For Research Use Only

SLC32A1/VGAT Polyclonal antibody

Catalog Number:14471-1-AP 16 Publications



Basic Information

Catalog Number: 14471-1-AP Source: Rabbit

Isotype: IgG

Immunogen Catalog Number:

AG5843

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

GenBank Accession Number:

BC053582

140679

Q9H598

GeneID (NCBI):

UNIPROT ID:

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

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

Storage Buffer:

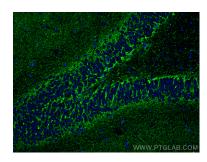
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

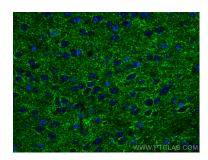
Selected Validation Data



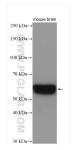
Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 14471-1-AP (VGAT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



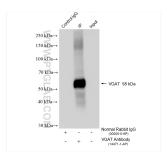
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



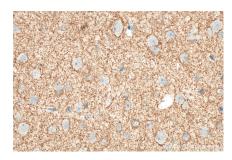
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using VGAT antibody (14471-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



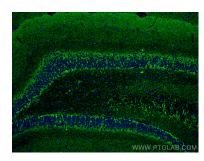
unboiled mouse brain tissue were subjected to SDS PAGE followed by western blot with 14471-1-AP (VGAT antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



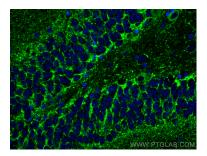
IP result of anti-VGAT (IP:14471-1-AP, 4ug; Detection:14471-1-AP 1:5000) with mouse brain tissue lysate 2100 ug.



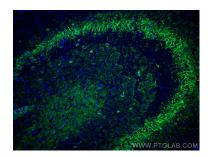
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 14471-1-AP (VGAT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).