

For Research Use Only

Synaptotagmin-1 Recombinant antibody, PBS Only

Catalog Number: 83637-4-PBS



Basic Information

Catalog Number: 83637-4-PBS	GenBank Accession Number: BC058917	Purification Method: Protein A purification
Concentration: 1 mg/ml	GeneID (NCBI): 6857	CloneNo.: 240589F6
Source: Rabbit	UNIPROT ID: P21579	
Isotype: IgG	Full Name: synaptotagmin I	
Immunogen Catalog Number: AG5970	Calculated MW: 48 kDa	
	Observed MW: 60 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Species Specificity:
human, mouse, rat

Background Information

The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca²⁺ sensors in the process of vesicular trafficking and exocytosis (PMID: 8058779). SYT1 (synaptotagmin I) was firstly identified as a 65-kDa protein with a wide distribution in neuronal and neurosecretory tissue (PMID: 7298720). Calcium binding to SYT1 participates in triggering neurotransmitter release at the synapse (PMID: 11242035). In addition to regulating exocytosis, SYT1 has also been implicated in endocytosis and neurite outgrowth (PMID: 15492212; 11078930; 10336114). This antibody recognizes endogenous SYT1, which has an experimentally determined molecular mass of 65-68 kDa. An additional band of 47 kDa could also be detected, which is corresponding to the calculated molecular weight of SYT1.

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:

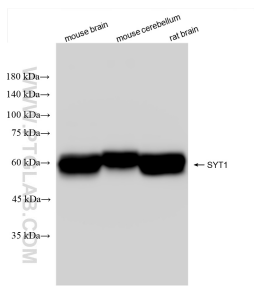
T: 4006900926

E: Proteintech-CN@ptglab.com

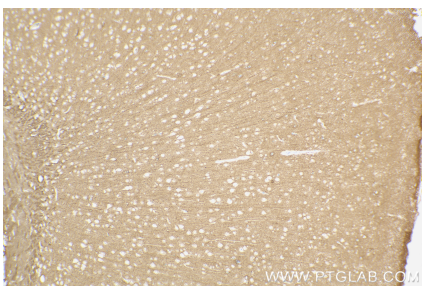
W: ptgcn.com

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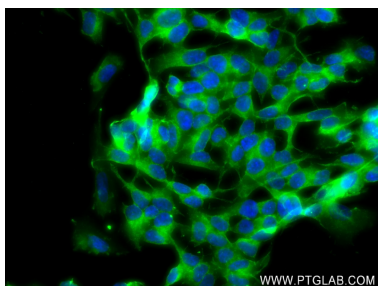
Selected Validation Data



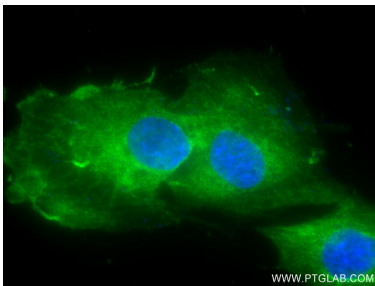
Various lysates were subjected to SDS PAGE followed by western blot with 83637-4-RR (Synaptotagmin-1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83637-4-PBS in a different storage buffer formulation.



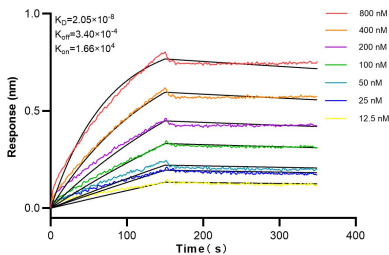
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83637-4-RR (Synaptotagmin-1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83637-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using Synaptotagmin-1 antibody (83637-4-RR, Clone: 240589F6) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83637-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using Synaptotagmin-1 antibody (83637-4-RR, Clone: 240589F6) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83637-4-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83637-4-RR against Human Synaptotagmin-1 were performed. The affinity constant is 20.5 nM.