

For Research Use Only

# VAMP2 Monoclonal antibody

Catalog Number: 67822-1-Ig



## Basic Information

<b>Catalog Number:</b> 67822-1-Ig	<b>GenBank Accession Number:</b> BC002737	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6844	<b>CloneNo.:</b> 1G7E8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P63027	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG3	<b>Full Name:</b> vesicle-associated membrane protein 2 (synaptobrevin 2)	
<b>Immunogen Catalog Number:</b> AG17908	<b>Calculated MW:</b> 13 kDa	
	<b>Observed MW:</b> 19 kDa	

## Applications

### Tested Applications:

WB, IF, IHC, ELISA

### Species Specificity:

Human, Mouse, Rat, Pig, Rabbit

**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: rabbit brain tissue, pig brain tissue, rat brain tissue, mouse brain tissue

IHC: mouse brain tissue,

IF/ICC: U-87 MG cells, SH-SY5Y cells

## Background Information

VAMP2 (vesicle-associated membrane protein 2), also named as synaptobrevin 2, is a member of the SNARE (soluble NSF-attachment protein receptor) family proteins. Characterized by a common sequence called the SNARE motif, SNARE proteins are involved in membrane fusion and vesicular transport (PMID: 11252968). VAMP2, with a molecular mass of 15-19 kDa, consists of a short N-terminal sequence, a SNARE motif, and a C-terminal transmembrane region. It is required for fast calcium-triggered synaptic vesicle fusion. VAMP2 forms a stable complex with STX1 (syntaxin 1) and SNAP25 (synaptosomal-associated protein 25) during synaptic vesicle fusion (PMID: 16793874). It also forms a distinct complex with synaptophysin. VAMP2 is expressed in nervous system and some non-neuronal tissues, such as skeletal muscle (PMID: 18570252).

## Storage

### Storage:

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

### 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

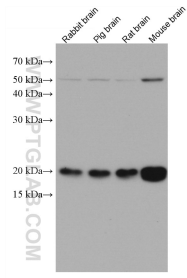
For technical support and original validation data for this product please contact:

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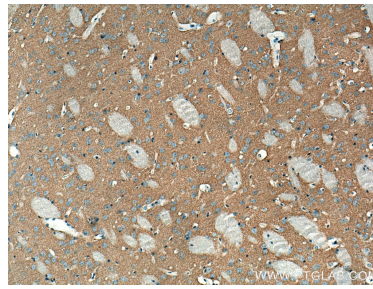
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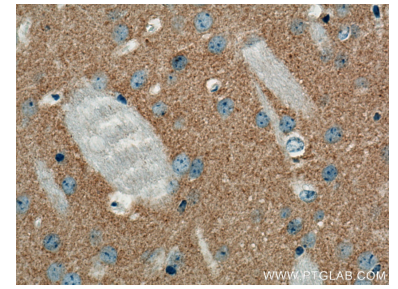
## Selected Validation Data



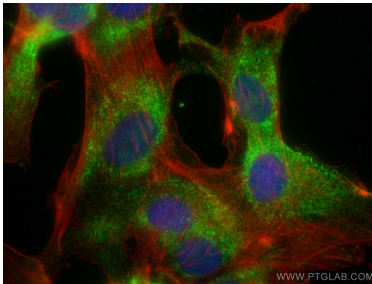
Various lysates were subjected to SDS PAGE followed by western blot with 67822-1-Ig (VAMP2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 67822-1-Ig (VAMP2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 67822-1-Ig (VAMP2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U-87 MG cells using VAMP2 antibody (67822-1-Ig, Clone: 1G7E8) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).