

Product datasheet for **TA337123**

Synaptophysin (SYP) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Immunohistochemistry-Frozen, Immunohistochemistry: 1:100, Immunocytochemistry/Immunofluorescence: 1:250, Western Blot: 1.0 ug/ml, Immunohistochemistry-Paraffin: 1:100
Reactivity:	Human, Mouse, Primate
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an C-terminal portion of the human Synaptophysin protein (between residues 230-313) [UniProt P08247]
Formulation:	PBS, 0.02% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	synaptophysin
Database Link:	NP_003170 Entrez Gene 20977 Mouse Entrez Gene 6855 Human P08247

Background: Communication in the nervous system is dependent on the exocytosis of neurotransmitter-containing synaptic vesicles that release their contents at the synapses following membrane depolarization. Synaptophysin (SYP) is a major 38 kDa tetraspan membrane protein of small synaptic vesicles that plays an essential role in targeting synaptic vesicles to the presynaptic membrane. Synaptophysin directly interacts with the essential membrane fusion v-SNARE protein, synaptobrevin/VAMP2, and targets it to the presynaptic membrane (PMID: 14528015). Thus, synaptophysin is required for proper targeting of VAMP2 and synaptic vesicles. Synaptophysin is localized to the trans-Golgi cisternae and then accumulates to the presynaptic membrane in a microtubule dependent manner (PMID: 8227215).

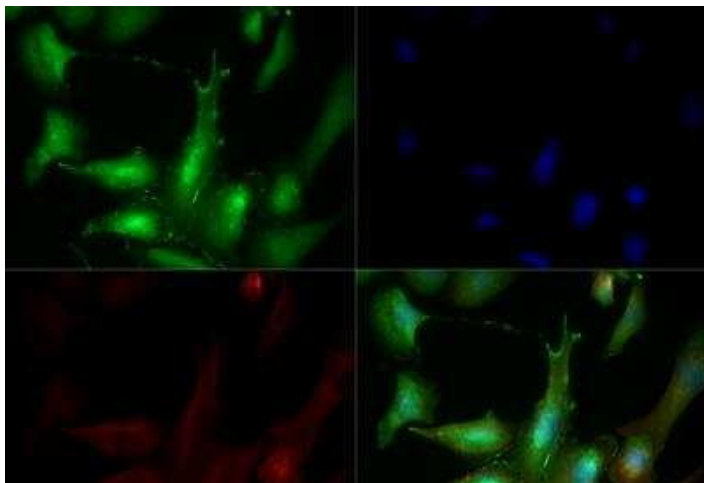


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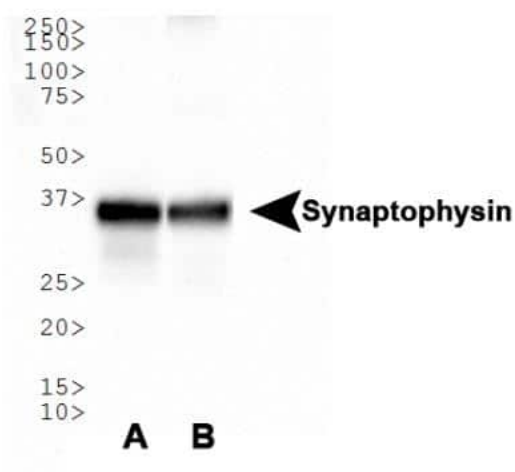
Synonyms: MRX96; MRXSYP

Protein Families: Secreted Protein, Transmembrane

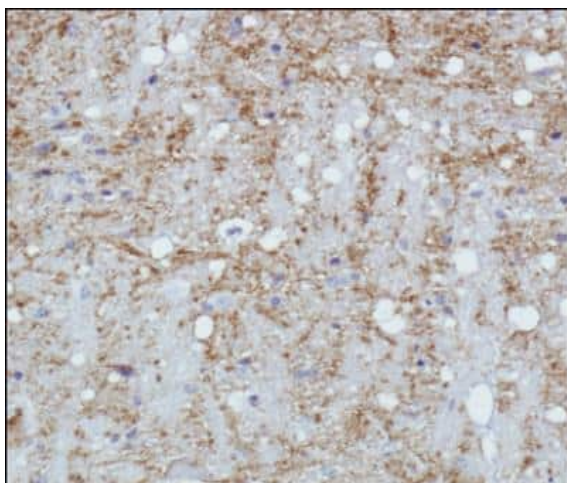
Product images:



Immunocytochemistry/Immunofluorescence: Synaptophysin Antibody TA337123 - PC12 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-Synaptophysin at a 1:50 dilution overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse DyLight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Western Blot: Synaptophysin Antibody TA337123 - Analysis of Synaptophysin in (A) human brain lysate and (B) mouse brain lysate.



Immunohistochemistry: Synaptophysin Antibody TA337123 - Analysis of Synaptophysin in mouse brain.