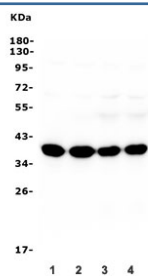


Synaptophysin Antibody / SYP [clone 3G12] (RQ6030)

Catalog No.	Formulation	Size
RQ6030	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	3G12
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P08247
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Synaptophysin antibody is available for research use only.



Western blot testing of rat brain (lanes 1-2) and mouse brain (lanes 3-4) lysate with Synaptophysin antibody. Predicted molecular weight: 34-38 kDa.

Description

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).

Application Notes

Optimal dilution of the Synaptophysin antibody should be determined by the researcher.

Immunogen

Amino acids MLLADMDVVNQLVAGGQFRVVKEPL from the human protein were used as the immunogen for the Synaptophysin antibody.

Storage

After reconstitution, the Synaptophysin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.