

KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1177

Product Information

Application	WB, FC, ICC
Primary Accession	P35221
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB3335
Calculated MW	100071
Gene Name	CTNNA1
Aliases	CTNNA1; Catenin Alpha 1; CAP102; Renal Carcinoma Antigen NY-REN-13; Alpha-E-Catenin; Catenin Alpha-1; Catenin (Cadherin-Associated Protein), Alpha 1 (102kD); Catenin (Cadherin-Associated Protein), Alpha 1, 102kDa; Epididymis Secretory Sperm Binding Protein; Cadherin-Associated Protein; Alpha E-Catenin; MDBS2; MDPT2
Immunogen	A synthesized peptide derived from human alpha 1 Catenin

Additional Information

Gene ID	1495
Other Names	Catenin alpha-1 {ECO:0000312 HGNC:HGNC:2509}, Alpha E-catenin {ECO:0000312 HGNC:HGNC:2509}, Cadherin-associated protein {ECO:0000312 HGNC:HGNC:2509}, Renal carcinoma antigen NY-REN-13, CTNNA1 (HGNC:2509)

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.

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