### For Research Use Only

# Synaptotagmin-1 Monoclonal antibody

Catalog Number:68043-1-lg 1 Publications



**Basic Information** 

Catalog Number:

GenBank Accession Number:

BC058917

**Purification Method:** Protein G purification

68043-1-lg

GeneID (NCBI):

CloneNo.:

1H1H2

150ul , Concentration: 500 ug/ml by Nanodrop:

**UNIPROT ID:** 

Recommended Dilutions: WB 1:20000-1:100000

IHC 1:2500-1:10000

Mouse

Isotype:

AG6071

P21579

Full Name: synaptotagmin I

lgG1 Calculated MW: Immunogen Catalog Number:

48 kDa

Observed MW:

60-65 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, ELISA

**Cited Applications:** 

WB

Species Specificity:

Human, Mouse, Rat, Pig, Rabbit, Chicken

**Cited Species:** 

human

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 cerebellum tissue, mouse cerebellum tissue, rabbit brain tissue, rat brain tissue. mouse brain tissue, chicken brain tissue, rabbit

cerebellum tissue

IHC: mouse brain tissue, mouse cerebellum tissue

## **Background Information**

The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) 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).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Michael S Biddle	39169954	F1000Res	WB

Storage

Storage:

Store at -20°C.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

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

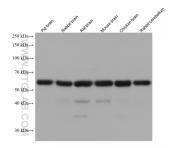
For technical support and original validation data for this product please contact:

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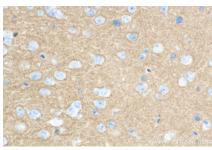
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 68043-1-1g (Synaptotagmin-1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 68043-1-Ig (Synaptotagmin-1 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 68043-1-Ig (Synaptotagmin-1 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).