

# Catenin alpha 1 Antibody

Rabbit mAb Catalog # AP90650

### **Product Information**

**Application** WB, IHC, IF, FC, ICC, IP, IHF

**Primary Accession** P35221

Reactivity Rat, Human, Mouse

Clonality Monoclonal

**Other Names** 102 kDa cadherin-associated protein; Alpha E-catenin; CATNA1; CTN1;

Cadherin-associated protein; catenin alpha-1; Catenin alpha 1;

Isotype Rabbit IgG Host Rabbit Calculated MW 100071

#### **Additional Information**

Dilution WB 1:10000~1:20000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human Catenin alpha 1

**Description** Adherens junctions are dynamic structures that form cell-cell contacts and

> are important in development, differentiation, tissue integrity, morphology and cell polarity. They are composed of the transmembrane proteins, cadherins, which bind cadherins on adjacent cells in a calcium-dependent

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Name CTNNA1 ( HGNC:2509)

**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. Involved in the regulation of WWTR1/TAZ, YAP1 and TGFB1- dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). May play a crucial role in cell differentiation.

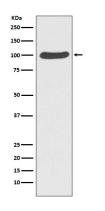
#### **Cellular Location**

Cytoplasm, cytoskeleton {ECO:0000250 | UniProtKB:P26231}. Cell junction, adherens junction. Cell membrane {ECO:0000250 | UniProtKB:P26231}; Peripheral membrane protein; Cytoplasmic side {ECO:0000250 | UniProtKB:P26231}. Cell junction Cytoplasm {ECO:0000250 | UniProtKB:Q9PVF8}. Nucleus. Note=Found at cell-cell boundaries and probably at cell-matrix boundaries. {ECO:0000250 | UniProtKB:P26231}

**Tissue Location** 

[Isoform 1]: Ubiquitously expressed in normal tissues.

## **Images**



Western blot analysis of Catenin alpha 1 expression in HeLa cell lysate.

Image not found: 202311/AP90650-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human lung cancer, using Catenin alpha 1 Antibody.

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