

Catenin alpha 1/2 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51125

Specification

Catenin alpha 1/2 Antibody - Product Information

Application	WB
Primary Accession	P35221
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	102 KDa
Antigen Region	841 - 900

Catenin alpha 1/2 Antibody - Additional Information

Gene ID 1495

Other Names

Catenin alpha-1, Alpha E-catenin, Cadherin-associated protein, Renal carcinoma antigen NY-REN-13, CTNNA1

Target/Specificity

KLH conjugated synthetic peptide derived from human Catenin alpha 1/2

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Catenin alpha 1/2 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

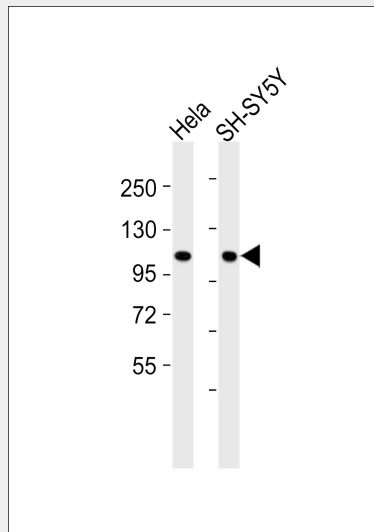
[Isoform 1]: Ubiquitously expressed in normal tissues.

Catenin alpha 1/2 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](#)

Catenin alpha 1/2 Antibody - Images



All lanes : Anti-Catenin alpha 1/2 Antibody at 1:1000 dilution Lane 1: HeLa whole cell lysates Lane 2: SH-SY5Y whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

Catenin alpha 1/2 Antibody - Background

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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.

Catenin alpha 1/2 Antibody - References

- Furukawa Y., et al. *Cytogenet. Cell Genet.* 65:74-78(1994).
Oda T., et al. *Biochem. Biophys. Res. Commun.* 193:897-904(1993).
Rimm D.L., et al. *Biochem. Biophys. Res. Commun.* 203:1691-1699(1994).
Kask M., et al. *Biochem. Biophys. Res. Commun.* 411:56-61(2011).
Nollet F.H., et al. Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.