

Endobrevin

Cat.No. 104 302; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: 1 : 100 up to 1 : 500 IHC: yes IHC-P/FFPE: 1 : 200
Immunogen	Recombinant protein corresponding to AA 1 to 75 from rat Endobrevin (UniProt Id: Q9WUF4)
Reactivity	Reacts with: human (Q9BV40), rat (Q9WUF4), mouse (O70404). Other species not tested yet.
Specificity	Specific for endobrevin. (K.D. verified)

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

Endobrevin/VAMP8, a member of the SNARE family of proteins, is a relative of synaptobrevin that is involved in the fusion of early and late endosomes. Endobrevin is expressed in most mammalian cells but appears to be absent from neurons. The protein is predominantly localized to early and late endosomal membranes but is also found on other membranes and organelles involved in endocytic membrane traffic. In the fusion of late endosomes it forms SNARE complexes with syntaxin 7, syntaxin 8 and vti1b.

Selected References SYSY Antibodies

A proteomic approach to identify endosomal cargoes controlling cancer invasiveness.
Diaz-Vera J, Palmer S, Hernandez-Fernaund JR, Dornier E, Mitchell LE, Macpherson I, Edwards J, Zanivan S, Norman JC
Journal of cell science (2017) 130(4): 697-711. **WB, IP, ICC, IHC-P**

A role for VAMP8/endobrevin in surface deployment of the water channel aquaporin 2.
Wang CC, Ng CP, Shi H, Liew HC, Guo K, Zeng Q, Hong W
Molecular and cellular biology (2010) 30(1): 333-43. **WB, IHC**

VAMP8-mediated NOX2 recruitment to endosomes is necessary for antigen release.
Dingjan I, Paardekoooper LM, Verboogen DRJ, von Mollard GF, Ter Beest M, van den Bogaart G
European journal of cell biology (2017) 96(7): 705-714. **WB, ICC; KD verified; tested species: human**

Oxidized phagosomal NOX2 complex is replenished from lysosomes.
Dingjan I, Linders PT, van den Bekerom L, Baranov MV, Halder P, Ter Beest M, van den Bogaart G
Journal of cell science (2017) 130(7): 1285-1298. **WB, ICC; KD verified; tested species: human**

Leishmania major Promastigotes Evade LC3-Associated Phagocytosis through the Action of GP63.
Matte C, Casgrain PA, Séguin O, Moradin N, Hong WJ, Descoteaux A
PLoS pathogens (2016) 12(6): e1005690. **WB, ICC**

Vesicular transport system in myotubes: ultrastructural study and signposting with vesicle-associated membrane proteins.
Tajika Y, Takahashi M, Khairani AF, Ueno H, Murakami T, Yorifuji H
Histochemistry and cell biology (2014) 141(4): 441-54. **WB, ICC**

Vesicle-associated membrane protein-8/endobrevin negatively regulates phagocytosis of bacteria in dendritic cells.
Ho YH, Cai DT, Wang CC, Huang D, Wong SH
Journal of immunology (Baltimore, Md. : 1950) (2008) 180(5): 3148-57. **WB, ICC**

Platelet-specific deletion of SNAP23 ablates granule secretion, substantially inhibiting arterial and venous thrombosis in mice.
Williams CM, Li Y, Brown E, Poole AW
Blood advances (2018) 2(24): 3627-3636. **WB; tested species: mouse**

Codon Optimization Leads to Functional Impairment of RD114-TR Envelope Glycoprotein.
Zucchelli E, Pema M, Stornaiuolo A, Piovano C, Scavullo C, Giuliani E, Bossi S, Corna S, Asperti C, Bordignon C, Rizzardi GP, et al.
Molecular therapy. Methods & clinical development (2017) 4: 102-114. **ICC; tested species: cos cells**

SNAP23/25 and VAMP2 mediate exocytic event of transferrin receptor-containing recycling vesicles.
Kubo K, Kobayashi M, Nozaki S, Yagi C, Hatsuzawa K, Katoh Y, Shin HW, Takahashi S, Nakayama K
Biology open (2015) 4(7): 910-20. **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**

Evidence for lysosomal exocytosis and release of aggrecan-degrading hydrolases from hypertrophic chondrocytes, in vitro and in vivo.
Bastow ER, Last K, Golub S, Stow JL, Stanley AC, Fosang AJ
Biology open (2012) 1(4): 318-28. **IHC**

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**

Vesicle-associated membrane protein (VAMP) cleavage by a new metalloprotease from the Brazilian scorpion Tityus serrulatus.
Fletcher PL, Fletcher MD, Weninger K, Anderson TE, Martin BM
The Journal of biological chemistry (2010) 285(10): 7405-16. **WB**

Receptor-promoted exocytosis of airway epithelial mucin granules containing a spectrum of adenine nucleotides.
Kreda SM, Seminario-Vidal L, van Heusden CA, O'Neal W, Jones L, Boucher RC, Lazarowski ER
The Journal of physiology (2010) 588(Pt 12): 2255-67. **ICC**

Mast cells possess distinct secretory granule subsets whose exocytosis is regulated by different SNARE isoforms.
Puri N, Roche PA
Proceedings of the National Academy of Sciences of the United States of America (2008) 105(7): 2580-5. **WB; tested species: mouse**

Proteomics analysis of insulin secretory granules.
Brunner Y, Couté Y, Iezzi M, Foti M, Fukuda M, Hochstrasser DF, Wollheim CB, Sanchez JC
Molecular & cellular proteomics : MCP (2007) 6(6): 1007-17. **ICC**

Syntaxin 6 and Vti1b form a novel SNARE complex, which is up-regulated in activated macrophages to facilitate exocytosis of tumor necrosis Factor-alpha.
Murray RZ, Wylie FG, Khromykh T, Hume DA, Stow JL
The Journal of biological chemistry (2005) 280(11): 10478-83. **IP**