

HUMAN-CTNND1_isform 2ABC(Y174) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20722b

Product Information

Application WB, E **Primary Accession** 060716

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB47366Calculated MW108170

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 160-200 amino acids from human.

Dilution WB~~1:1000 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 HUMAN-CTNND1_isform 2ABC(Y174) Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

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:<u>18343367</u>). 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:<u>10207085</u>, PubMed:<u>20371349</u>). Implicated both in cell transformation by SRC and in ligand-induced receptor signaling through the EGF, PDGF, CSF-1 and ERBB2 receptors (PubMed:<u>17344476</u>).

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

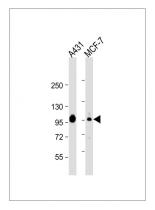
Background

Binds to and inhibits the transcriptional repressor ZBTB33, which may lead to activation of target genes of the Wnt signaling pathway (By similarity). Associates with and regulates the cell adhesion properties of both C-, E- and N-cadherins, being critical for their surface stability. Implicated both in cell transformation by SRC and in ligand-induced receptor signaling through the EGF, PDGF, CSF-1 and ERBB2 receptors. Promotes GLIS2 C-terminal cleavage.

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).

Images



All lanes: Anti-HUMAN-CTNND1_isform 2ABC(Y174) Antibody at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 108 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.