Synaptic Systems

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VAMP 7

Cat.No. 232 011; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 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**: yes **ICC**: 1 : 200 up to 1 : 500 **IHC**: 1 : 100 up to 1 : 200 **IHC-P/FFPE**: not tested yet
Clone	158.2
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 119 to 188 from mouse VAMP7 (UniProt Id: P70280)
Epitop	Epitop: AA 119 to 188 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)

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: mouse**

Tetanus neurotoxin-insensitive vesicle-associated membrane protein localizes to a presynaptic membrane compartment in selected terminal subsets of the rat brain.
Muzerelle A, Alberts P, Martinez-Arca S, Jeannequin O, Lafaye P, Mazié JC, Galli T, Gaspar P
Neuroscience (2003) 122(1): 59-75. **WB, IHC**

Vesicle-associated membrane protein 7-mediated eosinophil degranulation promotes allergic airway inflammation in mice.
Willetts L, Felix LC, Jacobsen EA, Puttagunta L, Condjella RM, Zellner KR, Ochkur SI, Kim JD, Luo H, Lee NA, Lee JJ, et al.
Communications biology (2018) 1: 83. **WB, ICC; KO verified; tested species: human**

An actin cytoskeletal barrier inhibits lytic granule release from natural killer cells in patients with Chediak-Higashi syndrome.
Gil-Krzewska A, Saeed MB, Oszmiana A, Fischer ER, Lagrue K, Gahl WA, Introne WJ, Coligan JE, Davis DM, Krzewski K
The Journal of allergy and clinical immunology (2017) : . **ICC; tested species: human**

VAMP-7 links granule exocytosis to actin reorganization during platelet activation.
Koseoglu S, Peters CG, Fitch-Tewfik JL, Aisiku O, Danglot L, Galli T, Flaumenhaft R
Blood (2015) 126(5): 651-60. **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.