

Synaptophysin Rabbit mAb

Catalog No: #48767

Package Size: #48767-1 50ul #48767-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

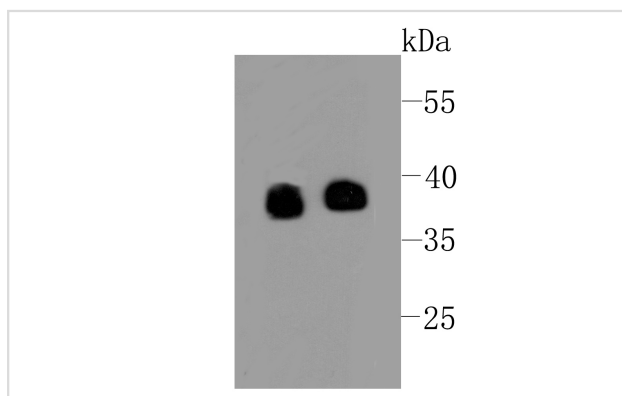
Description

Product Name	Synaptophysin Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SJ26-85
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	Major synaptic vesicle protein p38 antibody MRX96 antibody MRXSYP antibody Syn p38 antibody Synaptophysin antibody Syp antibody SYPH antibody SYPH_HUMAN antibody Syp1 antibody
Accession No.	Swiss-Prot#:P08247
Uniprot	P08247
GeneID	6855;
Calculated MW	38 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

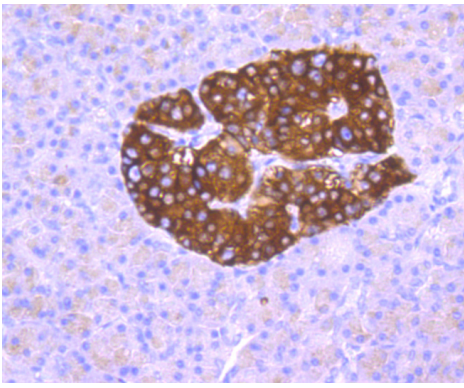
Application Details

WB: 1:1,000-5,000 IHC: 1:50-1:200 ICC: 1:50-1:200

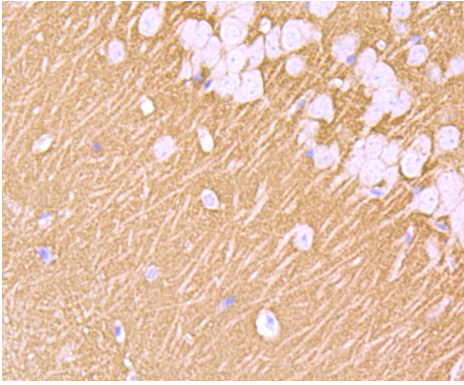
Images



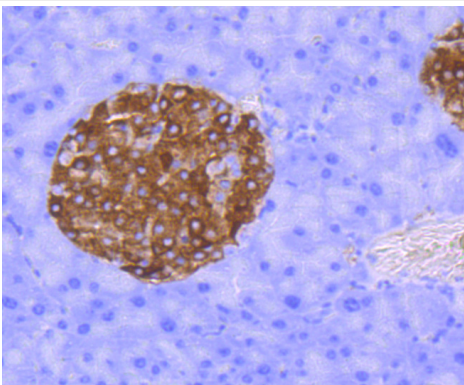
Western blot analysis of Synaptophysin on different lysates using anti-Synaptophysin at 1/500 dilution. Positive control
Lane 1: Human brain
Lane 2: PC-12



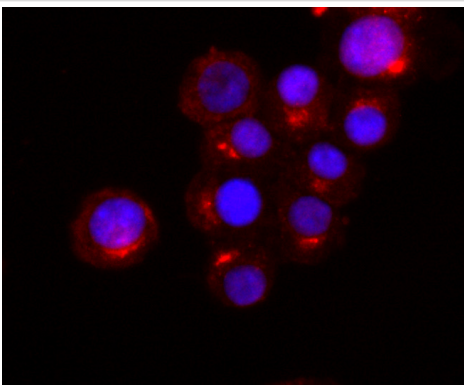
Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-Synaptophysin antibody. Counter stained with hematoxylin.



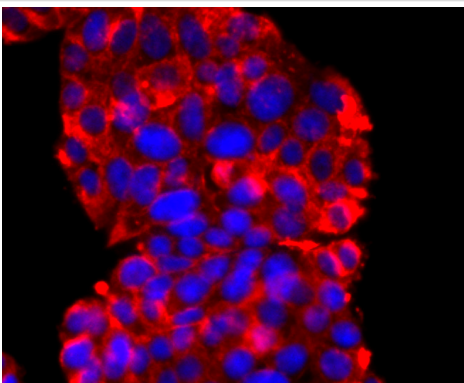
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Synaptophysin antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue using anti-Synaptophysin antibody. Counter stained with hematoxylin.



ICC staining Synaptophysin in N2A cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Synaptophysin in PC-12 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Synaptic vesicles participate in a cycle of fusion with the plasma membrane and reformation by endocytosis. Synaptic vesicle protein synaptophysin (SYP) is targeted to early endosomes in transfected fibroblasts and in neuroendocrine cells. SYP is an N-glycosylated intergral membrane protein found in neurons and endocrine cells that associates into hexamers to form a large conductance channel. SYP contains four transmembrane domains and may function as a gap junction-like channel. Membrane cholesterol specifically interacts with SYP to play a role in vesicle formation. Synaptobrevin (VAMP) also binds to SYP and the resultant complex is upregulated during neuronal development, but is absent in exocytosis fusion complex. Thus, the synaptophysin-synaptobrevin complex is not essential for exocytosis, but rather provides a pool of synaptobrevin for exocytosis. In addition, the tail domain of brain Myosin V also forms a stable complex with synaptobrevin II and SYP, and this complex is disassembled upon the depolarization-induced entry of Ca²⁺ into intact nerve endings.

References

Note: This product is for in vitro research use only