

VGLUT2 Recombinant Antibody [PSH10-54] - Mouse IgG1 (Chimeric)

HA601451



Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Mouse, Rat
Applications:	IHC-Fr, IHC-P, WB
Molecular Wt:	Predicted band size: 65 kDa
Clone number:	PSH10-54

Description: Predicted to enable L-glutamate transmembrane transporter activity and neurotransmitter transmembrane transporter activity. Involved in neurotransmitter loading into synaptic vesicle. Predicted to be located in synaptic vesicle. Predicted to be active in excitatory synapse. Predicted to be integral component of synaptic vesicle membrane.

Positive control: Mouse cerebellum tissue, rat cerebellum tissue, Mouse brain tissue lysate.

Subcellular location: Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane, Synapse, synaptosome, Cell membrane.

Database links: SwissProt: Q8BLE7 Mouse | Q9JI12 Rat

Recommended Dilutions:

IHC-Fr	1:500
IHC-P	1:2,000
WB	1:5,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

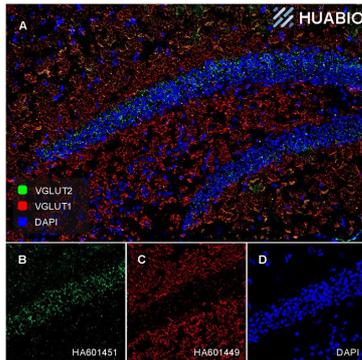
Orders:0086-571-88062880

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Images

**Fig1:** Application: IHC-Fr

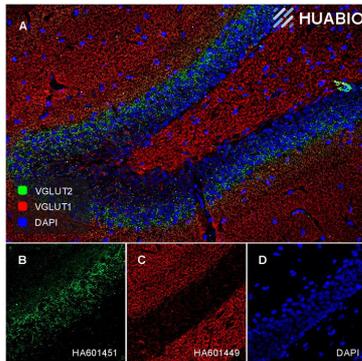
Species: Mouse

Site: hippocampus

Sample: Frozen section

Antibody concentration: 1/500 (VGLUT2, HA601451, Mouse, green); 1/500 (VGLUT1, HA601449, Guinea pig, red)

Antigen retrieval: Not required

**Fig2:** Application: IHC-Fr

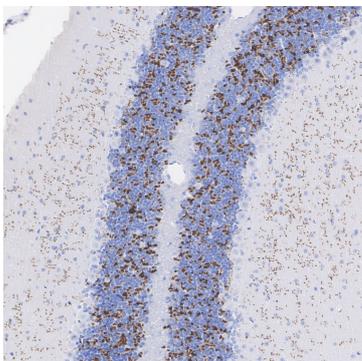
Species: Rat

Site: hippocampus

Sample: Frozen section

Antibody concentration: 1/500 (VGLUT2, HA601451, Mouse, green); 1/500 (VGLUT1, HA601449, Guinea pig, red)

Antigen retrieval: Not required

**Fig3:** Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Mouse anti-VGLUT2 antibody (HA601451) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA601451) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

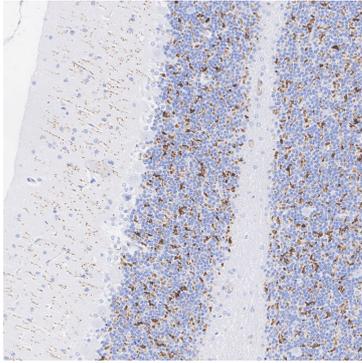
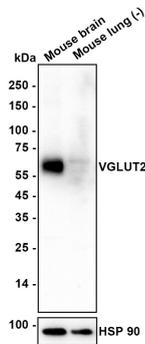


Fig4: Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Mouse anti-VGLUT2 antibody (HA601451) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA601451) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig5: Western blot analysis of VGLUT2 on different lysates with Mouse anti-VGLUT2 antibody (HA601451) at 1/5,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Mouse lung tissue lysate (negative)



Lysates/proteins at 20 µg/Lane.

Predicted band size: 65 kDa
Observed band size: 65 kDa

Exposure time: 20 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601451) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4 °C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Buck SA et al. Roles of VGLUT2 and Dopamine/Glutamate Co-Transmission in Selective Vulnerability to Dopamine Neurodegeneration. ACS Chem Neurosci. 2022 Jan
2. Zhang Y et al. VGLUT2 neuron subtypes in the paraventricular thalamic nucleus regulate depression in paraquat-induced Parkinson's disease. J Hazard Mater. 2024 Jul

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