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Goat Anti-Catenin alpha1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1196a

Specification

Goat Anti-Catenin alpha1 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	P35221
Other Accession	NP_001894, 1495, 12385 (mouse), 307505 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**100071**

Goat Anti-Catenin alpha1 Antibody - Additional Information

Gene ID 1495

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

Dilution
WB~~1:1000
IHC~~1:100~500
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Catenin alpha1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Catenin alpha1 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.

Goat Anti-Catenin alpha1 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 Cytomety
- Cell Culture

Goat Anti-Catenin alpha1 Antibody - Images

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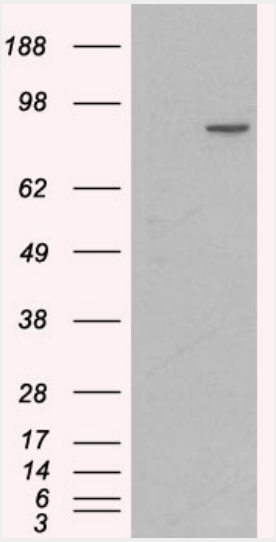
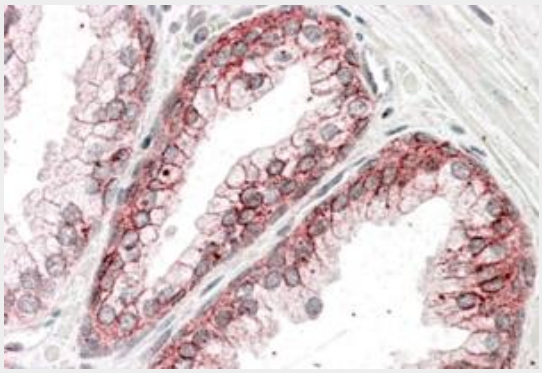
AF1196a (1 µg/ml) staining of human colon lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing Human CTNNA1 (RC201766) and probed with AF1196a (mock transfection in first lane), tested by Origene.



AF1196a (3.8 µg/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-Catenin alpha1 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Expression of the E-cadherin-catenin complex in patients with pancreatic ductal adenocarcinoma. Pryczynicz A, et al. Folia Histochem Cytobiol, 2010 Jan 1. PMID 20529828.
The expression of E-cadherin-catenin complex in patients with advanced gastric cancer: role in formation of metastasis. Czyzewska J, et al. Folia Histochem Cytobiol, 2010 Jan 1. PMID 20529814.
An evolutionarily conserved PTEN-C/EBPalpha-CTNNA1 axis controls myeloid development and transformation. Fu CT, et al. Blood, 2010 Jun 10. PMID 20371743.
Vascular endothelial-cadherin stabilizes at cell-cell junctions by anchoring to circumferential actin bundles through alpha- and beta-catenins in cyclic AMP-Epac-Rap1 signal-activated endothelial cells. Noda K, et al. Mol Biol Cell, 2010 Feb 15. PMID 20032304.