

# **SYP Monoclonal Antibody**

Catalog No: YM0608

Reactivity: Human;Rat

**Applications:** WB;IHC;IF;ELISA

Target: Synaptophysin

Gene Name: SYP

**Protein Name:** Synaptophysin

P08247

Q62277

Human Gene Id: 6855

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Rat Gene ld: 24804

Rat Swiss Prot No: P07825

Immunogen: Purified recombinant fragment of SYP expressed in E. Coli.

**Specificity:** SYP Monoclonal Antibody detects endogenous levels of SYP protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

**Purification:** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 34kD

1/3

#### P References:

- 1. Cancer. 2007 Oct 15;110(8):1776-81.
- 2. J Gastroenterol Hepatol. 2008 Oct;23(10):1574-85.
- 3. Virchows Arch. 2009 Aug;455(2):125-32.

## **Background:**

This gene encodes an integral membrane protein of small synaptic vesicles in brain and endocrine cells. The protein also 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). [provided by RefSeq, Aug 2011],

#### **Function:**

domain:The calcium-binding activity is thought to be localized in the cytoplasmic tail of the protein.,function:Possibly involved in structural functions as organizing other membrane components or in targeting the vesicles to the plasma membrane.,online information:Synaptophysin entry,PTM:Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.,similarity:Belongs to the synaptophysin/synaptobrevin family.,similarity:Contains 1 MARVEL domain.,subunit:Homohexamer or homotetramer.,tissue specificity:Characteristic of a type of small (30-80 nm) neurosecretory vesicles, including presynaptic vesicles, but also vesicles of various neuroendocrine cells of both neuronal and epithelial phenotype.,

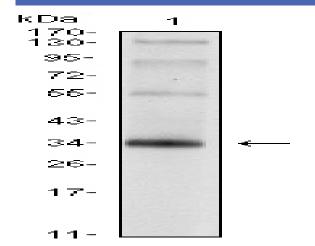
# Subcellular Location:

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Multi-pass membrane protein. Cell junction, synapse, synaptosome.

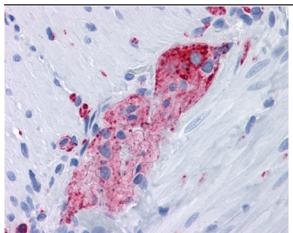
## **Expression:**

Expressed in the brain, with expression in the hippocampus, the neuropil in the dentate gyrus, where expression is higher in the outer half of the molecular layer than in the inner half, and in the neuropil of CA4 and CA3 (PubMed:8838578). Expressed in the putamen (at protein level) (PubMed:17296554).

## **Products Images**



Western Blot analysis using SYP Monoclonal Antibody against rat brain tissue lysate.



Immunohistochemistry analysis of paraffin-embedded human Small Intestine, myenteric plexus tissues with AEC staining using SYP Monoclonal Antibody.