

# Anti-APPL1 Antibody

Rabbit polyclonal antibody to APPL1 Catalog # AP60949

### **Product Information**

Application	WB
Primary Accession	<u>Q9UKG1</u>
Other Accession	<u>Q8K3H0</u>
Reactivity	Human, Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79663

## **Additional Information**

Gene ID	26060
Other Names	APPL; DIP13A; KIAA1428; DCC-interacting protein 13-alpha; Dip13-alpha; Adapter protein containing PH domain PTB domain and leucine zipper motif 1
Target/Specificity	Recognizes endogenous levels of APPL1 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name	APPL1 ( <u>HGNC:24035</u> )
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: <u>10490823</u> , PubMed: <u>15016378</u> , PubMed: <u>19661063</u> , PubMed: <u>26073777</u> , PubMed: <u>26583432</u> ). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed: <u>15016378</u> ). 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: <u>26583432</u> ). Plays a role in cell metabolism by regulating adiponecting and insulin

	signaling pathways (PubMed: <u>19661063</u> , PubMed: <u>24879834</u> , PubMed: <u>26073777</u> ). 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: <u>19433865</u> ).
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.

## Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human APPL1. The exact sequence is proprietary.

#### Images



Western blot analysis of APPL1 expression in SP20 (A), A2780 (B), SKOVCAR3 (C), PC12 (D) whole cell lysates.

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