β-Catenin monoclonal antibody (12F7)

β-Catenin, a vertebrate homologue of *Drosophila armadillo* encoded by the CTNNB1 gene, performs two functions in the cell: mediating cell-cell adhesion by association between E-cadherin and the cytoskeleton, and acting as a downstream transcriptional activator of Wnt signaling, a key player in such functions as embryonic development, the induction of cell polarity, and the determination of cell fate. In the absence of Wnt signaling, glycogen synthase kinase-3β (GSK-3β) phosphorylates any free β-catenin at the amino terminus. This results in adenomatous polyposis coli tumor suppressor protein (APC)-mediated β-catenin degradation via the ubiquitin-proteosome pathway. Wnt signaling stabilizes β-catenin by inhibiting the activity of GSK-3β and preventing β-catenin degradation. β-catenin forms complexes with DNA-binding proteins such as T-cell factor (Tcf) and lymphocyte-enhancer factor (Lef), which promote expression of a variety of target genes, including c-myc and cyclin D1.

This antibody is covered by our Worry-Free Guarantee.

Citations: 2 View Online »

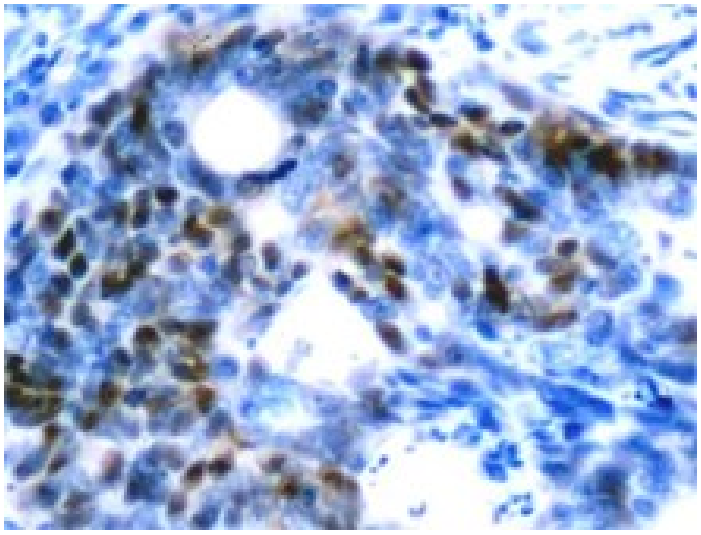
Ordering Information

Order Online »

ADI-KAM-ST001-E	100µg

Manuals, SDS & CofA

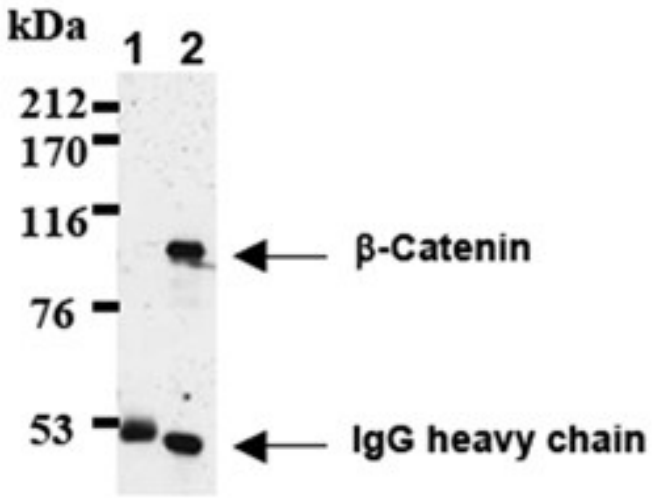
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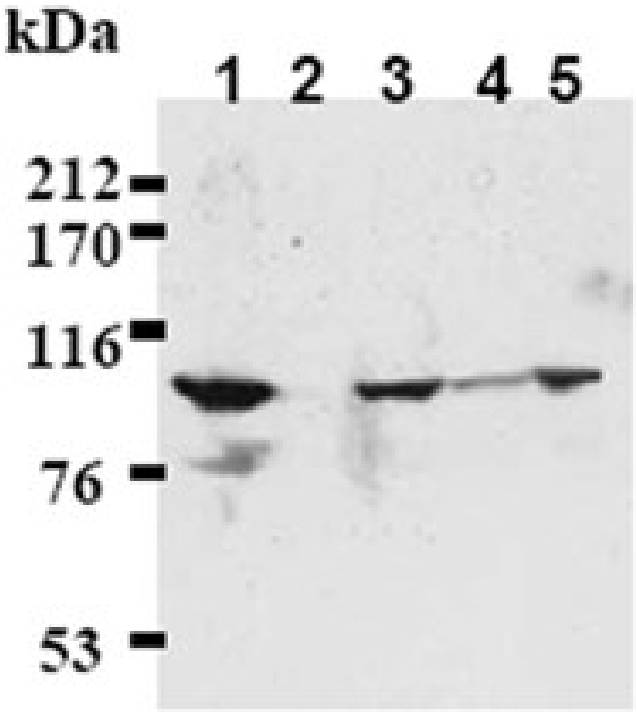
Immunohistochemical detection of colorectal cancer β-catenin on paraffin embedded sections with β-catenin mAb (12F7).



Immunohistochemical detection of gastric epithelium β-catenin on paraffin embedded sections with β-Catenin mAb (12F7).



Immunoprecipitation of Rat-1 cells with normal mouse IgG (1) or β-catenin mAb (12F7 (2). After immunoprecipitated with the antibody, immunocomplex was resolved on SDS-PAGE and immunoblotted with β-catenin mAb (12F7).



Western blot analysis of A431 cells (1), Hela cells (2), NIH/3T3 cells (3), C2C12 cells (4) and Rat-1 cells (5) probed with β-catenin mAb (12F7)

Handling & Storage

Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	CTNNB
Application	IHC, IP, WB
Application Notes	Detects bands of ~97kDa by Western blot.
Clone	12F7
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol.
Host	Mouse
Immunogen	Recombinant β-catenin (N-terminal fragment).
Isotype	IgG1
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	Immunohistochemistry (1-5µg/ml)Immunoprecipitation (2µg/200-300µl cell extract)Western Blot (1µg/ml, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Species Reactivity	Human, Mouse, Rat
UniProt ID	P35222 (human), Q02248 (mouse), Q9WU82 (rat)
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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