

Complexin 3

Cat.No. 122 311; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (ECL detection) IP: not tested yet ICC: not tested yet IHC: 1 : 500 IHC-P/FFPE: 1 : 200
Clone	294C2
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 158 from mouse Complexin3 (UniProt Id: Q8R1B5)
Reactivity	Reacts with: rat (D4ABY0), mouse (Q8R1B5). Other species not tested yet.
Specificity	Specific for complexin 3, no cross reaction to other complexins. (K.O. verified)

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

Complexins are enriched in neurons where they colocalize with syntaxin 1 and SNAP 25. In addition, complexin 2 is expressed ubiquitously at low levels. Complexins bind weakly to syntaxin 1 alone and not at all to synaptobrevin and SNAP 25, but strongly to the SNAP receptor-core complex composed of these three molecules. They compete with α-SNAP for binding to the core complex but not with other interacting molecules, suggesting that complexins regulate the sequential interactions of α-SNAP and synaptotagmins with the SNAP receptor during exocytosis.

In retinal ribbon synapses **complexin 3** and complexin 4 functionally replace complexin 1 and 2. They have similar biochemical binding properties and are farnesylated at their C-terminus.

Selected References SY SY Antibodies

Functional roles of complexin in neurotransmitter release at ribbon synapses of mouse retinal bipolar neurons. Vaithianathan T, Henry D, Akmentin W, Matthews G. The Journal of neuroscience : the official journal of the Society for Neuroscience (2015) 35(9): 4065-70. **ICC**

Molecular diversity of early-born subplate neurons. Hoerder-Suabedissen A, Molnár Z. Cerebral cortex (New York, N.Y. : 1991) (2013) 23(6): 1473-83. **IHC; tested species: mouse**

Selected General References

The synaptic vesicle cycle: a cascade of protein-protein interactions. Südhof TC. Nature (1995) 375(6533): 645-53.

Complexins: cytosolic proteins that regulate SNAP receptor function. McMahon HT, Missler M, Li C, Südhof TC. Cell (1995) 83(1): 111-9.

Synaptic vesicles and exocytosis. Jahn R, Südhof TC. Annual review of neuroscience (1994) 17: 219-46.