

## Rabbit CTNNA1 Polyclonal Antibody | anti-CTNNA1 antibody

CTNNA1 Antibody

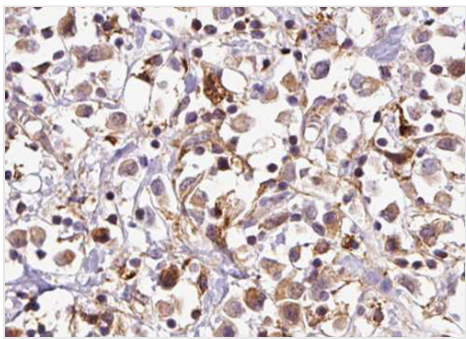
| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                              |
|-----------|--------|-------------------|-------------------------------------------|
| AAA327127 | Rabbit | Human, Mouse, Rat | ELISA, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

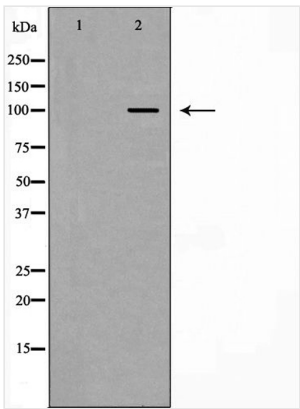
CTNNA1; Polyclonal Antibody; CTNNA1 Antibody; Alpha E-catenin; Cadherin associated protein 102kDa; Cadherin associated protein; Cadherin-associated protein; CAP 102; CAP102; Catenin (cadherin associated protein) alpha 1 102kDa; Catenin (cadherin associated protein); alpha 1; 102kDa; Catenin alpha 1; 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                                          | IgG                                                                                                                                                                                   |
| Specificity                                      | CTNNA1 antibody detects endogenous levels of total CTNNA1                                                                                                                             |
| Purity/Purification                              | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                                                                                         |
| Form/Format                                      | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                         |
| Concentration                                    | 1mg/ml (varies by lot)                                                                                                                                                                |
| Sequence Length                                  | 841                                                                                                                                                                                   |
| Applicable Applications for anti-CTNNA1 antibody | ELISA, IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                  |
| Immunogen                                        | A synthesized peptide derived from human CTNNA1                                                                                                                                       |
| Subcellular Location                             | Cell Membrane and Cytoplasm > Cytoskeleton. Cell Junction > Adherens Junction. Cell Membrane. Cell Junction.<br>Found at cell-cell boundaries and probably at cell-matrix boundaries. |
| Tissue Specificity                               | Expressed ubiquitously in normal tissues.                                                                                                                                             |
| Conjugation                                      | Unconjugated                                                                                                                                                                          |
| Preparation and Storage                          | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                     |



**IHC (Immunohistochemistry)**  
AAA327127 at 1/100 staining Human breast cancer 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 antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**WB (Western Blot)**  
Western blot analysis of Hela whole cell lysates, using CTNNA1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CTNNA1 antibody

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.

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 (PubMed:26691986).

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.

Similarity: Belongs to the vinculin/alpha-catenin family.

NCBI AND UNIPROT INFORMATION

|                                  |                                         |
|----------------------------------|-----------------------------------------|
| NCBI GI #                        | 594140506                               |
| NCBI GeneID                      | 1495                                    |
| NCBI Accession #                 | NP_001277236.1                          |
| NCBI GenBank Nucleotide #        | NM_001290307.2                          |
| UniProt Accession #              | P35221; Q12795; Q8N1C0                  |
| Molecular Weight                 | Observed: 100 kDa<br>Predicted: 101 kDa |
| NCBI Official Full Name          | catenin alpha-1 isoform 2               |
| NCBI Official Synonym Full Names | catenin alpha 1                         |
| NCBI Official Symbol             | CTNNA1                                  |
| NCBI Official Synonym Symbols    | MDPT2; CAP102                           |

|                          |                 |
|--------------------------|-----------------|
| NCBI Protein Information | catenin alpha-1 |
| UniProt Protein Name     | Catenin alpha-1 |
| UniProt Gene Name        | CTNNA1          |

**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/ctnna1-antibody-immunohistochemistry-western-blot-elisa/327127>