For Research Use Only

CPLX1 Polyclonal antibody

Catalog Number:10246-2-AP 8 Publications

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Basic Information

Catalog Number:
10246-2-AP

Size:
150ul , Concentration: 1000 µg/ml by Nanodrop and 533 µg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0387

GenBank Accession Number:
BC002471

GeneID (NCBI):
10815

Full Name:
complexin 1

Calculated MW:
15 kDa

Observed MW:
15-20 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:20-1:200
IF 1:10-1:100

Applications

Tested Applications:
IF, IHC, WB,ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, macaque

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, rat brain tissue

IHC : mouse brain tissue,

IF : SH-SY5Y cells,

Background Information

Complexin 1 (CPLX1) is a member of the complexin/synaphin gene family, which are cytosolic proteins that function in synaptic vesicle exocytosis. Complexins are enriched in neurons where they colocalize with syntaxin and SNAP-25. Complexins bind weakly to syntaxin alone and not at all to synaptobrevin and SNAP-25, but strongly to the SNAP receptor-core complex composed of these three molecules. Compexins also compete with alpha-SNAP for binding to the core complex but not with other interacting molecules, including synaptotagmin I, and regulate the sequential interactions of alpha-SNAP and synaptotagmins with the SNAP receptor during exocytosis. CLPX1 binds to the SNAP receptor complex and disrupts it, leading to the release of transmitters. Alterations of complexins may contribute to the molecular substrate for abnormalities of neural connectivity in severe mental disorders.

Notable Publications

Author	Pubmed ID	Journal	Application
Sandra Siegert	26005852	Nat Neurosci	WB
Hazal Haytural	34013204	Brain Commun	IF
Nicole Arnold	27681124	J Virol	IHC

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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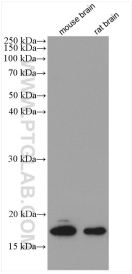
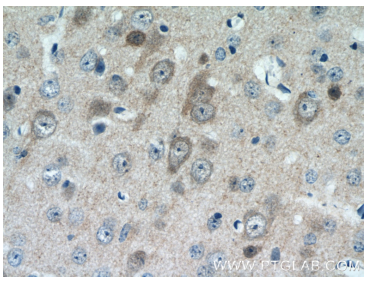
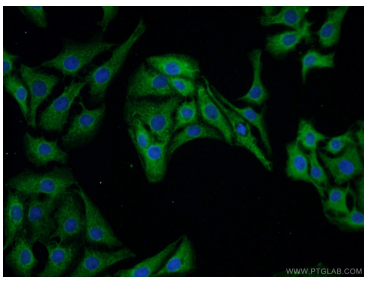
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 10246-2-AP (CPLX1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10246-2-AP (CPLX1 Antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of SH-SY5Y cells using 10246-2-AP (CPLX1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).