# SYSY **Synaptic Systems**

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## Complexin 1/2

Cat.No. 122 004; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

### **Data Sheet**

Reconstitution/ Storage	100 $\mu l$ antiserum, lyophilized. For reconstitution add 100 $\mu l$ $H_2O,$ then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining)   IP: yes   ICC: 1 : 500   IHC: 1 : 200 up to 1 : 500   IHC-P/FFPE: 1 : 500
Immunogen	Synthetic peptide corresponding to AA 122 to 134 from human Complexin2 (UniProt Id: Q6PUV4)
Reactivity	Reacts with: human (O14810, Q6PUV4), rat (P63041, P84087), mouse (P63040, P84086). Other species not tested yet.
Specificity	Recognizes complexin 1 and 2.
matching control	122-0P

#### 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**, also referred to as **synaphin 1**, 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 a-SNAP for binding to the core complex but not with other interacting molecules, suggesting that complexins regulate the sequential interactions of a-SNAP and synaptotagmins with the SNAP receptor during exocytosis. In retinal ribbon synapses complexin 3 and complexin 4 functionally replace complexin 1 (synaphin 2) and 2. They have similar biochemical binding properties and are farnesylated at their C-terminus.

#### **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.