### For Research Use Only

# Syntaxin 1A / Syntaxin 1B Monoclonal antibody



Catalog Number: 66437-1-Ig

**Featured Product** 

10 Publications

**Basic Information** 

Catalog Number: 66437-1-lg

BC062298

GenBank Accession Number:

GeneID (NCBI): Size: 150ul, Concentration: 1000 ug/ml by 112755

Nanodrop and 1000 ug/ml by Bradford<sub>UNIPROT ID:</sub> method using BSA as the standard; P61266

Source: Full Name: Mouse syntaxin 1B

Isotype: Calculated MW: lgG1 288 aa, 33 kDa Immunogen Catalog Number: Observed MW:

AG10257 33 kDa, 55 kDa **Purification Method:** 

Protein A purification

CloneNo.: 2D3B5

Recommended Dilutions:

WB 1:5000-1:40000 IHC 1:2000-1:8000 IF-P 1:200-1:800

**Applications** 

**Tested Applications:** 

WB, IHC, IF-P, ELISA Cited Applications:

WB. IF

Species Specificity:

human, mouse, rat, rabbit, pig

**Cited Species:** 

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: pig brain tissue, rat brain tissue, fetal human brain tissue, Y79 cells, rabbit brain tissue, mouse brain

IHC: rat brain tissue, human brain tissue

IF-P: mouse brain tissue.

# **Background Information**

Syntaxins are a family of transmembrane proteins that belong to the SNARE complex (PMID: 11737951). In conjunction with other SNAREs and with the cytoplasmic NSF and SNAP proteins, syntaxins mediate vesicle fusion in diverse vesicular transport processes along the exocytic and the endocytic pathway (PMID: 11737951). Syntaxin 1A and 1B, two closely related isoforms of syntaxin 1, are involved in synaptic vesicle docking and fusion during neurotransmitter release (PMID: 7690687; 1321498; 18691641). This antibody raised against 1-263 aa of human syntaxin 1B detects a ~33 kDa band of syntaxin 1 and an additional band of 55-60 kDa, which probably represents a syntaxin 1 dimer (PMID: 10100611).

#### **Notable Publications**

| Author              | Pubmed ID | Journal         | Application |
|---------------------|-----------|-----------------|-------------|
| Danyang Li          | 36374725  | Neurotoxicology | WB          |
| Dennis J Weingarten | 36261524  | Nature          | WB          |
| Nuomin Li           | 36505063  | Front Physiol   | WB          |

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

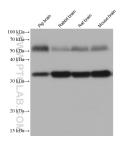
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

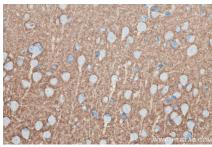
## **Selected Validation Data**



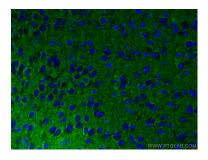
Various lysates were subjected to SDS PAGE followed by western blot with 66437-1-lg (Syntaxin 1A / Syntaxin 1B antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 66437-1-lg (Syntaxin 1A / Syntaxin 1B antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 66437-1-lg (Syntaxin 1A / Syntaxin 1B antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using Syntaxin 1A / Syntaxin 1B antibody (66437-1-Ig, Clone: 2D3B5) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L).