

### VAMP1/2 Antibody

VAMP1/2 Antibody, Clone SP-11 Catalog # ASM10120

### Specification

# VAMP1/2 Antibody - Product Information

Application Primary Accession Other Accession Host Isotype Reactivity Clonality Format <b>Description</b> Mouse Anti-Human VAMP1/2 Monoclonal IgG1	IHC, WB <u>P23763</u> <u>NP_055046.1</u> Mouse IgG1 Human, Rat Monoclonal HRP
Target/Specificity Detects ~20-25kDa. Recognizes VAMP 1 and 2.	
<b>Other Names</b> SYB1 Antibody, Synaptobrevin Antibody, vesicle associated membrane protein Antibody	
<b>Immunogen</b> Crude human synaptic immunoprecipitate	
Purification Protein G Purified	
Storage <b>Storage Buffer</b> PBS pH7.4, 50% glycerol, 0.09% sodium azide	-20ºC

Shipping TemperatureBlue Ice or 4°CCertificate of Analysis1 μg/ml of SMC-179 was sufficient for detection of VAMP in 10 μg of rat brain lysate by colorimetricimmunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization** Mitochondrion | Mitochondrion Outer Membrane | Cytoplasmic Vesicle

# VAMP1/2 Antibody - Protocols

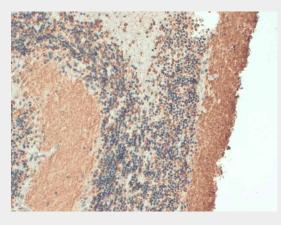
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry

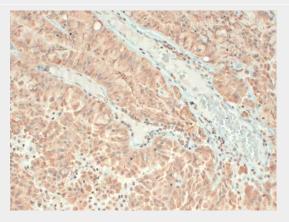


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### VAMP1/2 Antibody - Images

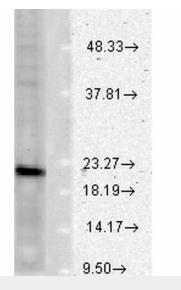


Immunohistochemistry analysis using Mouse Anti-VAMP Monoclonal Antibody, Clone SP-11 (ASM10120). Tissue: Cerebellum. Species: Human. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-VAMP Monoclonal Antibody (ASM10120) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT. Localization: Fibers and Neurons.



Immunohistochemistry analysis using Mouse Anti-VAMP Monoclonal Antibody, Clone SP-11 (ASM10120). Tissue: Brain Slice. Species: Human. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-VAMP Monoclonal Antibody (ASM10120) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500  $\mu$ l for 5 minutes at RT. Localization: Brain neurons with lack of staining on the blood vessels. Magnification: 20x.





Western Blot analysis of Rat brain lysates showing detection of VAMP protein using Mouse Anti-VAMP Monoclonal Antibody, Clone SP-11 (ASM10120). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-VAMP Monoclonal Antibody (ASM10120) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

# VAMP1/2 Antibody - Background

VAMP-1, also known as vesicle-associated membrane protein, is an 18kDa member of the synaptobrevin family of proteins. It is expressed in neurons, neutrophils, and skeletal muscle cells, and participates in vesicle fusion with the plasma membrane (1). Synaptobrevins, Syntakins and the 25kDa synaptosomal associated SNAP25 are the main components of a protein complex involved in the docking and/or fusion of synaptic vesicles with the presynaptic membrane (2). VAMP-1 is also one of the key proteins in the SNARE complex which is involved in regulated exocytosis (3).

# VAMP1/2 Antibody - References

 Trimble W.S., Cowan D.M., and Scheller R.H. (1988) Proc Natl Acad Sci USA. 85: 4538-4542.
Nabokina S.M. (2001) Bulletin of Experimental Bio and Med. 131(2): 130-131.
Berglund L., Hoffman H.J., Dahl R., and Peterson T.E. (1999) Biochem Biophys Research Communications. 264(3): 777-780.