

**Anti-APPL Antibody**  
**Catalog # ABO10713****Specification**

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**Anti-APPL Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q9UKG1</a> |
| Host              | Rabbit                 |
| Reactivity        | Human, Mouse, Rat      |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for DCC-interacting protein 13-alpha(APPL1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-APPL Antibody - Additional Information**

**Gene ID** 26060

**Other Names**

DCC-interacting protein 13-alpha, Dip13-alpha, Adapter protein containing PH domain, PTB domain and leucine zipper motif 1, APPL1

**Calculated MW**

79663 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Early endosome membrane; Peripheral membrane protein. Nucleus. Early endosomal membrane-bound and nuclear. Translocated into the nucleus upon release from endosomal membranes following internalization of EGF.

**Tissue Specificity**

High levels in heart, ovary, pancreas and skeletal muscle. .

**Protein Name**

DCC-interacting protein 13-alpha(Dip13-alpha)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human APPL(138-158aa

NDHDAAINRYSRLSKKRENDK), identical to the related mouse and rat sequences.

#### Purification

Immunogen affinity purified.

#### Cross Reactivity

No cross reactivity with other proteins

#### Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

#### Sequence Similarities

Contains 1 PH domain.

### Anti-APPL Antibody - Protein Information

**Name** APPL1 ([HGNC:24035](#))

#### Function

Multifunctional adapter protein that binds to various membrane receptors, nuclear factors and signaling proteins to regulate many processes, such as cell proliferation, immune response, endosomal trafficking and cell metabolism (PubMed:<a href="http://www.uniprot.org/citations/26583432" target="\_blank">26583432</a>, PubMed:<a href="http://www.uniprot.org/citations/15016378" target="\_blank">15016378</a>, PubMed:<a href="http://www.uniprot.org/citations/26073777" target="\_blank">26073777</a>, PubMed:<a href="http://www.uniprot.org/citations/19661063" target="\_blank">19661063</a>, PubMed:<a href="http://www.uniprot.org/citations/10490823" target="\_blank">10490823</a>). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed:<a href="http://www.uniprot.org/citations/15016378" target="\_blank">15016378</a>). Functions as a positive regulator of innate immune response via activation of AKT1 signaling pathway by forming a complex with APPL1 and PIK3R1 (By similarity). Inhibits Fc-gamma receptor-mediated phagocytosis through PI3K/Akt signaling in macrophages (By similarity). Regulates TLR4 signaling in activated macrophages (By similarity). Involved in trafficking of the TGFBR1 from the endosomes to the nucleus via microtubules in a TRAF6-dependent manner (PubMed:<a href="http://www.uniprot.org/citations/26583432" target="\_blank">26583432</a>). Plays a role in cell metabolism by regulating adiponecting and insulin signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/26073777" target="\_blank">26073777</a>, PubMed:<a href="http://www.uniprot.org/citations/19661063" target="\_blank">19661063</a>, PubMed:<a href="http://www.uniprot.org/citations/24879834" target="\_blank">24879834</a>). Required for fibroblast migration through HGF cell signaling (By similarity). Positive regulator of beta-catenin/TCF-dependent transcription through direct interaction with RUVBL2/reptin resulting in the relief of RUVBL2-mediated repression of beta-catenin/TCF target genes by modulating the interactions within the beta-catenin-reptin-HDAC complex (PubMed:<a href="http://www.uniprot.org/citations/19433865" target="\_blank">19433865</a>).

#### Cellular Location

Early endosome membrane; Peripheral membrane protein. Nucleus. Cytoplasm. Endosome. Cell projection, ruffle {ECO:0000250|UniProtKB:Q8K3H0}. Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:Q8K3H0}. Note=Early endosomal membrane-bound and nuclear. Translocated into the nucleus upon release from endosomal membranes following internalization of EGF

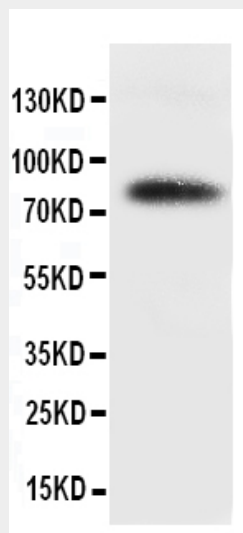
**Tissue Location**

High levels in heart, ovary, pancreas and skeletal muscle.

**Anti-APPL 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](#)

**Anti-APPL Antibody - Images**

Anti-APPL antibody, ABO10713, Western blottingWB: HELA Cell Lysate

**Anti-APPL Antibody - Background**

DCC-interacting protein 13-alpha(APPL1) is a protein that in humans is encoded by the APPL1 gene. The APPL1 gene is mapped to 3q21.1-p13.3. It is said to contain 709 amino acids and share 54% amino acid identity with APPL2. APPL is highly expressed in skeletal muscle, heart, ovary, and pancreas, tissues in which AKT2 mRNA is abundant. It has been regarded as an adaptor that may tether inactive AKT2 to the PI3K in the cytoplasm and thereby may expedite recruitment of AKT2 and PI3K to the cell membrane upon mitogenic stimulation.