

# Rabbit Anti-CPLX1 antibody

SL11341R

Product Name:	CPLX1
Chinese Name:	Complexin I/复合素1抗体
Alias:	complexin 1; Complexin I; Complexin-1; CPLX1; CPLX1 HUMAN; CPX I; CPX-I;
	CPX1; Synaphin 2; Synaphin-2; 921-S.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow,
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
<b>Cellular localization:</b>	cytoplasmic 💙
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CPLX1:31-100/134
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 glucoseinduced secretion of insulin by pancreatic beta-cells.

#### 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 inhibitory neurons. Overexpressed in substantia nigra from patients with Parkinson disease.

# Similarity:

Belongs to the complexin/synaphin family.

SWISS: 014810

# Gene ID: 10815

Database links:

Entrez Gene: 768228Cow

Entrez Gene: 10815Human

Entrez Gene: 12889Mouse

Entrez Gene: 64832Rat

Omim: 605032Human

SwissProt: Q0IIL7Cow

SwissProt: 014810Human
SwissProt: P63040 Mouse
SwissProt: P63041Rat
Unigene: 478930Human
Unigene: 5195 Mouse
Unigene: 10133Rat
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications
inclupedue of anglicone approximation.

Lagnostic applications.







Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CPLX1) Polyclonal Antibody, Unconjugated (SL11341R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CPLX1) Polyclonal Antibody, Unconjugated (SL11341R) at 1:400 overnight at 4°C, followed by a conjugated secondary (Goat Anti-rabbit IgG/Bio) for 20minutes at 37°C, followed by a conjugated streptavidin (SL11341R) at[1:500] for 40 minutes and DAPI staining of the nuclei.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CPLX1) Polyclonal Antibody, Unconjugated (SL11341R) at 1:400 overnight at 4°C, followed by a conjugated secondary (Goat Anti-rabbit IgG/Bio) for 20minutes at 37°C, followed by a conjugated streptavidin (SL11341R) at[1:500] for 40 minutes and DAPI staining of the nuclei.