

For Research Use Only

# APPL1 Polyclonal antibody

Catalog Number: 12639-1-AP

Featured Product

10 Publications



## Basic Information

### Catalog Number:

12639-1-AP

### Size:

150ul, Concentration: 1100 ug/ml by Nanodrop and 467 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3334

### GenBank Accession Number:

BC028599

### GeneID (NCBI):

26060

### UNIPROT ID:

Q9UKG1

### Full Name:

adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1

### Calculated MW:

709 aa, 80 kDa

### Observed MW:

80 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:20-1:200

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB: C2C12 cells, HEK-293 cells, mouse ovary tissue, HeLa cells, mouse liver tissue

IP: mouse brain tissue,

IHC: human ovary tumor tissue,

IF/ICC: HepG2 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1 (APPL1), a binding partner of Akt2 and an important regulator of INS signaling, plays a key role in the regulation of INS secretion [PMID:22615370]. APPL1 interacts with adiponectin receptors and mediates the INS-sensitizing effects of adiponectin in muscle and endothelial cells. It also participates in nuclear signaling and transcriptional regulation, mostly by modulating the activity of various nuclear factors [PMID:22685329]. Apart from its role in endocytosis and endosomal transport, APPL1 was reported to undergo nucleocytoplasmic shuttling and participate in transcriptional regulation, e.g. by interactions with histone deacetylases (HDACs) [PMID:19686092].

## Notable Publications

Author	Pubmed ID	Journal	Application
Peiyuan Li	34586803	J Agric Food Chem	WB
Elizabeth J English	29899118	J Biol Chem	WB
Neftali Flores-Rodriguez	25588841	J Cell Sci	IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

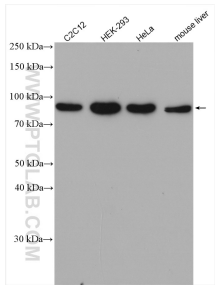
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

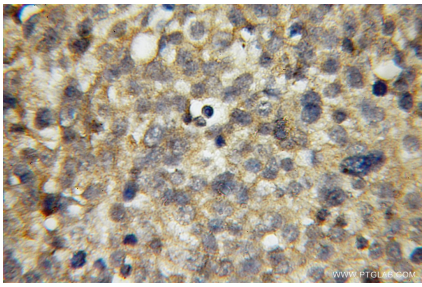
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

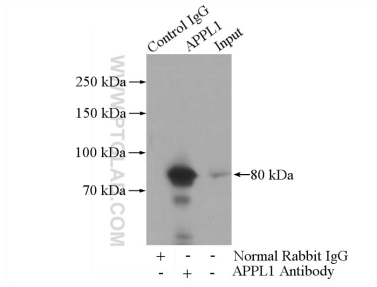
Selected Validation Data



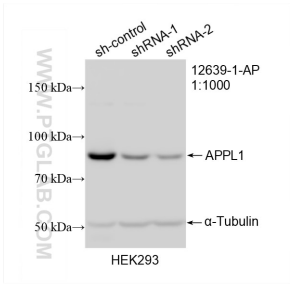
Various lysates were subjected to SDS PAGE followed by western blot with 12639-1-AP (APPL1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



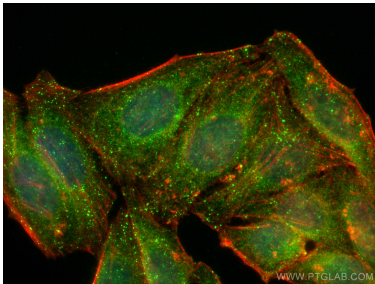
Immunohistochemical analysis of paraffin-embedded human ovary tumor using 12639-1-AP (APPL1 antibody) at dilution of 1:50 (under 10x lens).



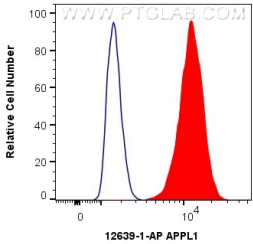
IP result of anti-APPL1 (IP:12639-1-AP, 4µg; Detection:12639-1-AP 1:500) with mouse brain tissue lysate 4000µg.



WB result of APPL1 antibody (12639-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-APPL1 transfected HEK-293 cells.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using APPL1 antibody (12639-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 µg Anti-Human APPL1 (12639-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 µg Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).