

Rabbit alpha 1 Catenin Polyclonal Antibody | anti-CTNNA1 antibody

Phospho-alpha 1 Catenin (Ser655/Thr658) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31319	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

alpha 1 Catenin; Polyclonal Antibody; Phospho-alpha 1 Catenin (Ser655/Thr658) 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
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-alpha 1 Catenin (Ser655/Thr658) Antibody detects endogenous levels of alpha 1 Catenin only when phosphorylated at Ser655/Thr658. 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	WB (Western Blot), IHC (Immunohistochemistry), ELISA (Peptide ELISA)
Application Notes	IHC: 1:50-1:200 WB: 1:500-1:2000 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human alpha 1 Catenin around the phosphorylation site of Ser655/Thr658.
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



IHC (Immunohistochemistry)
At 1/100 staining Human ovarian cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



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IHC (Immunohistochemistry)
At 1/100 staining Mouse stomach tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Mouse colorectal tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
Staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from Rat heart, using Phospho-alpha 1 Catenin (Ser655/Thr658) Antibody. The lane on the left was treated with blocking 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-western-blot-immunohistochemistry-peptide-elisa-elisa/31319>