

For Research Use Only

# SLC32A1/VGAT Polyclonal antibody

Catalog Number: 14471-1-AP

15 Publications



## Basic Information

### Catalog Number:

14471-1-AP

### Concentration:

800 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5843

### GenBank Accession Number:

BC053582

### GeneID (NCBI):

140679

### UNIPROT ID:

Q9H598

### Full Name:

solute carrier family 32 (GABA vesicular transporter), member 1

### Calculated MW:

57 kDa

### Observed MW:

57 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:10000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF-P: 1:50-1:500

IF-Fro: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, caenorhabditis elegans

**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: unboiled mouse brain tissue,

IP: mouse brain tissue,

IHC: rat brain tissue, mouse brain tissue

IF-P: rat brain tissue, mouse brain tissue

IF-Fro: rat brain tissue,

## Background Information

SLC32A1, also known as VGAT (vesicular GABA transporter), functions in the uptake of GABA and glycine into synaptic vesicles. GABA (gamma-aminobutyric acid), is the major inhibitory neurotransmitter in the CNS. VGAT transports GABA and glycine into acidic vesicles and localizes to the synaptic vesicle in glycinergic and GABAergic neurons. And VGAT antibodies are useful markers for presynaptic GABAergic and glycinergic neurons.

## Notable Publications

Author	Pubmed ID	Journal	Application
Eva S Schweikhard	26348906	Biochem J	WB
Wenting Zhuang	35735607	Curr Issues Mol Biol	IF
Tomohiro Umeda	28760161	Acta Neuropathol Commun	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

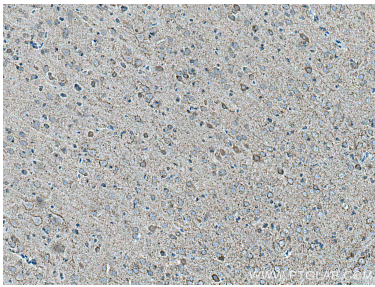
T: 4006900926

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

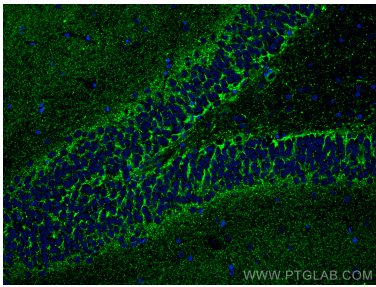
W: [ptgcn.com](http://ptgcn.com)

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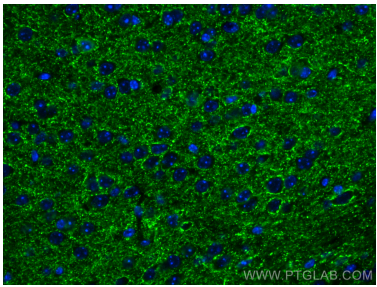
Selected Validation Data



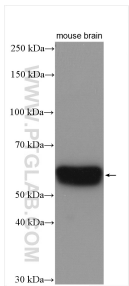
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 14471-1-AP (VGAT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



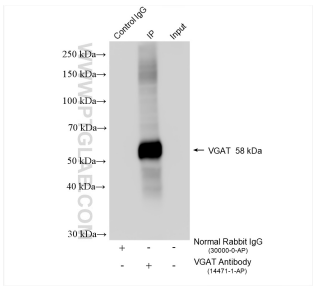
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



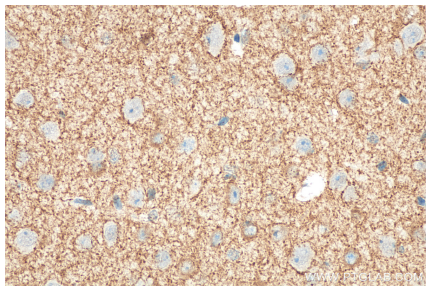
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



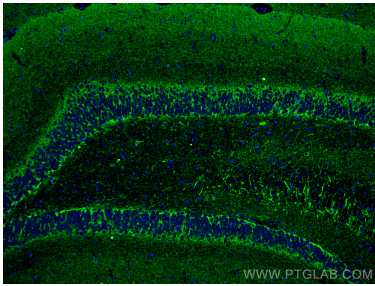
unboiled mouse brain tissue were subjected to SDS PAGE followed by western blot with 14471-1-AP (VGAT antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



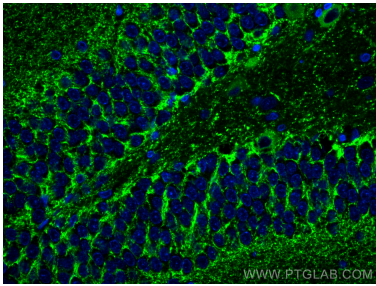
IP result of anti-VGAT (IP:14471-1-AP, 4ug; Detection:14471-1-AP 1:5000) with mouse brain tissue lysate 2100 ug.



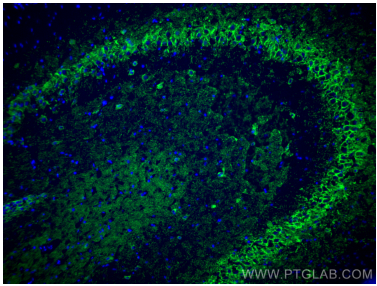
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 14471-1-AP (VGAT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded rat brain tissue using SLC32A1/VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).