### For Research Use Only

# Synaptophysin Polyclonal antibody

Catalog Number:17785-1-AP 222 Publications



**Basic Information** 

Catalog Number: 17785-1-AP

Concentration: 500 ug/ml

Source: Rabbit Isotype:

Immunogen Catalog Number:

AG11781

313 aa, 34 kDa Observed MW:

38-40 kDa

BC064550

6855

P08247

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

synaptophysin

Calculated MW:

GenBank Accession Number:

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

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

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, human brain tissue, mouse cerebellum tissue, PC-12 cells, rat brain 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 arereduced 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.

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

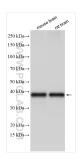
Aliquoting is unnecessary for -20°C storage

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

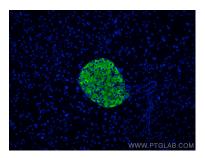
T: 4006900926 E: Proteintech-CN@ptglab.com

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

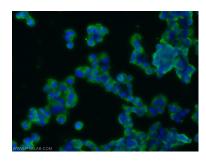
## **Selected Validation Data**



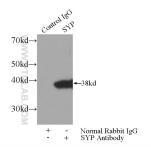
Various lysates were subjected to SDS PAGE followed by western blot with 17785-1-AP (Synaptophysin antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



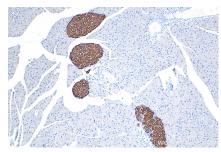
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse pancreas tissue using Synaptophysin antibody (17785-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



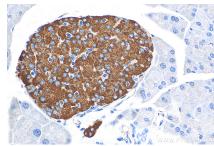
Immunofluorescent analysis of PC-12 cells using 17785-1-AP (Synaptophysin antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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 paraffinembedded 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 paraffinembedded 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).