

Product Data Sheet

Anti-VAMP2 Polyclonal Antibody

Species Reactivity
Murine (Ms)
Rat (Rt)

Applications	Dilution
Immunoprecipitation (IP)	Assay dependent
Western Blot (WB)	0.3 µg/ml

Details	
Catalog Number:	PA1-766
Size:	100 µg
Class:	Polyclonal
Type:	Antibody
Clone:	
Host / Isotype:	Rabbit /
Immunogen:	Synthetic peptide corresponding to residues M(1) S A T A A T V P P A A P A G E G G(18) C of rat VAMP-2.
Storage:	-20° C, Avoid Freeze/Thaw Cycles
Form:	100 µg of epitope affinity purified IgG (1 mg/ml) in PBS containing 1 mg/ml BSA and 0.05% sodium azide.

Product Specific Information	General Information
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PA1-766 detects vesicle associated membrane protein 2 (VAMP-2) from rat and mouse tissues.

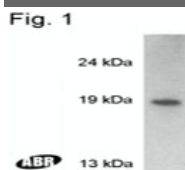
PA1-766 has been successfully used in Western blot and immunoprecipitation procedures. By Western blot, this antibody detects a 19 kDa protein representing VAMP-2 from rat brain whole protein extract.

The PA1-766 immunogen is a synthetic peptide corresponding to residues M(1) S A T A A T V P P A A P A G E G G(18) C of rat VAMP-2. This immunizing peptide (Cat. # PEP-101) is available for use in neutralization and control experiments.

Figure 1 shows a Western blot of VAMP-2 on rat brain extract using PA1-766.

The vesicle associated membrane proteins (VAMP) or synaptobrevins are calcium binding proteins specific to eukaryotes. VAMPs, along with synaptosomal associated protein of 25 kDa (SNAP-25) and syntaxin, form the core complex of soluble NSF attachment protein receptor (SNARE) proteins that interact with the soluble proteins N-ethylmaleimide-sensitive factor (NSF) and alpha-SNAP. These membrane associated proteins play a key role in the regulation of vesicle membrane fusion with the plasma membrane. The Clostridium tetani neurotoxin is a metalloprotease with specificity for VAMP. In Alzheimer's disease, VAMP levels of all isoforms appear to be significantly lowered. It is suggested that VAMP-2 is a resident protein of the insulin-sensitive glucose transporter type 4 (GLUT4) compartment and that it is required for GLUT4 vesicle incorporation into the cell surface in response to insulin.

Image



References:

Mol Cell Biology Vol 22, No 1, 378-387, Jan 2002

Mol. Cell. Biol., Vol 22: 378-387, Jan 2002

Mol. Endo. 19(1):213-224, 2005.

AJP Cell Physiol doi:10.1152/ajpcell.00241.2004 Sept 2004

Cell Tissue Res. 296:499-510, 1999.

This product is for In Vitro experimental use only

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