

## Basic Information

<b>Product Name</b>	Anti-Synaptophysin/SYP Antibody (Clone#3G12)
<b>Gene Name</b>	SYP
<b>Source</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2b
<b>Species Reactivity</b>	mouse, rat
<b>Tested Application</b>	WB
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human Synaptophysin, identical to the related mouse and rat sequences.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	protein G purified.
<b>Observed MW</b>	38 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied.

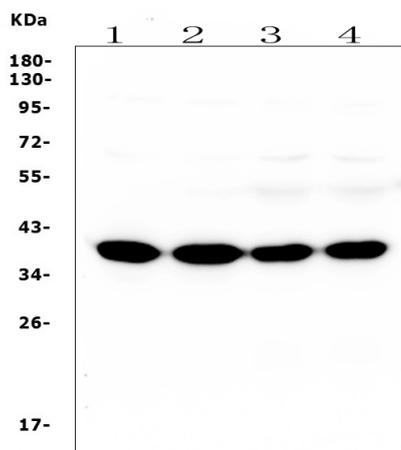
## Background Information

SYP(Synaptophysin) is located on the short arm of X chromosome (Xp11.23-p11.22). The protein is a synaptic vesicle glycoprotein with four transmembrane domains weighing 38kDa. It is present in neuroendocrine cells and in virtually all neurons in the brain and spinal cord that participate in synaptic transmission. It acts as a marker for neuroendocrine tumors, and its ubiquity at the synapse has led to the use of synaptophysin immunostaining for quantification of synapses. Also, the protein binds cholesterol and is thought to direct targeting of vesicle-associated membrane protein 2 (synaptobrevin) to intracellular compartments. Mutations in this gene are associated with X-linked mental retardation (XLMR).

## Reference

Anti-Synaptophysin/SYP Antibody (Clone#3G12)被引用在3文献中。

## Selected Validation Data



Western blot analysis of Synaptophysin/SYP using anti-Synaptophysin/SYP antibody (M05049-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat brain whole cell lysates, Lane 3: mouse brain whole cell lysates, Lane 4: mouse brain whole cell lysates. After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Synaptophysin/SYP antigen affinity purified monoclonal antibody (M05049-3) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Synaptophysin/SYP at approximately 38 kDa. The expected band size for Synaptophysin/SYP is at 34 kDa.