

Syntaxin 16

Cat.No. 110 162; 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 up to 1 : 5000 (AP staining) IP: not recommended ICC: 1 : 100 up to 1 : 500 IHC: yes IHC-P/FFPE: 1 : 2000
Immunogen	Recombinant protein corresponding to AA 1 to 302 from rat Syntaxin16
Reactivity	Reacts with: human (O14662), rat, mouse (Q8BVI5), hamster, rabbit. Other species not tested yet.
Specificity	Recognizes all four isoforms syntaxin 16a, b, c, d.
matching control	110-16P

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Syntaxin 16, a member of the SNARE family of proteins, localizes to the Golgi stack. It has been shown to be involved in trans-Golgi network trafficking and to interact with VAMP 3, VAMP 4 and VAMP 8.

Four splice variants (syntaxin 16a, b, c, d) have been described, which may have different roles in intracellular trafficking. The splice variant c is the shortest and localizes to the cytoplasm.

Selected References SYSY Antibodies

Composition of isolated synaptic boutons reveals the amounts of vesicle trafficking proteins. Wilhelm BG, Mandad S, Truckenbrodt S, Kröhnert K, Schäfer C, Rammner B, Koo SJ, Claßen GA, Krauss M, Haucke V, Urlaub H, et al. *Science (New York, N.Y.)* (2014) 344(6187): 1023-8. **WB, ICC, IHC; tested species: mouse, rat**

Syntaxin 16 regulates lumen formation during epithelial morphogenesis. Jung JJ, Inamdar SM, Tiwari A, Ye D, Lin F, Choudhury A *PloS one* (2013) 8(4): e61857. **WB, ICC; KD verified; tested species: rabbit**

Dual roles of the mammalian GARP complex in tethering and SNARE complex assembly at the trans-golgi network. Pérez-Victoria FJ, Bonifacino JS *Molecular and cellular biology* (2009) 29(19): 5251-63. **WB, ICC**

Glyoxal as an alternative fixative to formaldehyde in immunostaining and super-resolution microscopy. Richter KN, Revelo NH, Seitz KJ, Helm MS, Sarkar D, Saleeb RS, D'Este E, Eberle J, Wagner E, Vogl C, Lazaro DF, et al. *The EMBO journal* (2018) 37(1): 139-159. **ICC; tested species: mouse**

Newly produced synaptic vesicle proteins are preferentially used in synaptic transmission. Truckenbrodt S, Viplav A, Jähne S, Vogts A, Denker A, Wildhagen H, Fornasiero EF, Rizzoli SO *The EMBO journal* (2018) : . **ICC; tested species: rat**

Dynamic GLUT4 sorting through a syntaxin-6 compartment in muscle cells is derailed by insulin resistance-causing ceramide. Foley KP, Klip A *Biology open* (2014) 3(5): 314-25. **WB**

A new probe for super-resolution imaging of membranes elucidates trafficking pathways. Revelo NH, Kamin D, Truckenbrodt S, Wong AB, Reuter-Jessen K, Reisinger E, Moser T, Rizzoli SO *The Journal of cell biology* (2014) 205(4): 591-606. **IHC**

Sorting of GLUT4 into its insulin-sensitive store requires the Sec1/Munc18 protein mVps45. Rocisana J, Sadler JB, Bryant NJ, Gould GW *Molecular biology of the cell* (2013) 24(15): 2389-97. **WB**

SNARE protein expression and localization in human cytotoxic T lymphocytes. Pattu V, Qu B, Schwarz EC, Strauss B, Weins L, Bhat SS, Halimani M, Marshall M, Rettig J, Hoth M *European journal of immunology* (2012) 42(2): 470-5. **ICC**

Endoproteolytic cleavage of TUG protein regulates GLUT4 glucose transporter translocation. Bogan JS, Rubin BR, Yu C, Löffler MG, Orme CM, Belman JP, McNally LJ, Hao M, Cresswell JA *The Journal of biological chemistry* (2012) 287(28): 23932-47. **WB**

Calsyntenin-1 shelters APP from proteolytic processing during anterograde axonal transport. Steuble M, Diep TM, Schätzle P, Ludwig A, Tagaya M, Kunz B, Sonderegger P *Biology open* (2012) 1(8): 761-74. **WB**

Interaction of calcium-dependent activator protein for secretion 1 (CAPS1) with the class II ADP-ribosylation factor small GTPases is required for dense-core vesicle trafficking in the trans-Golgi network. Sadakata T, Shinoda Y, Sekine Y, Saruta C, Itakura M, Takahashi M, Furuichi T *The Journal of biological chemistry* (2010) 285(49): 38710-9. **WB**

Differential effects of depletion of ARL1 and ARFRP1 on membrane trafficking between the trans-Golgi network and endosomes. Nishimoto-Morita K, Shin HW, Mitsuhashi H, Kitamura M, Zhang Q, Johannes L, Nakayama K *The Journal of biological chemistry* (2009) 284(16): 10583-92. **ICC**

Molecular anatomy of a trafficking organelle. Takamori S, Holt M, Stenius K, Lemke EA, Grønborg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, et al. *Cell* (2006) 127(4): 831-46. **WB**

The v-SNARE Vti1a regulates insulin-stimulated glucose transport and Acrp30 secretion in 3T3-L1 adipocytes. Bose A, Guilherme A, Huang S, Hubbard AC, Lane CR, Soriano NA, Czech MP *The Journal of biological chemistry* (2005) 280(44): 36946-51. **WB**

MARCH-II is a syntaxin-6-binding protein involved in endosomal trafficking. Nakamura N, Fukuda H, Kato A, Hirose S *Molecular biology of the cell* (2005) 16(4): 1696-710. **WB**