Synaptic Systems

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VAMP 7

Cat.No. 232 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 (AP staining) **IP**: not recommended **ICC**: not recommended **IHC**: 1 : 500 **IHC-P/FFPE**: not tested yet
Immunogen	Recombinant protein corresponding to AA 10 to 177 from mouse VAMP7 (UniProt Id: P70280)
Reactivity	Reacts with: rat (Q9JHW5), mouse (P70280), human (P51809). No signal: zebrafish. Other species not tested yet.
Specificity	Specific for VAMP 7. (K.O. verified)
matching control	232-0P

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

VAMP 7, also referred to as Ti-VAMP and SybL 1, is a member of the SNARE family of proteins and a relative of synaptobrevin. It is involved in membrane fusion events that mediate neurite outgrowth in developing neurons, in endosome to lysosome transport and in other cellular trafficking mechanisms. VAMP 7 is ubiquitously expressed in different tissues.
It is a member of the syntaxin 4-SNAP 23-VAMP 7- and the syntaxin 7-syntaxin 8-Vti1b-VAMP 7-SNARE complex.

Selected References SYSY Antibodies

Comparative study of commercially available and homemade anti-VAMP7 antibodies using CRISPR/Cas9-depleted HeLa cells and VAMP7 knockout mice.
Verraes A, Cholley B, Galli T, Nola S
F1000Research (2018) 7: 1649. **WB; KO verified; tested species: human**

Syntaxin 11 binds Vti1b and regulates late endosome to lysosome fusion in macrophages.
Offenhäuser C, Lei N, Roy S, Collins BM, Stow JL, Murray RZ
Traffic (Copenhagen, Denmark) (2011) 12(6): 762-73. **WB**

Selective molecular impairment of spontaneous neurotransmission modulates synaptic efficacy.
Crawford DC, Ramirez DM, Trauterman B, Monteggia LM, Kavalali ET
Nature communications (2017) 8: 14436. **WB; KD verified**

Differential Expression of Munc13-2 Produces Unique Synaptic Phenotypes in the Basolateral Amygdala of C57BL/6J and DBA/2J Mice.
Gioia DA, Alexander NJ, McCool BA
The Journal of neuroscience : the official journal of the Society for Neuroscience (2016) 36(43): 10964-10977. **WB**

Characterization of VAMP isoforms in 3T3-L1 adipocytes: implications for GLUT4 trafficking.
Sadler JB, Bryant NJ, Gould GW
Molecular biology of the cell (2015) 26(3): 530-6. **WB**

Selected General References

Vesicle-associated membrane protein 7 is expressed in intestinal ER.
Siddiqi SA, Mahan J, Siddiqi S, Gorelick FS, Mansbach CM
Journal of cell science (2006) 119(Pt 5): 943-50.

Identification of SNAREs involved in synaptotagmin VII-regulated lysosomal exocytosis.
Rao SK, Huynh C, Proux-Gillardeaux V, Galli T, Andrews NW
The Journal of biological chemistry (2004) 279(19): 20471-9.

A dual mechanism controlling the localization and function of exocytic v-SNAREs.
Martinez-Arca S, Rudge R, Vacca M, Raposo G, Camonis J, Proux-Gillardeaux V, Daviet L, Formstecher E, Hamburger A, Filippini F, D'Esposito M, et al.
Proceedings of the National Academy of Sciences of the United States of America (2003) 100(15): 9011-6.

Subcellular localization of tetanus neurotoxin-insensitive vesicle-associated membrane protein (VAMP)/VAMP7 in neuronal cells: evidence for a novel membrane compartment.
Coco S, Raposo G, Martinez S, Fontaine JJ, Takamori S, Zahraoui A, Jahn R, Matteoli M, Louvard D, Galli T
The Journal of neuroscience : the official journal of the Society for Neuroscience (1999) 19(22): 9803-12.

VAMP-7 mediates vesicular transport from endosomes to lysosomes.
Advani RJ, Yang B, Prekeris R, Lee KC, Klumperman J, Scheller RH
The Journal of cell biology (1999) 146(4): 765-76.