

Rabbit Anti-CPLX2 antibody

SL11342R

| Product Name: | CPLX2 |
|------------------------|--|
| Chinese Name: | Complexin II/复合素2抗体 |
| Alias: | Complexin 2; Complexin II; Complexin-2; Complexin2; ComplexinII; CPLX 2; Cplx2; CPLX2_HUMAN; CPX 2; CPX II; CPXII; Hfb1; Synaphin 1; Synaphin-1; Synaphin1; 921 L. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Chicken, Horse, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 15kDa |
| Cellular localization: | cytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human Complexin II:51-100/134 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Complexin 1 and Complexin 2, also designated Synaphin 1 and Synaphin 2, contain an a-helical middle domain of approximately 58 amino acids. Complexin 1 and Complexin 2 are expressed in presynaptic terminals of inhibitory and excitatory hippocampal neurons, respectively, and in cytoplasmic pools during early stages of development. Complexins promote SNARE (soluble N-ethylmaleimide-sensitive factor attachment |

protein receptors) precomplex formation by binding to synaxin with its a-helical domain. Complexins are important regulators of transmitter release at a late step in calcium dependent neurotransmitter release or immediately after the calcium-triggering step of fast synchronous transmitter release and preceding vesicle fusion. Neurons lacking complexins show reduced transmitter release efficiency due to decreased calcium sensitivity of the synaptic secretion process. Complexin 2 may play a role in LTP (long term potentiation) following tetanic stimulation. A progressive loss of Complexin 2 occurs in the brains of mice carrying the Huntington disease mutation, an autosomal dominant neurodegenerative disorder. Changes in the neurotransmitter release might contribute to the motor, emotional and cognitive dysfunctions seen in these mice.

Function:

Positively regulates a late step in synaptic vesicle exocytosis. Also involved in mast cell exocytosis.

Subunit:

Binds to the SNARE core complex containing SNAP25, VAMP2 and STX1A.

Subcellular Location:

Cytoplasm; cytosol. Enriched at synaptic-releasing sites in mature neurons.

Tissue Specificity:

Nervous system. In hippocampus and cerebellum, expressed mainly by excitatory neurons. Down-regulated in brain cortex from patients suffering from Huntington disease, bipolar disorder or major depression. Down-regulated in cerebellum from patients with schizophrenia.

Similarity: 🥏

Belongs to the complexin/synaphin family.

SWISS:

Q6PUV4

Gene ID: 10814

Database links:

Entrez Gene: 10814Human

Entrez Gene: 12890 Mouse

Entrez Gene: 116657Rat

Omim: 605033Human

SwissProt: Q6PUV4Human

| SwissProt: P84086Mouse |
|---|
| SwissProt: P84087Rat |
| Unigene: 193235Human |
| Unigene: 268902Mouse |
| Unigene: 10134Rat |
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| Important Note: |
| This product as supplied is intended for research use only, not for use in human, |
| |
| therapeutic or diagnostic applications. |
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