

For Research Use Only

VGLUT1 Polyclonal antibody

Catalog Number: 55491-1-AP

20 Publications



Basic Information

Catalog Number:

55491-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_020309

GeneID (NCBI):

57030

UNIPROT ID:

Q9P2U7

Full Name:

solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7

Calculated MW:

62 kDa

Observed MW:

61 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:750-1:3000

IF-P: 1:50-1:500

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: unboiled mouse brain tissue,

IHC: rat brain tissue, human brain tissue, mouse brain tissue

IF-P: mouse brain tissue,

FC (Intra): 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

Vesicular glutamate transporter 1 (VGLUT1) is a critical protein involved in the packaging and release of the neurotransmitter glutamate in synaptic vesicles. VGLUT1 is predominantly expressed in neurons that release glutamate, the primary excitatory neurotransmitter in the central nervous system, it is a marker of glutamatergic neurons.

Notable Publications

Author	Pubmed ID	Journal	Application
Juan Mo	30347267	Neurobiol Dis	IF
Patrizia Bossolasco	36220610	Neurobiol Dis	IF
Hironori Bando	35096641	Front Cell Infect Microbiol	IF

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

*** 20ul sizes contain 0.1% BSA

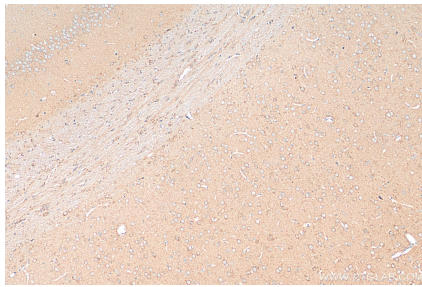
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

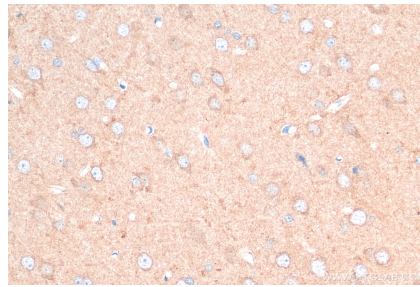
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

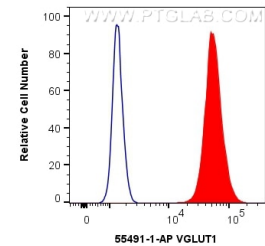
Selected Validation Data



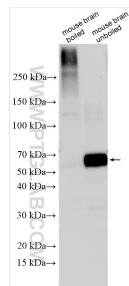
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



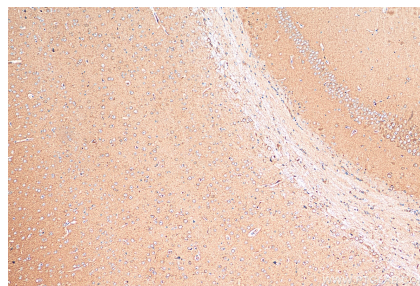
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



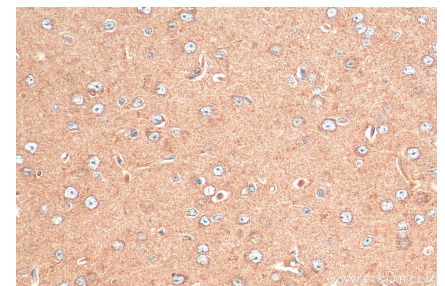
1X10⁶ SH-SY5Y cells were intracellularly stained with 0.4 ug Anti-Human VGLUT1 (55491-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



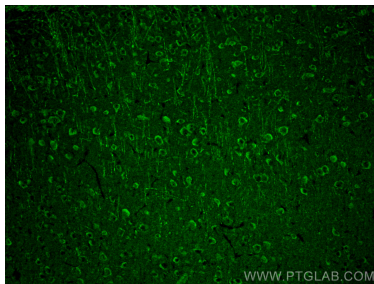
Various lysates were subjected to SDS PAGE followed by western blot with 55491-1-AP (VGLUT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using VGLUT1 antibody (55491-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).