

#### Catenin delta-1

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22436a

# **Specification**

## Catenin delta-1 - Product Information

Application WB,E
Primary Accession O60716
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit Ig
Calculated MW 108170

# Catenin delta-1 - Additional Information

## **Gene ID 1500**

#### **Other Names**

Catenin delta-1, Cadherin-associated Src substrate, CAS, p120 catenin, p120(ctn), p120(cas), CTNND1, KIAA0384

# **Target/Specificity**

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.

### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

### **Precautions**

Catenin delta-1 is for research use only and not for use in diagnostic or therapeutic procedures.

# Catenin delta-1 - Protein Information

Name CTNND1 (HGNC:2515)

Synonyms KIAA0384

Function Key regulator of cell-cell adhesion that associates with and regulates the cell adhesion



properties of both C-, E- and N-cadherins, being critical for their surface stability (PubMed:14610055, PubMed:20371349). Promotes localization and retention of DSG3 at cell-cell junctions, via its interaction with DSG3 (PubMed:18343367). Beside cell-cell adhesion, regulates gene transcription through several transcription factors including ZBTB33/Kaiso2 and GLIS2, and the activity of Rho family GTPases and downstream cytoskeletal dynamics (PubMed:10207085, PubMed:20371349). Implicated both in cell transformation by SRC and in ligand-induced receptor signaling through the EGF, PDGF, CSF-1 and ERBB2 receptors (PubMed:17344476).

# **Cellular Location**

Cell junction, adherens junction. Cytoplasm. Nucleus. Cell membrane. Cell junction. Note=Interaction with GLIS2 promotes nuclear translocation (By similarity). Detected at cell-cell contacts (PubMed:15240885, PubMed:17047063). NANOS1 induces its translocation from sites of cell-cell contact to the cytoplasm (PubMed:17047063). CDH1 enhances cell membrane localization (PubMed:15240885). Localizes to cell-cell contacts as keratinocyte differentiation progresses (By similarity) {ECO:0000250|UniProtKB:P30999, ECO:0000269|PubMed:11896187, ECO:0000269|PubMed:15240885, ECO:0000269|PubMed:17047063} [Isoform 2A]: Nucleus [Isoform 4A]: Cytoplasm

#### **Tissue Location**

Expressed in vascular endothelium. Melanocytes and melanoma cells primarily express the long isoform 1A, whereas keratinocytes express shorter isoforms, especially 3A. The shortest isoform 4A, is detected in normal keratinocytes and melanocytes, and generally lost from cells derived from squamous cell carcinomas or melanomas. The C-terminal alternatively spliced exon B is present in the p120ctn transcripts in the colon, intestine and prostate, but lost in several tumor tissues derived from these organs

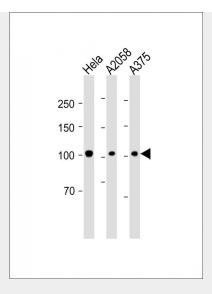
## Catenin delta-1 - Protocols

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

# Catenin delta-1 - Images





All lanes: Anti-Catenin delta-1 at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: A2058 whole cell lysate Lane 3: A375 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 108 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

# Catenin delta-1 - Background

Key regulator of cell-cell adhesion that associates with and regulates the cell adhesion properties of both C-, E- and N-cadherins, being critical for their surface stability (PubMed:14610055, PubMed:20371349). Beside cell-cell adhesion, regulates gene transcription through several transcription factors including ZBTB33/Kaiso2 and GLIS2, and the activity of Rho family GTPases and downstream cytoskeletal dynamics (PubMed:10207085, PubMed:20371349). Implicated both in cell transformation by SRC and in ligand-induced receptor signaling through the EGF, PDGF, CSF-1 and ERBB2 receptors (PubMed:17344476).

### Catenin delta-1 - References

Keirsebilck A., et al. Genomics 50:129-146(1998). Nagase T., et al. DNA Res. 4:141-150(1997). Ota T., et al. Nat. Genet. 36:40-45(2004). Taylor T.D., et al. Nature 440:497-500(2006). Kim L., et al. Mol. Cell. Biol. 15:4553-4561(1995).