

Catenin alpha 1 Antibody

Rabbit mAb Catalog # AP90650

Specification

Catenin alpha 1 Antibody - Product Information

Application WB, IHC, FC, ICC, IP

Primary Accession P35221
Reactivity Rat

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 Da

Catenin alpha 1 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A

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 manner.

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.

Catenin alpha 1 Antibody - 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

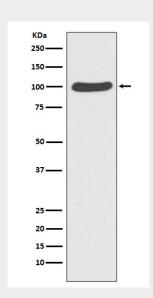
[Isoform 1]: Ubiquitously expressed in normal tissues.

Catenin alpha 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Catenin alpha 1 Antibody - Images



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