For Research Use Only

VAMP2 Monoclonal antibody

Catalog Number: 67822-1-Ig



Basic Information

Catalog Number: 67822-1-lg

Size:

Source:

BC002737 GeneID (NCBI): 1000 µg/ml 6844 **UNIPROT ID:**

Mouse P63027 Full Name: Isotype: vesicle-associated membrane protein IF 1:200-1:800 IgG3

2 (synaptobrevin 2) Immunogen Catalog Number: AG17908 Calculated MW: 13 kDa

> Observed MW: 19 kDa

GenBank Accession Number:

Applications

Tested Applications: IF/ICC, IHC, WB, 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

Purification Method:

CloneNo.:

1G7E8

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:1000-1:4000

IHC: mouse brain tissue. IF: 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).

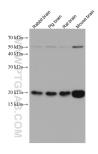
Storage

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

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

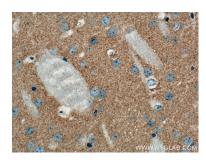
Selected Validation Data



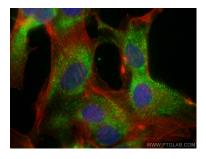
Various lysates were subjected to SDS PAGE followed by western blot with 67822-1-1g (VAMP2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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 (67822-1-1g, Clone: 1G7E8) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).