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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

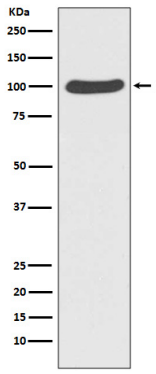
Dilution	WB 1:10000~1:20000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Catenin alpha 1
Description	Adherens junctions are dynamic structures that form cell-cell contacts and are important in development, differentiation, tissue integrity, morphology and cell polarity. They are composed of the transmembrane proteins, cadherins, which bind cadherins on adjacent cells in a calcium-dependent 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.

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 (PubMed:40983751). 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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