

# Synaptophysin Polyclonal antibody

Catalog Number: 17785-1-AP

240 Publications

## Basic Information

## Catalog Number:

17785-1-AP

## Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG11781

## GenBank Accession Number:

BC064550

## GeneID (NCBI):

6855

## UNIPROT ID:

P08247

## Full Name:

synaptophysin

## Calculated MW:

313 aa, 34 kDa

## Observed MW:

38-40 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB: 1:20000-1:100000

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

IHC: 1:1000-1:4000

IF-P: 1:50-1:500

IF/ICC: 1:10-1:100

## Applications

## Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, ELISA

## Cited Applications:

WB, IHC, IF, IHC-IF

## Species Specificity:

human, mouse, rat

## Cited Species:

human, mouse, rat, canine, hamster

**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: mouse brain tissue, PC-12 cells, rat brain tissue, mouse cerebellum tissue, rat cerebellum tissue

IP: mouse brain tissue,

IHC: mouse pancreas tissue, mouse brain tissue, human brain tissue, ganglioma tissue, human pancreas tissue, neuroblastoma tissue, human pituitary adenoma tissue

IF-P: mouse pancreas tissue, human lung cancer tissue, human gliomas tissue, mouse brain tissue

IF/ICC: PC-12 cells,

## Background Information

Synaptophysin (SYP, also known as major synaptic vesicle protein p38) is a 38-kDa integral membrane glycoprotein that regulates synaptic vesicle endocytosis. It is the most abundant synaptic vesicle protein by mass. Synaptophysin is present in neuroendocrine cells and neurons that participate in synaptic transmission. Synaptophysin is a useful marker for the identification of neuroendocrine cells and neoplasms. Synaptic proteins including synaptophysin are reduced in brain tissue from patients with Alzheimer's disease. (PMID: 3010302; 21658579)

## Notable Publications

Author	Pubmed ID	Journal	Application
Pengcheng Ma	36179027	Sci Adv	WB
Yang Fang	33014035	Neural Plast	WB
Longjiao Tan	36193078	Oxid Med Cell Longev	WB

## 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

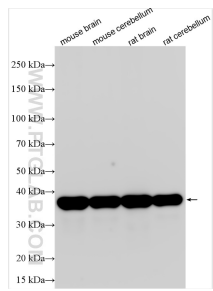
For technical support and original validation data for this product please contact:

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

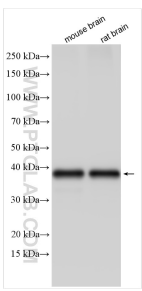
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

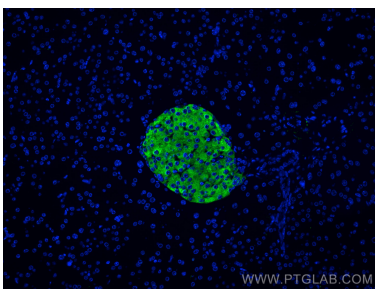
Selected Validation Data



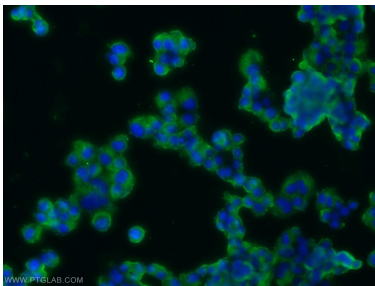
Various lysates were subjected to SDS PAGE followed by western blot with 17785-1-AP (Synaptophysin antibody) at dilution of 1:60000 incubated at room temperature for 1.5 hours.



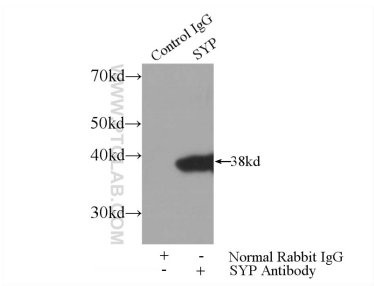
Various lysates were subjected to SDS PAGE followed by western blot with 17785-1-AP (Synaptophysin antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



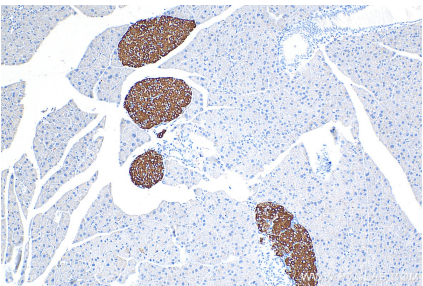
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse pancreas tissue using Synaptophysin antibody (17785-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



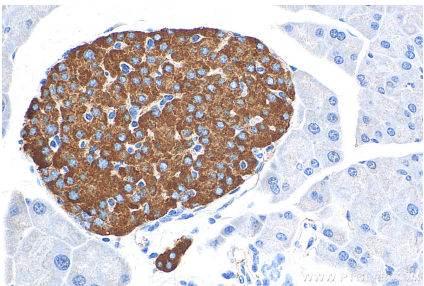
Immunofluorescent analysis of PC-12 cells using 17785-1-AP (Synaptophysin antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-Synaptophysin (IP:17785-1-AP, 3ug; Detection:17785-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue slide using 17785-1-AP (Synaptophysin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue slide using 17785-1-AP (Synaptophysin antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).