binds to the cytoplasmic tail of E-Cadherin. The cadherins, transmembrane adhesion molecules, are found with catenins at adherens junctions. Deletions in the cytoplasmic domain of E-Cadherin eliminate catenin binding and result in a loss of cell adhesion. Tyrosine phosphorylation of beta-Catenin can regulate its interaction with critical components of adherens junctions. Both Fer and Fyn Kinases phosphorylate tyrosine 142 in vitro. Overexpression of these kinases in epithelial cells disrupts interactions between alpha- and beta-Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of beta-Catenin. Src family kinases can also phosphorylate tyrosine 86, 489, and 654 in beta-Catenin. Tyr-654 phosphorylation regulates beta-Catenin binding to E-cadherin, while c-Abl phosphorylation of Tyr-489 decreases beta-Catenin binding to N-Cadherin and leads to nuclear translocation and transcriptional activation.
References	Roura, S. et al. (1999) J Biol Chem. 274(51) :36734. Piedra, J. et al. (2003) Mol. Cell. Biol. 23(7):2287. Brembeck, F.H. et al. (2004) Genes Dev. 18(18):2225. Rhee, J. et al. (2007) Nat. Cell Biol. 9(8):883.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148233338
NCBI GeneID	1499
NCBI Accession #	NP_001091679.1
NCBI GenBank Nucleotide #	NM_001098209.1
UniProt Accession #	P35222; Q8NEW9; Q8NI94; Q9H391; A8K1L7
Molecular Weight	85,497 Da
NCBI Official Full Name	catenin beta-1
NCBI Official Synonym Full Names	catenin (cadherin-associated protein), beta 1, 88kDa
NCBI Official Symbol	CTNNB1
NCBI Official Synonym Symbols	CTNNB; MRD19; armadillo
NCBI Protein Information	catenin beta-1
UniProt Protein Name	Catenin beta-1
UniProt Gene Name	CTNNB1
UniProt Synonym Gene Names	CTNNB
UniProt Entry Name	CTNB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.