

For Research Use Only

# UNC13A Monoclonal antibody

Catalog Number: 68483-1-Ig



## Basic Information

<b>Catalog Number:</b> 68483-1-Ig	<b>GenBank Accession Number:</b> NM_001080421	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 23025	<b>CloneNo.:</b> 3C3A9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9UPW8	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:200-1:1000 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG2a	<b>Full Name:</b> unc-13 homolog A (C. elegans)	
	<b>Calculated MW:</b> 193 kDa	
	<b>Observed MW:</b> 193-210 kDa	

## Applications

**Tested Applications:**  
IF/ICC, IHC, WB, ELISA

**Species Specificity:**  
Human, mouse, rat, pig, rabbit

**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:** pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue

**IHC:** mouse brain tissue,

**IF/ICC:** SH-SY5Y cells,

## Background Information

UNC13A, also named KIAA1032, belongs to the unc-13 family. It plays a role in vesicle maturation during exocytosis as a target of the diacylglycerol second messenger pathway. UNC13A is involved in neurotransmitter release by acting in synaptic vesicle priming prior to vesicle fusion and participates in the activity-dependent refilling of readily releasable vesicle pool (RRP). It is essential for synaptic vesicle maturation in most excitatory/glutamatergic but not inhibitory/GABA-mediated synapses. UNC13A is also involved in secretory granule priming in INS secretion. The antibody is specific to UNC13A.

## 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

For technical support and original validation data for this product please contact:

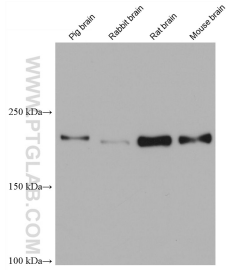
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

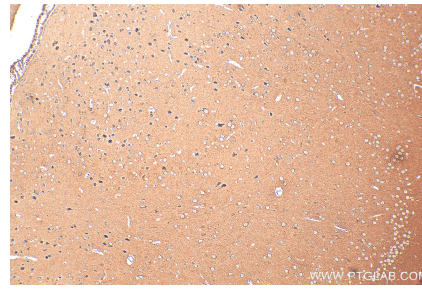
W: [ptgcn.com](http://ptgcn.com)

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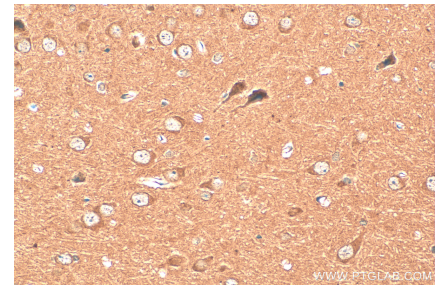
## Selected Validation Data



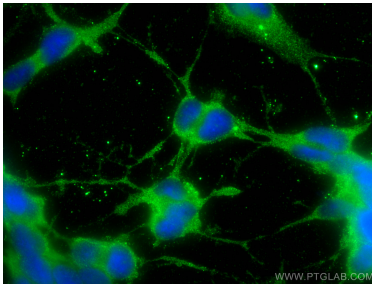
Various lysates were subjected to SDS PAGE followed by western blot with 68483-1-Ig (UNC13A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68483-1-Ig (UNC13A antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68483-1-Ig (UNC13A antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using UNC13A antibody (68483-1-Ig, Clone: 3C3A9) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).