

## Anti-Catenin-alpha antibody



**Description** Rabbit polyclonal to Catenin-alpha1.

Model STJ92035

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC

Immunogen Synthesized peptide derived from human Catenin-alpha1 around the non-

phosphorylation site of S641.

**Immunogen Region** 580-660 aa

**Gene ID** <u>1495</u>

Gene Symbol CTNNA1

**Dilution range** IHC 1:100-1:300ELISA 1:5000

Specificity Catenin-alpha1 Polyclonal Antibody detects endogenous levels of Catenin-

alpha1 protein.

**Tissue Specificity** Expressed ubiquitously in normal tissues.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Catenin alpha-1 Alpha E-catenin Cadherin-associated protein Renal

carcinoma antigen NY-REN-13

Molecular Weight 100.071 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:2509OMIM:116805

Alternative Names Catenin alpha-1 Alpha E-catenin Cadherin-associated protein Renal

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**Function** Associates with the cytoplasmic domain of a variety of cadherins. The

association of catenins to cadherins produces a complex which is linked to the actin filament network, and which seems to be of primary importance for cadherins cell-adhesion properties. Can associate with both E- and N-

cadherins. Originally believed to be a stable component of E-cadherin/catenin adhesion complexes and to mediate the linkage of cadherins to the actin cytoskeleton at adherens junctions. In contrast, cortical actin was found to be much more dynamic than E-cadherin/catenin complexes and CTNNA1 was shown not to bind to F-actin when assembled in the complex suggesting a different linkage between actin and adherens junctions components. The homodimeric form may regulate actin filament assembly and inhibit actin branching by competing with the Arp2/3 complex for binding to actin

filaments. May play a crucial role in cell differentiation.

**Cellular Localization** Isoform 1: Cytoplasm, cytoskeleton. Cell junction, adherens junction. Cell

membrane. Peripheral membrane protein. Cytoplasmic side. Cell junction. Found at cell-cell boundaries and probably at cell-matrix boundaries.. Isoform

3: Cell membrane

Post-translational

**Modifications** 

Sumoylated. Phosphorylation seems to contribute to the strength of cell-cell

adhesion rather than to the basic capacity for cell-cell adhesion.

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