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## anti-CTNNA1 antibody (AA 729-906)

3 Images



**Publications** 



Go to Product page

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Quantity:	150 μg
Target:	CTNNA1
Binding Specificity:	AA 729-906
Reactivity:	Human, Mouse, Rat, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CTNNA1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP)

#### **Product Details**

Immunogen:	Mouse alpha-Catenin aa. 729-906
Clone:	5-a
Isotype:	lgG1
Cross-Reactivity:	Human, Chicken, Dog (Canine), Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
	2. Please refer to us for technical protocols.
	3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide
	compounds in running water before discarding to avoid accumulation of potentially explosive
	deposits in plumbing.
	4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

chromatography.

### Target Details

Target:	CTNNA1
Alternative Name:	alpha-Catenin (CTNNA1 Products)
Background:	The catenins (alpha-, beta-, and gamma-) are cytoplasmic proteins that bind to the highly
	conserved cytoplasmic tail of E-Cadherin. The cadherins, transmembrane adhesion molecules,
	are found with catenins at adherens junctions (zonula adherens). These junctions are critical
	for cell-cell adhesion, signal transmission between neighboring cells, and for the anchoring of
	the actin cytoskeleton. alpha-Catenin (CAP102) shows homology to vinculin, while beta-Catenin
	is similar to plakoglobin or the Drosophila armadillo gene product. alpha-Catenin was identified
	as an E-Cadherin-associated protein, however, it also appears to interact with other cadherin
	family members. There are at least two subtypes of alpha-Catenin: alphaE-Catenin and alphaN-
	Catenin. The predominant form is known as alphaE-Catenin. It is ubiquitously expressed, but at
	low levels in the nervous system. The expression of alphaN-Catenin is more restricted and this
	form predominates in the brain. Increased tyrosine phosphorylation of adherens junction
	proteins can disrupt catenin-cadherin complexes, leading to changes in cell adhesion
	properties. It has been noted that down-regulation of this group of proteins often precedes
	metastasis. In fact, data suggests a correlation between deletions within the alpha-Catenin
	gene and the development of prostate cancer. This antibody is routinely tested by western blot
	analysis.
Molecular Weight:	102 kDa
Pathways:	Regulation of Muscle Cell Differentiation, Cell-Cell Junction Organization, Maintenance of
	Protein Location
Application Details	
Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	250 μg/mL

#### Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

#### **Publications**

Product cited in:

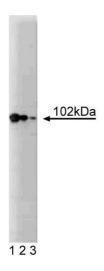
Baki, Marambaud, Efthimiopoulos, Georgakopoulos, Wen, Cui, Shioi, Koo, Ozawa, Friedrich, Robakis: "Presenilin-1 binds cytoplasmic epithelial cadherin, inhibits cadherin/p120 association, and regulates stability and function of the cadherin/catenin adhesion complex." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 98, Issue 5, pp. 2381-6, (2001) (PubMed).

Giannini, Vivanco, Kypta: "alpha-catenin inhibits beta-catenin signaling by preventing formation of a beta-catenin\*T-cell factor\*DNA complex." in: **The Journal of biological chemistry**, Vol. 275, Issue 29, pp. 21883-8, (2000) (PubMed).

Huan, van Adelsberg: "Polycystin-1, the PKD1 gene product, is in a complex containing E-cadherin and the catenins." in: **The Journal of clinical investigation**, Vol. 104, Issue 10, pp. 1459-68, (1999) (PubMed).

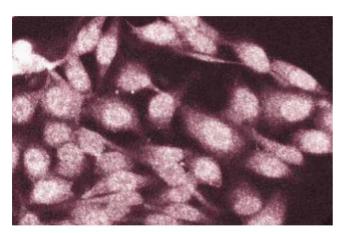
Hirano, Kimoto, Shimoyama, Hirohashi, Takeichi: "Identification of a neural alpha-catenin as a key regulator of cadherin function and multicellular organization." in: **Cell**, Vol. 70, Issue 2, pp. 293-301, (1992) (PubMed).

Herrenknecht, Ozawa, Eckerskorn, Lottspeich, Lenter, Kemler: "The uvomorulin-anchorage protein alpha catenin is a vinculin homologue." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 88, Issue 20, pp. 9156-60, (1991) (PubMed).



#### **Western Blotting**

**Image 1.** Western blot analysis of alpha-Catenin on a human endothelial cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti- alpha-Catenin antibody.



#### **Immunofluorescence**

Image 2. Immunofluorescence staining of HeLa cells.

#### Image 3.

