

## Munc18-2

Cat.No. 116 102; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

### Data Sheet

|                            |                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reconstitution/<br>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)<br><b>IP:</b> not tested yet<br><b>ICC:</b> 1 : 500<br><b>IHC:</b> not tested yet<br><b>IHC-P/FFPE:</b> not tested yet |
| Immunogen                  | Recombinant protein corresponding to AA 1 to 593 from mouse Munc18-2 (UniProt Id: Q64324)                                                                               |
| Reactivity                 | Reacts with: rat (Q62753), mouse (Q64324).<br>Other species not tested yet.                                                                                             |
| Specificity                | Specific for Munc 18-2 with weak cross-reactivity to Munc18-1 and 3.                                                                                                    |
| Remarks                    | This antibody detects two smaller bands (possible degradation products) of unknown identity.                                                                            |

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

**Munc 18** is an abundant neuronal protein that tightly binds to the synaptic fusion protein syntaxin 1. It is highly homologous to the *C. elegans* unc-18 gene product, and weakly related to the yeast *sec1*, *sly1*, and *slp1* genes.

There are three munc 18 isoforms in mammals. **Munc 18-1** or 18a, also referred to as **rb-sec1**, **n-sec1**, **stxbp1** and **p67**, is primarily expressed in neurons. **Munc 18-2** or 18b, also referred to as **stxbp2**, and Munc 18-3 or 18c are expressed ubiquitously.

### Selected References SYSY Antibodies

Involvement of complexin 2 in docking, locking and unlocking of different SNARE complexes during sperm capacitation and induced acrosomal exocytosis.

Tsai PS, Brewis IA, van Maaren J, Gadella BM  
PloS one (2012) 7(3): e32603. **WB, ICC; tested species: pig**

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**

### Selected General References

Molecular identification of two novel Munc-18 isoforms expressed in non-neuronal tissues.

Tellam JT, McIntosh S, James DE  
The Journal of biological chemistry (1995) 270(11): 5857-63.

Slp4-a/granuphilin-a interacts with syntaxin-2/3 in a Munc18-2-dependent manner.

Fukuda M, Imai A, Nashida T, Shimomura H  
The Journal of biological chemistry (2005) 280(47): 39175-84.

Evidence of a role for Munc18-2 and microtubules in mast cell granule exocytosis.

Martin-Verdeaux S, Pombo I, Iannascoli B, Roa M, Varin-Blank N, Rivera J, Blank U  
Journal of cell science (2003) 116(Pt 2): 325-34.

Munc18-2, a functional partner of syntaxin 3, controls apical membrane trafficking in epithelial cells.

Riento K, Kauppi M, Keranen S, Olkkonen VM  
The Journal of biological chemistry (2000) 275(18): 13476-83.

A novel ubiquitous form of Munc-18 interacts with multiple syntaxins. Use of the yeast two-hybrid system to study interactions between proteins involved in membrane traffic.

Hata Y, Südhof TC  
The Journal of biological chemistry (1995) 270(22): 13022-8.

n-Sec1: a neural-specific syntaxin-binding protein.

Pevsner J, Hsu SC, Scheller RH  
Proceedings of the National Academy of Sciences of the United States of America (1994) 91(4): 1445-9.

A rat brain Sec1 homologue related to Rop and UNC18 interacts with syntaxin.

Garcia EP, Gatti E, Butler M, Burton J, De Camilli P  
Proceedings of the National Academy of Sciences of the United States of America (1994) 91(6): 2003-7.

Synaptic vesicle fusion complex contains unc-18 homologue bound to syntaxin.

Hata Y, Slaughter CA, Südhof TC  
Nature (1993) 366(6453): 347-51.