For Research Use Only

## Synaptotagmin-1 Monoclonal antibody

www.ptglab.com

Catalog Number: 68043-1-Ig

**Basic Information** 

Catalog Number: GenBank Accession Number:

68043-1-lg BC058917 GeneID (NCBI):

150ul, Concentration: 500 µg/ml by 1H1H2 6857 Full Name:

Source: synaptotagmin I Mouse Calculated MW: Isotype: 48 kDa lgG1 Observed MW:

Immunogen Catalog Number: 60-65 kDa

**Applications** 

**Tested Applications:** 

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Purification Method:** Protein G purification

CloneNo.:

Recommended Dilutions: WB 1:20000-1:100000 IHC 1:2500-1:10000

IHC, WB, ELISA

Species Specificity:

Human, Mouse, Rat, Pig, Rabbit, Chicken

IHC: mouse brain tissue, mouse cerebellum tissue

WB: pig brain tissue, rat cerebellum tissue, mouse

mouse brain tissue, chicken brain tissue, rabbit

cerebellum tissue, rabbit brain tissue, rat brain tissue,

**Positive Controls:** 

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).

Storage

Storage:

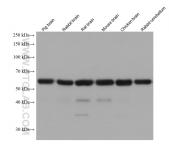
Store at -20°C. Storage Buffer

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

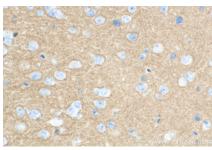
## **Selected Validation Data**



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).