

ARG58521 anti-alpha 1 Catenin antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha 1 Catenin
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha 1 Catenin
Species	Human
Immunogen	Human CTNNA1 recombinant protein (Position: D143-D292). Human CTNNA1 shares 98% amino acid (aa) sequence identity with Mouse CTNNA1.
Conjugation	Un-conjugated
Alternate Names	Catenin alpha-1; Renal carcinoma antigen NY-REN-13; Cadherin-associated protein; CAP102; Alpha E-catenin

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml

Application Note
IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

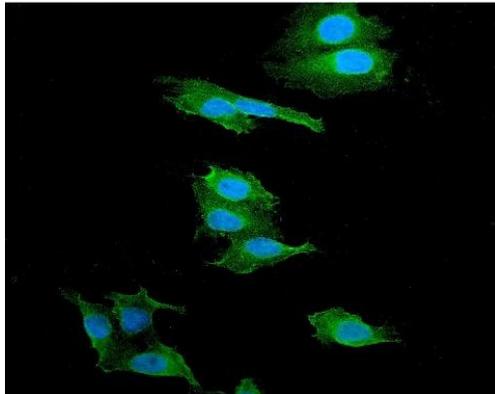
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

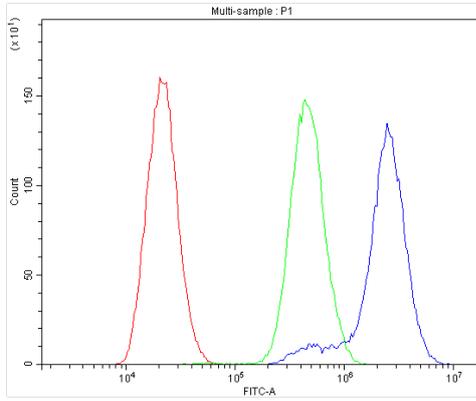
Gene Symbol	CTNNA1
Gene Full Name	catenin (cadherin-associated protein), alpha 1, 102kDa
Function	Associates with the cytoplasmic domain of a variety of cadherins. The association of catenins to cadherins produces a complex which is linked to the actin filament network, and which seems to be of primary 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. May play a crucial role in cell differentiation. [UniProt]
Calculated Mw	100 kDa
PTM	Sumoylated. Phosphorylation seems to contribute to the strength of cell-cell adhesion rather than to the basic capacity for cell-cell adhesion. [UniProt]
Cellular Localization	Isoform 1: Cytoplasm, cytoskeleton. Cell junction, adherens junction. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction. Found at cell-cell boundaries and probably at cell-matrix boundaries. [UniProt]

Images



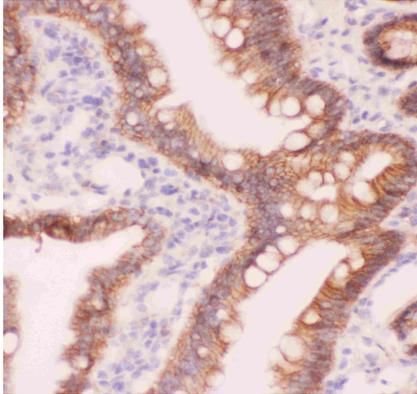
ARG58521 anti-alpha 1 Catenin antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG58521 anti-alpha 1 Catenin antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



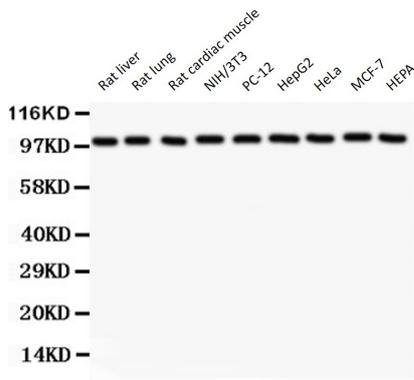
ARG58521 anti-alpha 1 Catenin antibody FACS image

Flow Cytometry: U-87 cells were blocked with 10% normal goat serum, and then stained with ARG58521 anti-alpha 1 Catenin antibody (blue) at 1 $\mu\text{g}/10^6$ cells for 30 min at 20°C, followed by DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 $\mu\text{g}/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



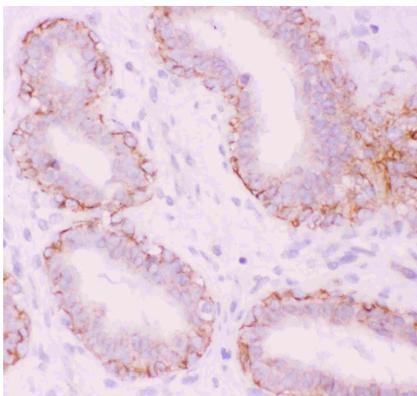
ARG58521 anti-alpha 1 Catenin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat intestine tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58521 anti-alpha 1 Catenin antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



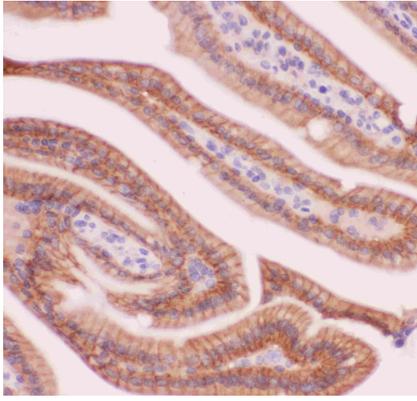
ARG58521 anti-alpha 1 Catenin antibody WB image

Western blot: 50 μg of samples under reducing conditions. Rat liver, Rat lung, Rat cardiac muscle, NIH/3T3, PC-12, HepG2, HeLa, MCF-7 and HEPA whole cell lysates stained with ARG58521 anti-alpha 1 Catenin antibody at 0.5 $\mu\text{g}/\text{ml}$, overnight at 4°C.



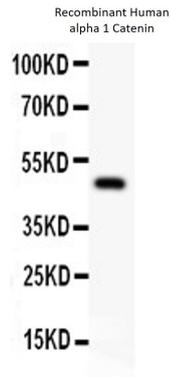
ARG58521 anti-alpha 1 Catenin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58521 anti-alpha 1 Catenin antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



ARG58521 anti-alpha 1 Catenin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse intestine tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58521 anti-alpha 1 Catenin antibody at 1 $\mu\text{g/ml}$ dilution, overnight at 4°C.



ARG58521 anti-alpha 1 Catenin antibody WB image

Western blot: 0.5 ng of Recombinant Human alpha 1 Catenin Protein stained with ARG58521 anti-alpha 1 Catenin antibody at 0.5 $\mu\text{g/ml}$, overnight at 4°C.