

Purified anti-Synaptotagmin-12 Antibody (Previously Covance catalog# MMS-5197)

Catalog# / Size	820401 / 100 µL
Clone	N277/7
Regulatory Status	RUO
Other Names	Synaptotagmin-12, sytXII, synaptotagmin 12, Syt12, Synaptotagmin XII, Synaptotagmin-related gene 1 protein, Srg1, Sytr1
Previously	Covance Catalog# MMS-5197
Isotype	Mouse IgG1, κ
Description	Synaptotagmin 12 (Syt12) is regulated by protein kinase A (PKA) and is unique from other synaptotagmins in that it does not bind to Ca ²⁺ . Syt12 interaction with Syt1 prevents SNARE complex binding. Expression of Syt12 induces spontaneous neurotransmitter release, providing a mechanism for spontaneous synaptic-vesicle exocytosis that is Ca ²⁺ -independent.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	This monoclonal antibody was raised against a fusion protein corresponding to amino acids 168-255 (cytoplasmic C2A domain) of mouse Synaptotagmin-12.
Formulation	Phosphate-buffered solution with BSA + 0.1% NaN ₃ .
Preparation	The antibody was purified by affinity chromatography.
Concentration	1 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Please note the storage condition for this antibody has been changed from -20°C to between 2°C and 8°C. You can also check your vial or your CoA to find the most accurate storage condition for this antibody.
Application	WB - Quality tested IHC-P - Verified
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 2.0 - 10 µg/ml. For immunohistochemistry of formalin-fixed paraffin-embedded tissue sections, a concentration of 10 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
Additional Product Notes	This antibody is effective in immunoblotting (WB) and immunohistochemistry (IHC-P).
Product Citations	1. Liu K, <i>et al.</i> 2020. Med Sci Monit. 26:e920351. PubMed
RRID	AB_2564840 (BioLegend Cat. No. 820401)

Antigen Details

Structure	Expected MW: 47 kD
Biology Area	Cell Biology, Neuroscience, Synaptic Biology
Molecular Family	Presynaptic proteins

Related Protocols

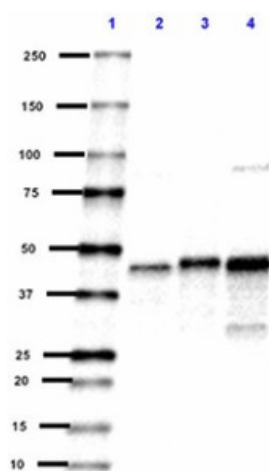
[Western Blotting Protocol](#)

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

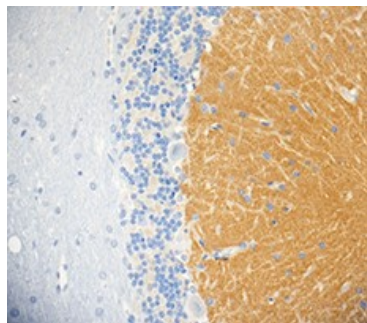
Other Formats

Purified anti-Synaptotagmin-12, HRP anti-Synaptotagmin-12, Alexa Fluor® 594 anti-Synaptotagmin-12, Biotin anti-Synaptotagmin-12

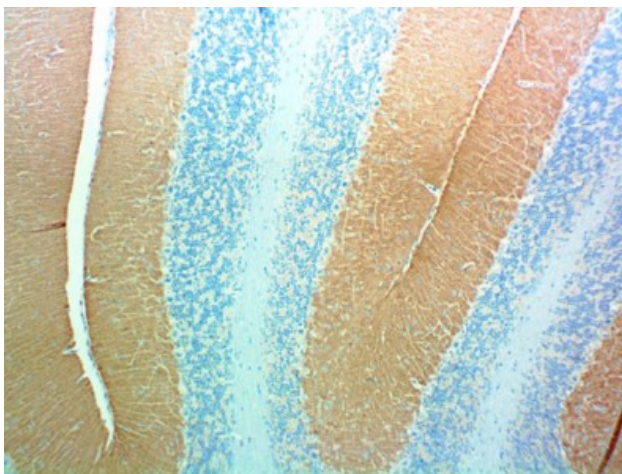
Product Data



Western blot of anti-Synaptotagmin-12 antibody (clone N277/7). Lane 1: Molecular weight marker; Lane 2: 20 µg of human brain membrane lysate; Lane 3: 20 µg of mouse brain membrane lysate; Lane 4: 20 µg of rat brain membrane lysate. The blot was incubated with clone N277/7 at 10 µg/ml, overnight at 4°C, followed by incubation with a HRP conjugated secondary antibody. Enhanced Chemiluminescence was used for detection.



IHC staining of anti-Synaptotagmin-12 antibody (clone N277/7) on formalin-fixed paraffin-embedded rat brain tissue. Following antigen retrieval using Sodium Citrate Heat Induced Epitope Retrieval (H.I.E.R.), the tissue was incubated with clone N277/7 at 10 µg/ml overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB) was used for detection following by hematoxylin and bluing solution counterstain.



IHC staining of anti-Synaptotagmin-12 antibody (clone N277/7) on formalin-fixed paraffin-embedded mouse brain tissue. Following antigen retrieval using Sodium Citrate Heat Induced Epitope Retrieval (H.I.E.R.), the tissue was incubated with clone N277/7 at 10 µg/ml overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB) was used for detection following by hematoxylin and bluing solution counterstain.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587