

## Anti-VGLUT1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

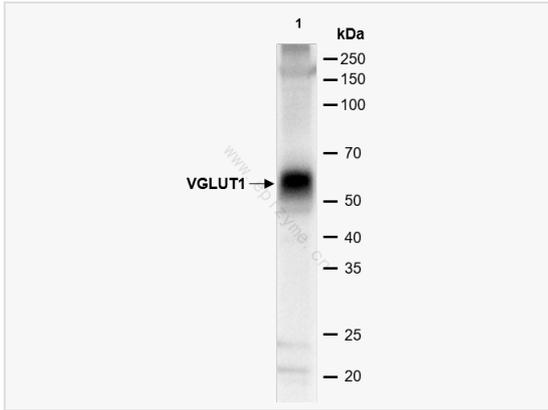
Catalog # R013806

### Product Information

Application	WB, IHC-P/IF (Tissue-P), IHC-F/IF (Tissue-F), IF (Cell)/ICC, ELISA
Reactivity	Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IHC-F 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	51B02L61
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human VGLUT1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-VGLUT1 Rabbit mAb [51B02L61] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	BNPI; Brain specific Na (+) dependent inorganic phosphate cotransporter; Brain specific Na dependent inorganic phosphate cotransporter; Brain-specific Na(+)-dependent inorganic phosphate cotransporter; Slc17a7; Solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7; Solute carrier family 17 member 7; Vesicular glutamate transporter 1; VGLU1_HUMAN; VGLUT 1; VGluT1.
Calculated MW	Calculated MW: 62 kDa; Observed MW: 62 kDa
Uniprot ID	Q9P2U7
Gene ID	57030
Background	The protein encoded by this gene is a vesicle-bound, sodium-dependent phosphate transporter that is specifically expressed in the neuron-rich regions of the brain. It is preferentially associated with the membranes of synaptic vesicles and functions in glutamate transport. The protein shares 82% identity with the differentiation-associated Na-dependent inorganic phosphate cotransporter and they appear to form a distinct class within the Na <sup>+</sup> /Pi cotransporter family. [provided by RefSeq, Jul 2008]
Cellular Location	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Membrane. Cell junction, synapse, synaptosome.
Tissue Location	Expressed in several regions of the brain including amygdala, cerebellum, cerebral cortex, hippocampus, frontal lobe, medulla, occipital lobe, putamen and temporal lobe.



Western Blot - Anti-VGLUT1 Rabbit mAb [51B02L61]

All lanes: R013806 at 1:1,000 dilution

Lane 1: Rat brain whole tissue lysates

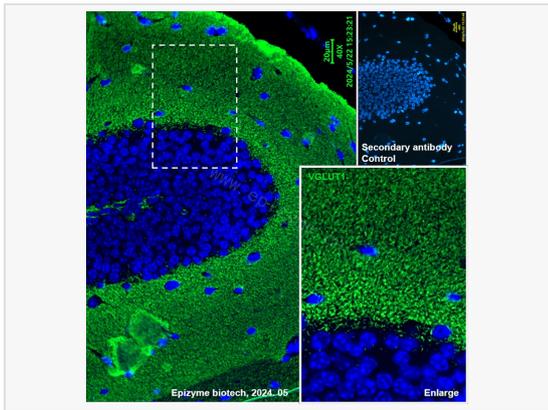
Lysates/proteins at 10  $\mu$ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 62 kDa

Observed band size: 62 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-VGLUT1 Rabbit mAb [51B02L61]

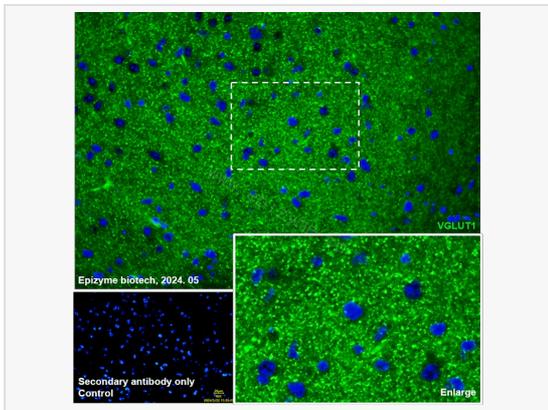
Sample: Paraformaldehyde-fixed, paraffin embedded mouse brain tissue (section of hippocampus)

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R013806 at 1:100 dilution

Secondary antibody: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green)

Nuclei were stained with DAPI (shown in blue).



Immunofluorescence - Anti-VGLUT1 Rabbit mAb [51B02L61]

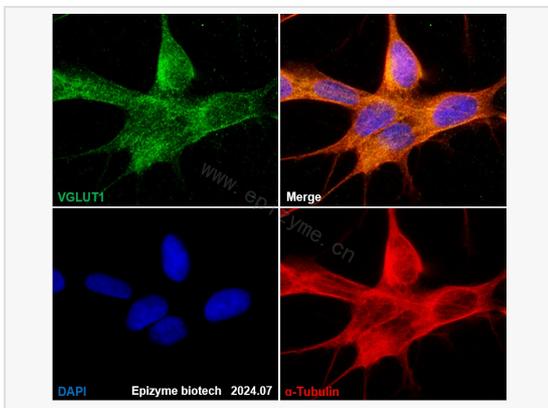
Sample: Paraformaldehyde-fixed, paraffin embedded mouse brain tissue (section of hippocampus)

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R013806 at 1:100 dilution

Secondary antibody: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green)

Nuclei were stained with DAPI (shown in blue).



Immunofluorescence - Anti-VGLUT1 Rabbit mAb [51B02L61]

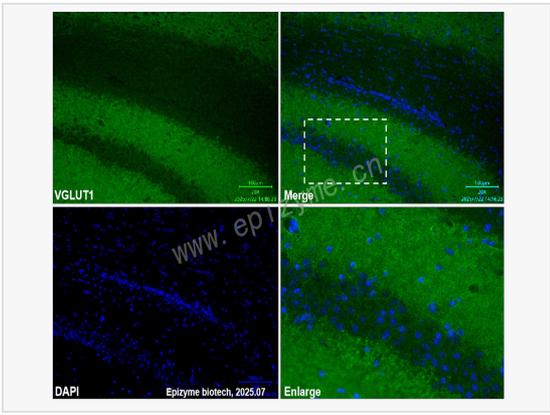
Sample: SY5Y cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R013806 at 1:100 dilution and  $\alpha$ -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunofluorescence (frozen section) - Anti-VGLUT1 Rabbit mAb [51B02L61]  
Sample: Paraformaldehyde-fixed, frozen mouse brain tissue  
Primary antibody: R013806 at 1:100 dilution  
Secondary antibody: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green)  
Nuclei were stained with DAPI (shown in blue).