

For Research Use Only

# VGLUT1 Polyclonal antibody

Catalog Number: 55491-1-AP

16 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

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

IHC 1:750-1:3000

IF-P 1:50-1:500

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**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:

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

**IF-P** : mouse brain tissue,

## 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

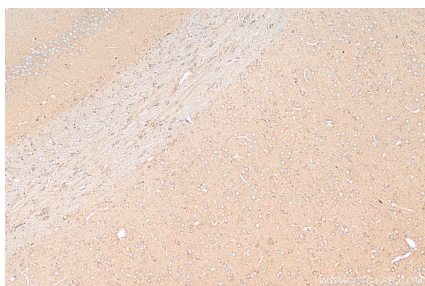
For technical support and original validation data for this product please contact:

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

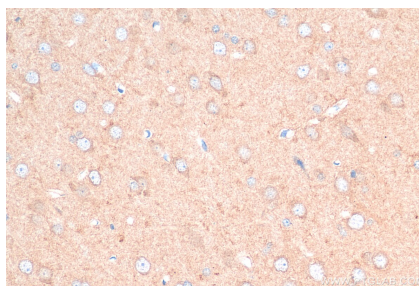
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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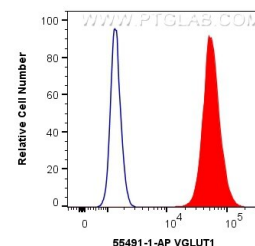
## Selected Validation Data



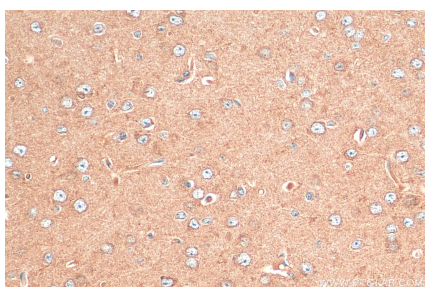
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



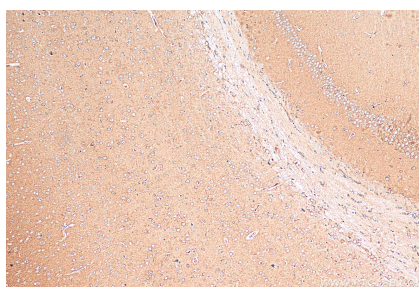
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 55491-1-AP (VGLUT1 antibody) at dilution of 1:1500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



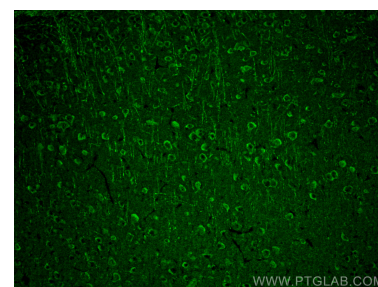
1X10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.4 ug Anti-Human VGLUT1 (55491-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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).



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).



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).