

For Research Use Only

# APPL1 Polyclonal antibody

Catalog Number: 19885-1-AP

Featured Product



## Basic Information

### Catalog Number:

19885-1-AP

### Size:

150ul, Concentration: 450 ug/ml by Nanodrop and 280 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13703

### 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: 1:1000-1:4000

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

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

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

### Species Specificity:

human, mouse, rat

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

### Positive Controls:

WB: human brain tissue, HEK-293 cells, HeLa cells, human heart tissue, HT-1080 cells, mouse brain tissue

IP: mouse brain tissue,

IHC: human breast cancer tissue,

IF/ICC: HepG2 cells,

FC (Intra): HepG2 cells,

## Background Information

Adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1 (APPL1), a binding partner of Akt2 and an important regulator of insulin signaling, plays a key role in the regulation of insulin secretion [PMID:22615370]. APPL1 interacts with adiponectin receptors and mediates the insulin-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].

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

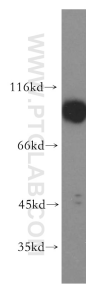
For technical support and original validation data for this product please contact:

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

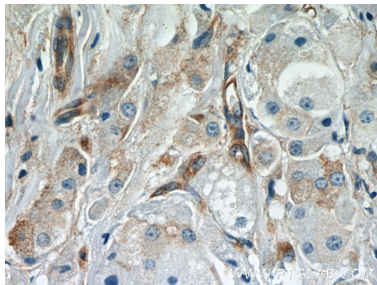
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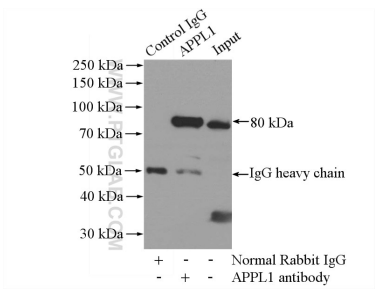
Selected Validation Data



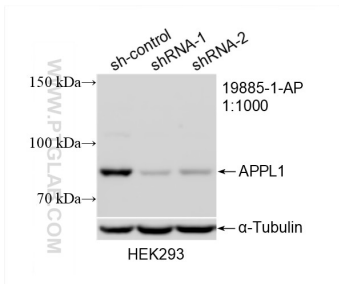
human brain tissue were subjected to SDS PAGE followed by western blot with 19885-1-AP (APPL1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



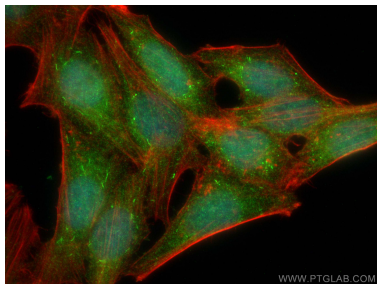
Immunohistochemical analysis of paraffin-embedded human breast cancer slide using 19885-1-AP (APPL1 Antibody) at dilution of 1:50.



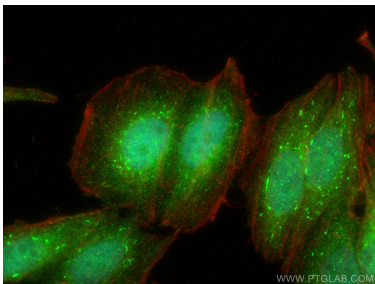
IP result of anti-APPL1 (IP:19885-1-AP, 4ug; Detection:19885-1-AP 1:1000) with mouse brain tissue lysate 2640ug.



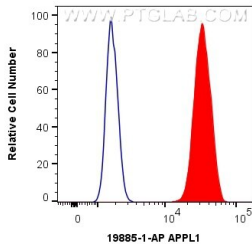
WB result of APPL1 antibody (19885-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-APPL1 transfected HEK-293 cells.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using APPL1 antibody (19885-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using APPL1 antibody (19885-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human APPL1 (19885-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).