## For Research Use Only

# Synaptophysin Monoclonal antibody

Catalog Number: 67864-1-lg 17 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 67864-1-lg BC064550

Size: GeneID (NCBI):

150ul, Concentration: 500 ug/ml by 6855

Nanodrop; UNIPROT ID:

Mouse
Isotype:
IgG1

Immunogen Catalog Number: 313 aa, 34 kDa AG11803 Observed MW:

38 kDa

P08247

Full Name:

synaptophysin

Calculated MW:

Purification Method:

Protein A purification

CloneNo.: 4E12C4

Recommended Dilutions:

WB 1:20000-1:100000 IHC 1:500-1:2000 IF-P 1:200-1:800 IF/ICC 1:250-1:1000

**Applications** 

**Tested Applications:** 

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

**Cited Applications:** 

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig, rabbit

Cited Species: 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: PC-12 cells, pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, pig cerebellum tissue, rabbit cerebellum tissue, rat cerebellum tissue, mouse cerebellum tissue

IHC: mouse brain tissue, human rectal cancer tissue, rat pancreas tissue

IF-P: mouse pancreas tissue, mouse brain tissue

IF/ICC: SH-SY5Y cells, 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 identification of neuroendocrine cells and neoplasms. (PMID: 3010302; 21658579)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Kangyu Jin	36103758	Psychiatry Res	WB
Xu-Qiao Chen	36370135	Alzheimers Dement	WB
Yue Xu	35401120	Front Cell Neurosci	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

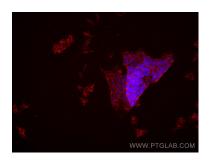
For technical support and original validation data for this product please contact:

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

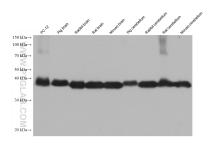
E: proteintech@ptglab.com
W: ptglab.com

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

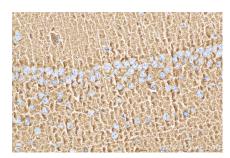
### Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using Synaptophysin antibody (67864-1-Ig, Clone: 4E12C4) at dilution of 1:500 and MultirAb Coralite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



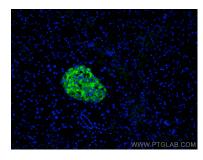
Various lysates were subjected to SDS PAGE followed by western blot with 67864-1-1g (Synaptophysin antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours.



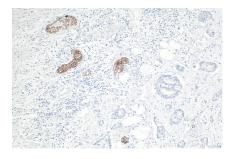
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 67864-1-Ig (Synaptophysin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



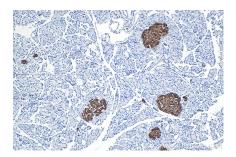
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 67864-1-lg (Synaptophysin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse pancreas tissue using Synaptophysin antibody (67864-1-Ig, Clone: 4E12C4) at dilution of 1:400 and Coralite® 488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffinembedded human rectal cancer tissue slide using 67864-1-1g (Synaptophysin antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat pancreas tissue slide using 67864-1-lg (Synaptophysin antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).