

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 SYSY 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.