

## Syntaxin 4

Cat.No. 110 042; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

### Data Sheet

Reconstitution/Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H <sub>2</sub> O, then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 1000 up to 1 : 5000 (AP staining) <b>IP:</b> yes <b>ICC:</b> 1 : 100 <b>IHC:</b> not recommended <b>IHC-P/FFPE:</b> not tested yet
Immunogen	Recombinant protein corresponding to AA 1 to 273 from rat Syntaxin4 (UniProt Id: Q08850)
Reactivity	Reacts with: human (Q12846), rat (Q08850), mouse (P70452), hamster. Other species not tested yet.
Specificity	Specific for syntaxin 4.
matching control	110-4P

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

**Syntaxin 4**, a member of the SNARE family of proteins, is related to syntaxin 1. Like syntaxin 2 it is predominantly localized to the plasma membrane of a wide variety of cells. Similar to syntaxins 1, 2, and 3, it appears to be involved in the fusion of transport vesicles with the plasma membrane.

### Selected References SYSY Antibodies

Legionella pneumophila promotes functional interactions between plasma membrane syntaxins and Sec22b.

Arasaki K, Roy CR

Traffic (Copenhagen, Denmark) (2010) 11(5): 587-600. **WB, ICC; tested species: human**

Insulin stimulates syntaxin4 SNARE complex assembly via a novel regulatory mechanism.

Kioumourtzoglou D, Gould GW, Bryant NJ

Molecular and cellular biology (2014) 34(7): 1271-9. **ICC, WB**

Role of insulin-dependent cortical fodrin/spectrin remodeling in glucose transporter 4 translocation in rat adipocytes.

Liu L, Jedrychowski MP, Gygi SP, Pilch PF

Molecular biology of the cell (2006) 17(10): 4249-56. **ICC, WB; tested species: rat**

Identification of a Botulinum Neurotoxin-like Toxin in a Commensal Strain of Enterococcus faecium.

Zhang S, Lebreton F, Mansfield MJ, Miyashita SI, Zhang J, Schwartzman JA, Tao L, Masuyer G, Martinez-Carranza M, Stenmark P, Gilmore MS, et al.

Cell host & microbe (2018) 23(2): 169-176.e6. **WB; tested species: mouse**

Limited proteolysis as a tool to probe the tertiary conformation of dysferlin and structural consequences of patient missense variant L344P.

Woolger N, Bournazos A, Sophocleous RA, Evesson FJ, Lek A, Driemer B, Sutton RB, Cooper ST

The Journal of biological chemistry (2017) 292(45): 18577-18591. **WB; tested species: human**

Calpains, cleaved mini-dysferlinC72, and L-type channels underpin calcium-dependent muscle membrane repair.

Lek A, Evesson FJ, Lemckert FA, Redpath GM, Lueders AK, Turnbull L, Whitchurch CB, North KN, Cooper ST

The Journal of neuroscience : the official journal of the Society for Neuroscience (2013) 33(12): 5085-94. **ICC; tested species: human**

Complexin 2 modulates vesicle-associated membrane protein (VAMP) 2-regulated zymogen granule exocytosis in pancreatic acini.

Falkowski MA, Thomas DD, Groblewski GE

The Journal of biological chemistry (2010) 285(46): 35558-66. **WB**

Reduced plasma membrane expression of dysferlin mutants is attributed to accelerated endocytosis via a syntaxin-4-associated pathway.

Evesson FJ, Peat RA, Lek A, Brilot F, Lo HP, Dale RC, Parton RG, North KN, Cooper ST

The Journal of biological chemistry (2010) 285(37): 28529-39. **ICC; tested species: human**

Syntaxin isoform specificity in the regulation of renal H<sup>+</sup>-ATPase exocytosis.

Li G, Alexander EA, Schwartz JH

The Journal of biological chemistry (2003) 278(22): 19791-7.

Rab3D is not required for exocrine exocytosis but for maintenance of normally sized secretory granules.

Riedel D, Antonin W, Fernandez-Chacon R, Alvarez de Toledo G, Jo T, Geppert M, Valentijn JA, Valentijn K, Jamieson JD, Südhof TC, Jahn R, et al.

Molecular and cellular biology (2002) 22(18): 6487-97.

From lysosomes to the plasma membrane: localization of vacuolar-type H<sup>+</sup>-ATPase with the α3 isoform during osteoclast differentiation.

Toyomura T, Murata Y, Yamamoto A, Oka T, Sun-Wada GH, Wada Y, Futai M

The Journal of biological chemistry (2003) 278(24): 22023-30.

Promiscuous interaction of SNAP-25 with all plasma membrane syntaxins in a neuroendocrine cell.

Bajohrs M, Darios F, Peak-Chew SY, Davletov B

The Biochemical journal (2005) 392(Pt 2): 283-9.

### Selected General References

Identification of SNAREs involved in regulated exocytosis in the pancreatic acinar cell.

Hansen NJ, Antonin W, Edwardson JM

The Journal of biological chemistry (1999) 274(32): 22871-6.

Membrane fusion and exocytosis.

Jahn R, Südhof TC

Annual review of biochemistry (1999) 68: 863-911.

The syntaxin family of vesicular transport receptors.

Bennett MK, García-Arrarás JE, Elferink LA, Peterson K, Fleming AM, Hazuka CD, Scheller RH

Cell (1993) 74(5): 863-73.