

APPL1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9874b**Specification**

APPL1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9UKG1](#)**APPL1 Antibody (C-term) Blocking Peptide - 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

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.

APPL1 Antibody (C-term) Blocking Peptide - 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: [26583432](http://www.uniprot.org/citations/26583432), PubMed: [15016378](http://www.uniprot.org/citations/15016378), PubMed: [26073777](http://www.uniprot.org/citations/26073777), PubMed: [19661063](http://www.uniprot.org/citations/19661063), PubMed: [10490823](http://www.uniprot.org/citations/10490823)). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed: [15016378](http://www.uniprot.org/citations/15016378)). 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: [26583432](http://www.uniprot.org/citations/26583432)). Plays a role in cell metabolism by regulating adiponecting and

insulin signaling pathways (PubMed:26073777, PubMed:19661063, PubMed:24879834). 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:19433865).

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.

APPL1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

APPL1 Antibody (C-term) Blocking Peptide - Images

APPL1 Antibody (C-term) Blocking Peptide - Background

APPL1 encoded by this gene has been shown to be involved in the regulation of cell proliferation, and in the crosstalk between the adiponectin signalling and insulin signalling pathways. The encoded protein binds many other proteins, including RAB5A, DCC, AKT2, PIK3CA, adiponectin receptors, and proteins of the NuRD/MeCP1 complex. This protein is found associated with endosomal membranes, but can be released by EGF and translocated to the nucleus.

APPL1 Antibody (C-term) Blocking Peptide - References

Banach-Orlowska, M., et al. Biochem. J. 423(3):389-400(2009)Zhou, L., et al. J. Biol. Chem. 284(33):22426-22435(2009)Rashid, S., et al. J. Biol. Chem. 284(27):18115-18128(2009)Chandrasekar, B., et al. J. Biol. Chem. 283(36):24889-24898(2008)Fang, Q.C., et al. Zhonghua Yi Xue Za Zhi 88(6):369-373(2008)Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)