

**Catenin- $\alpha$ 1 Polyclonal Antibody**  
Catalog # AP68853**Specification****Catenin- $\alpha$ 1 Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P35221</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Catenin- $\alpha$ 1 Polyclonal Antibody - Additional Information****Gene ID** 1495**Other Names**

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

**Dilution**

IHC~~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Catenin- $\alpha$ 1 Polyclonal 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

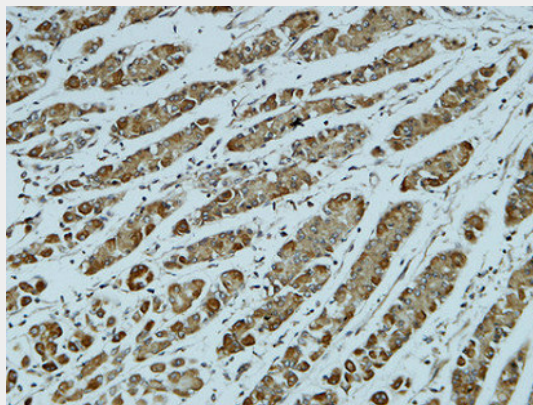
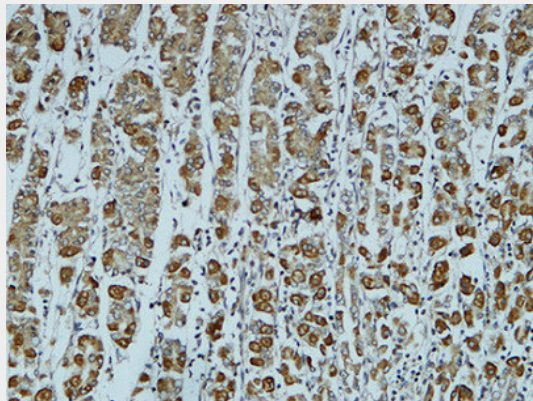
[Isoform 1]: Ubiquitously expressed in normal tissues.

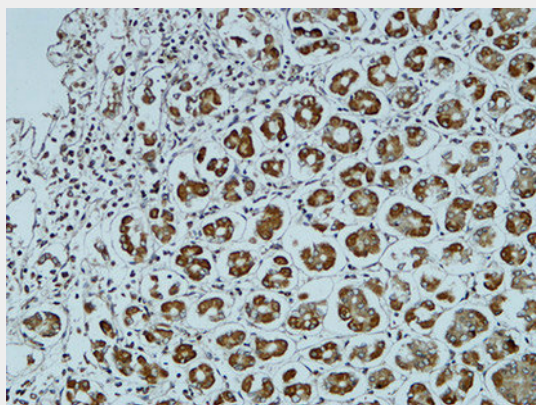
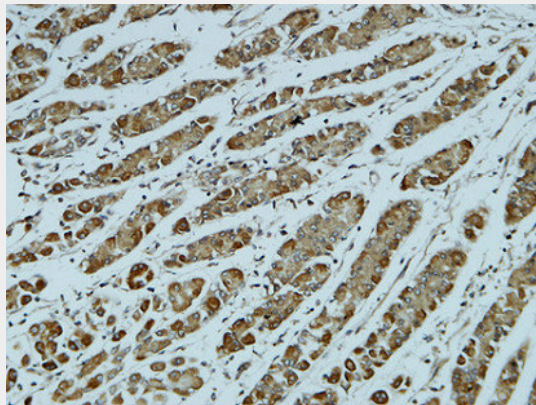
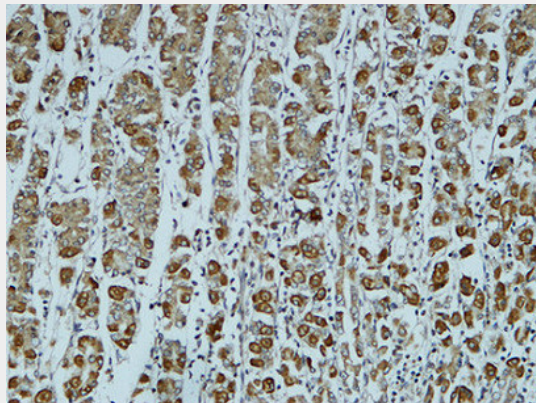
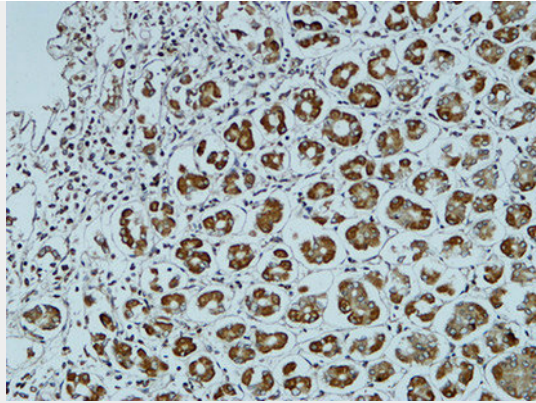
#### Catenin- $\alpha$ 1 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images





## **Catenin- $\alpha$ 1 Polyclonal Antibody - Background**

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.