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CPLX1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9412c

Specification

CPLX1 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O14810
Other Accession	P63041, P63040, Q4R4N1, Q0IIL7
Reactivity	**Mouse**
Predicted	**Bovine, Monkey, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**33-60**

CPLX1 Antibody (Center) - Additional Information

Gene ID 10815

Other Names
Complexin-1, Complexin I, CPX I, Synaphin-2, CPLX1

Target/Specificity
This CPLX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-60 amino acids from the Central region of human CPLX1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CPLX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CPLX1 Antibody (Center) - Protein Information

Name CPLX1

Function Positively regulates a late step in exocytosis of various cytoplasmic vesicles, such as

synaptic vesicles and other secretory vesicles (PubMed:21785414). Organizes the SNAREs into a cross-linked zigzag topology that, when interposed between the vesicle and plasma membranes, is incompatible with fusion, thereby preventing SNAREs from releasing neurotransmitters until an action potential arrives at the synapse (PubMed:21785414). Also involved in glucose-induced secretion of insulin by pancreatic beta-cells. Essential for motor behavior.

Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P63040}. Perikaryon {ECO:0000250|UniProtKB:P63040}. Presynapse {ECO:0000250|UniProtKB:P63040}. Note=Enriched at synaptic-releasing sites in mature neurons. {ECO:0000250|UniProtKB:P63040}

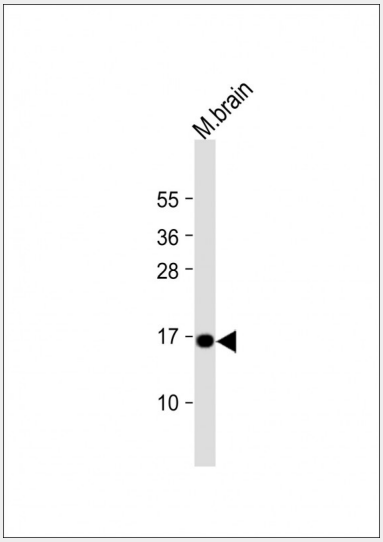
Tissue Location
Nervous system. In hippocampus and cerebellum, expressed mainly by inhibitory neurons. Overexpressed in substantia nigra from patients with Parkinson disease

CPLX1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

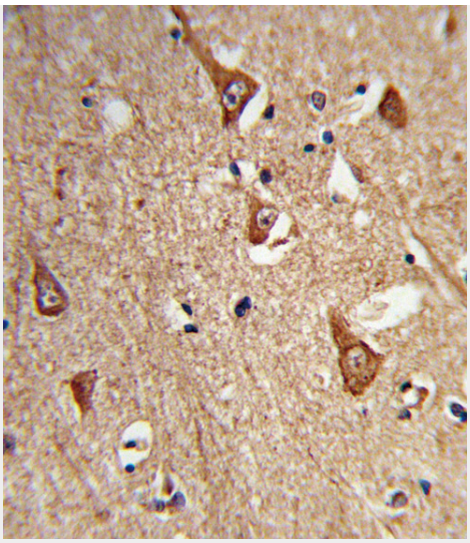
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CPLX1 Antibody (Center) - Images



Anti-CPLX1 Antibody (Center) at 1:1000 dilution + mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 15 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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Formalin-fixed and paraffin-embedded human brain tissue reacted with CPLX1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CPLX1 Antibody (Center) - Background

CPLX1 encoded by the complexin/synaphin gene family are cytosolic proteins that function in synaptic vesicle exocytosis. These proteins bind syntaxin, part of the SNAP receptor. The protein product of this gene binds to the SNAP receptor complex and disrupts it, allowing transmitter release.

CPLX1 Antibody (Center) - References

Salimi, K., et al. Synapse 62(4):273-282(2008)
Giraudo, C.G., et al. Science 313(5787):676-680(2006)
Kishi, T., et al. Schizophr. Res. 82 (2-3), 185-189 (2006) :
Basso, M., et al. Proteomics 4(12):3943-3952(2004)
Chen, X., et al. Neuron 33(3):397-409(2002)