

# APPL Rabbit mAb

Catalog # AP75094

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">Q9UKG1</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Isotype</b>	IgG
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity Purified
<b>Calculated MW</b>	79663

## Additional Information

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<b>Gene ID</b>	26060
<b>Other Names</b>	APPL1
<b>Dilution</b>	WB~~1:1000-1:5000 IHC-P~~N/A
<b>Format</b>	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	APPL1 ( <a href="#">HGNC:24035</a> )
<b>Function</b>	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="#">10490823</a> , PubMed: <a href="#">15016378</a> , PubMed: <a href="#">19661063</a> , PubMed: <a href="#">26073777</a> , PubMed: <a href="#">26583432</a> ). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed: <a href="#">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="#">26583432</a> ). Plays a role in cell metabolism by regulating adiponectin and insulin signaling pathways (PubMed: <a href="#">19661063</a> , PubMed: <a href="#">24879834</a> ,

PubMed:[26073777](#)). 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

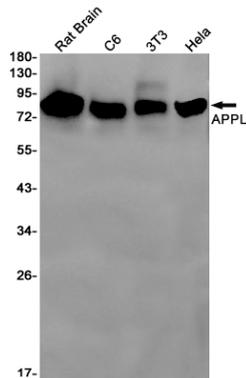
### Tissue Location

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

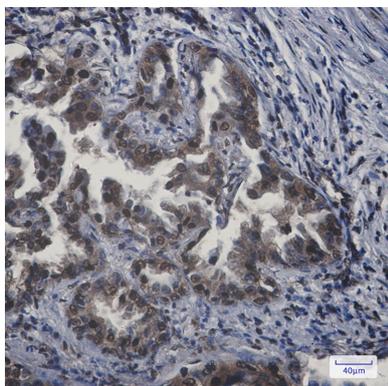
## Background

Adapter protein that interacts with proteins involved in different cellular signaling pathways. Required for the regulation of cell proliferation in response to extracellular signals from an early endosomal compartment. Links Rab5 to nuclear signal transduction. Involved in the regulation of the insulin receptor signaling pathway.

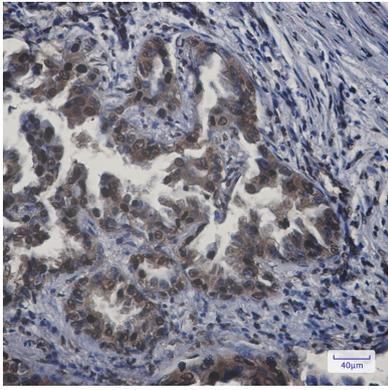
## Images



Western blot analysis of APPL in rat Brain, C6, 3T3, HeLa lysates using APPL antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using APPL antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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