

Rabbit alpha 1 Catenin Polyclonal Antibody | anti-CTNNA1 antibody

Phospho-alpha 1 Catenin (Ser641) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329672	Rabbit	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

alpha 1 Catenin; Polyclonal Antibody; Phospho-alpha 1 Catenin (Ser641) Antibody; Alpha E-catenin; Cadherin associated protein 102kDa; Cadherin associated protein; Cadherin-associated protein; CAP 102; CAP102; Catenin (cadherin associated protein) alpha 1 102kDa; Catenin (cadherin associated protein); alpha 1; 102kDa; Catenin alpha 1; Catenin alpha-1; CTNA1_HUMAN; CTNNA 1; Ctnna1; FLJ36832; FLJ52416; MDPT2; NY REN 13 antigen; OTTHUMP00000224141; OTTHUMP00000224147; Renal carcinoma antigen NY REN 13; Renal carcinoma antigen NY-REN-13; anti-CTNNA1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-alpha 1 Catenin (Ser641) Antibody detects endogenous levels of alpha 1 Catenin only when phosphorylated at Ser641. Tissue Specificity: Expressed ubiquitously in normal tissues.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CTNNA1 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Catenin-alpha1 around the phosphorylation site of Ser641.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Sumoylated. Phosphorylation seems to contribute to the strength of cell-cell adhesion rather than to the basic capacity for cell-cell adhesion.
Subunit Structure	Monomer and homodimer; the monomer preferentially binds to CTNNB1 and the homodimer to actin. Binds AFDN and F-actin. Possible component of an E-cadherin/ catenin adhesion complex together with E-cadherin/CDH1 and beta-catenin/CTNNB1 or gamma-catenin/JUP; the complex is located to adherens junctions. The stable association of CTNNA1 is controversial as CTNNA1 was shown not to bind to F-actin when assembled in the complex. Alternatively, the CTNNA1-containing complex may be linked to F-actin by other proteins such as LIMA1. Interacts with ARHGAP21 and with AJUBA. Interacts with LIMA1 (By similarity). Interacts with vinculin/VCL. Component of an cadherin:catenin adhesion complex composed of at least of CDH26, beta-catenin/CTNNB1, alpha-catenin/CTNNA1 and p120 catenin/CTNND1.
Similarity	Belongs to the vinculin/alpha-catenin family.

Subcellular Location	Cytoplasm>Cytoskeleton. Cell junction>Adherens junction. Cell membrane>Peripheral membrane protein>Cytoplasmic side. Cell junction. Note: Found at cell-cell boundaries and probably at cell-matrix boundaries.Cell membrane>Peripheral membrane protein>Cytoplasmic side.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

At 1/200 staining Human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemisry)

At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)

Staining Rat spleen tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Catenin-1±1 (Phospho-Ser641) using EPO treated COS7 whole cell lysates.-/+ means absence or presence of N peptide1/4non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-CTNNA1 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	55770844
NCBI GeneID	1495
NCBI Accession #	NP_001894.2
NCBI GenBank Nucleotide #	NM_001903.2
UniProt Accession #	P35221; Q12795
Molecular Weight	100,071 Da

NCBI Official Full Name	catenin alpha-1
NCBI Official Synonym Full Names	catenin (cadherin-associated protein), alpha 1, 102kDa
NCBI Official Symbol	CTNNA1
NCBI Official Synonym Symbols	CAP102
NCBI Protein Information	catenin alpha-1; alpha-catenin; alphaE-catenin; alpha E-catenin; alpha-E-catenin; renal carcinoma antigen NY-REN-13; cadherin-associated protein,102kDa
UniProt Protein Name	Catenin alpha-1
UniProt Gene Name	CTNNA1
UniProt Entry Name	CTNA1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/alpha-1-catenin-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/329672>