

# CTNA1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6582b

# Specification

# CTNA1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

## <u>P35221</u>

# CTNA1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1495

#### Other Names Catenin alpha-1, Alpha E-cat

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

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6582b>AP6582b</a> was selected from the C-term region of human CTNA1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# CTNA1 Antibody (C-term) Blocking Peptide - 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.

## **CTNA1 Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

CTNA1 Antibody (C-term) Blocking Peptide - Images

## CTNA1 Antibody (C-term) Blocking Peptide - Background

CTNA1 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. The protein may play a crucial role in cell differentiation.

### CTNA1 Antibody (C-term) Blocking Peptide - References

Inge,L.J., Mol. Cancer Ther. 7 (6), 1386-1397 (2008)Merdek,K.D., Biochem. Biophys. Res. Commun. 366 (3), 717-723 (2008)