

KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1177**Specification****KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	P35221
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 100 kDa , observed, 100 kDa kDa
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

KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody - 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)	

KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal 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

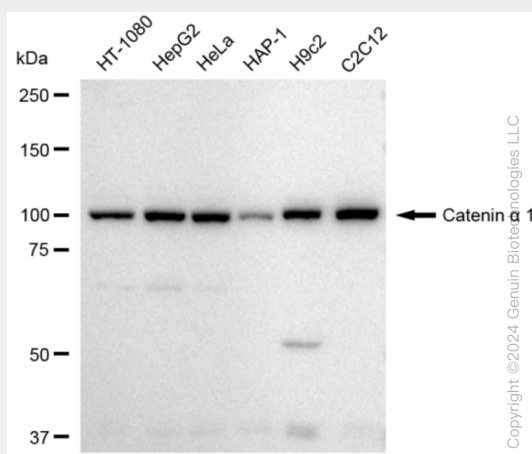
[Isoform 1]: Ubiquitously expressed in normal tissues.

KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody - Protocols

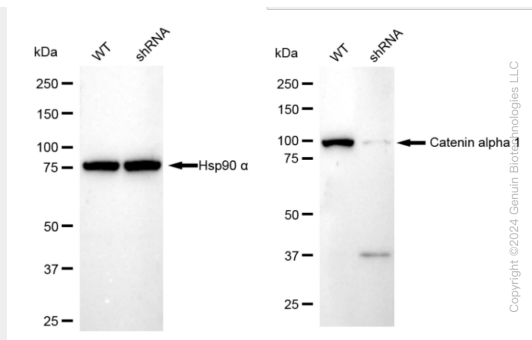
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

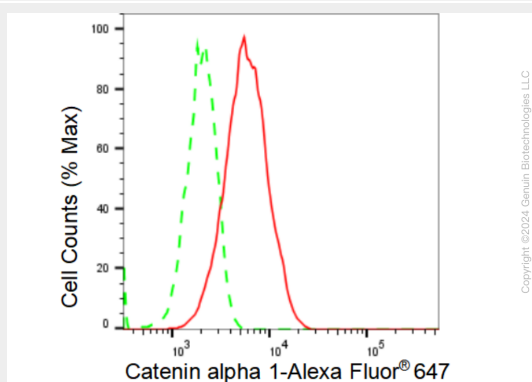
KD-Validated Anti-Catenin alpha 1 Rabbit Monoclonal Antibody - Images



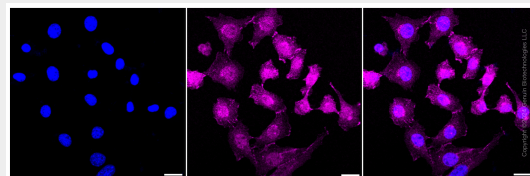
Western blotting analysis using anti-Catenin alpha 1 antibody (Cat#AGI1177). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Catenin alpha 1 antibody (Cat#AGI1177, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Catenin alpha 1 antibody (Cat#AGI1177). Catenin alpha 1 expression in wild type (WT) and Catenin alpha 1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Catenin alpha 1 antibody (Cat#AGI1177, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Catenin alpha 1 expression in C2C12 cells using Catenin alpha 1 antibody (Cat#AGI1177, 1:2,000). Green, isotype control; red, Catenin alpha 1.



Immunocytochemical staining of C2C12 cells with Catenin alpha 1 antibody (Cat#AGI1177, 1:1,000). Nuclei were stained blue with DAPI; Catenin alpha 1 was stained magenta with Alexa Fluor 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.