## For Research Use Only

## Synaptophysin Monoclonal antibody

Catalog Number:67864-1-lg 9 Publications



**Basic Information** 

Catalog Number: 67864-1-lg Size:

500 μg/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG11803

GenBank Accession Number:

BC064550 GeneID (NCBI): 6855 **UNIPROT ID:** 

P08247 Full Name: synaptophysin Calculated MW:

313 aa, 34 kDa

Observed MW: 38 kDa

**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

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:20000-1:100000 IHC 1:500-1:2000

IF 1:200-1:800

CloneNo.:

4E12C4

IHC: mouse brain tissue,

IF: mouse pancreas tissue, Neuro-2a cells, PC-12 cells, mouse brain tissue

**Applications** 

**Tested Applications:** IF/ICC,IF-P, IHC, WB, ELISA

**Cited Applications:** 

IF. WB

Species Specificity:

Human, Pig, Mouse, Rat, Rabbit

**Cited Species:** human, rat, mouse

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** 

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

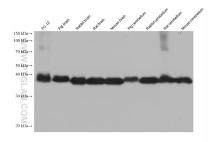
Storage

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

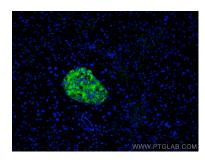
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

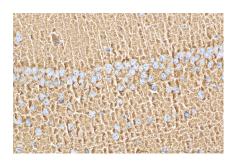
## **Selected Validation Data**



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.



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 AffiniPure Goat Anti-Mouse IgG(H+L).



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-Ig (Synaptophysin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).