

For Research Use Only

CPLX1 Polyclonal antibody

Catalog Number: 10246-2-AP

8 Publications



Basic Information

Catalog Number: 10246-2-AP	GenBank Accession Number: BC002471	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop and 533 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 10815	Recommended Dilutions: WB 1:2000-1:10000
Source: Rabbit	UNIPROT ID: O14810	IHC 1:500-1:2000
Isotype: IgG	Full Name: complexin 1	IF/ICC 1:200-1:800
Immunogen Catalog Number: AG0387	Calculated MW: 15 kDa	
	Observed MW: 15-20 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Cited Applications: WB, IHC, IF	WB : mouse brain tissue, rat brain tissue
Species Specificity: human, mouse, rat	IHC : mouse brain tissue,
Cited Species: human, mouse, macaque	IF/ICC : SH-SY5Y cells,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

Complexin 1 (CPLX1) is a member of the complexin/syntaxin 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. Complexins 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. CPLX1 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

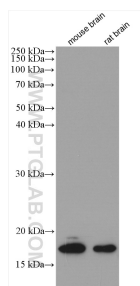
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

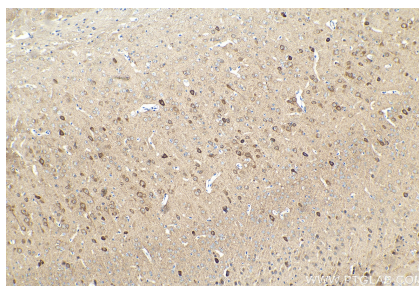
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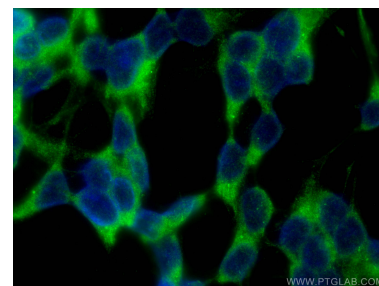
Selected Validation Data



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 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using CPLX1 antibody (10246-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).