

VGLUT1 Polyclonal Antibody

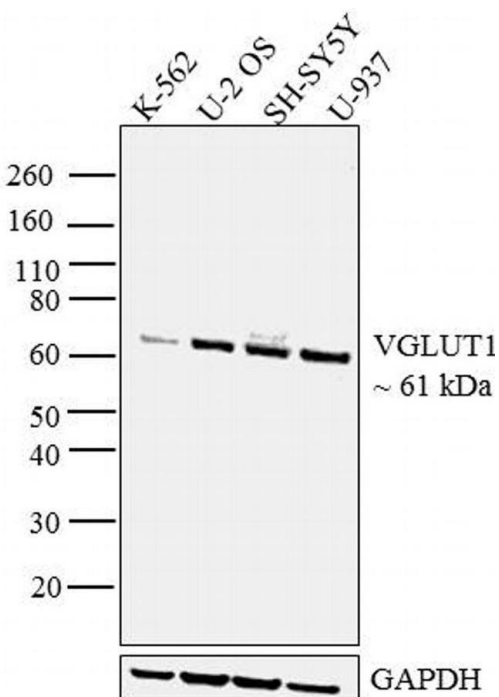
Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from the internal region of the mouse VGLUT1 protein (Accession# NP_892038, Q3TXX4), which is 93% homologous to human and rat.
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533843

Applications	Tested Dilution	Publications
Western Blot (WB)	1-3 µg/mL	7 Publications
Immunohistochemistry (IHC)	2-3 µg/mL	9 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:1,000	6 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

This antibody is specific for the VGLUT1 protein. On western blots, it identifies the target band at ~55 kDa. Reactivity has been confirmed with mouse brain homogenates by western blotting, with mouse hippocampus frozen sections by immunohistochemistry, and in immunofluorescence analysis with human glutamate neurons derived from iPSCs.

Product Images For VGLUT1 Polyclonal Antibody

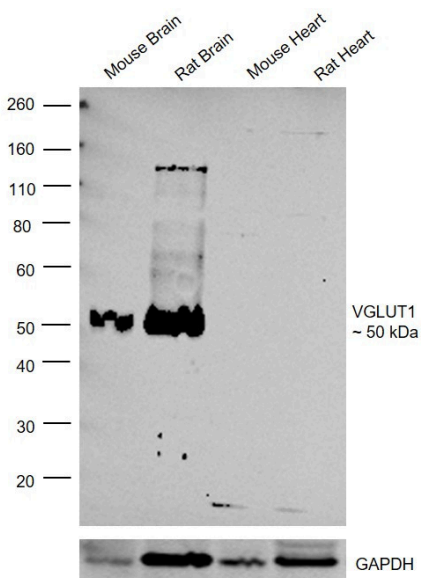


VGLUT1 Antibody (48-2400) in WB

Western blot analysis was performed on membrane enriched cell extracts of K-562 (Lane 1), U-2 OS (Lane 2), SH-SY5Y (Lane 3) and U-937 (Lane 4). The blot was probed with Anti-VGLUT1 Rabbit Polyclonal Antibody (Product # 48-2400, 2 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 61 kDa band corresponding to VGLUT1 was observed across all the cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

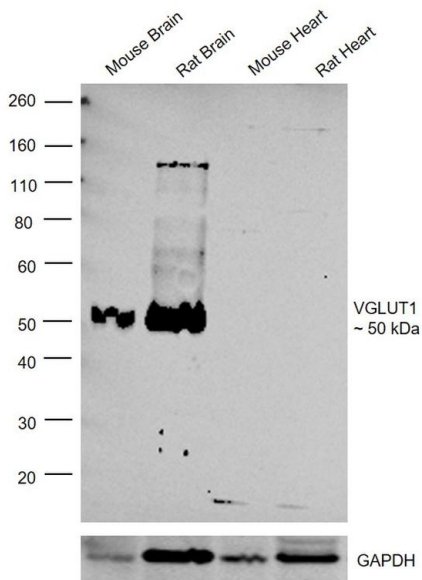
VGLUT1 Antibody (48-2400)

Antibody specificity was demonstrated by detection of differential basal expression of the target across the Mouse brain, Rat brain, Mouse heart and Rat heart tissues owing to their inherent genetic constitution. Relative expression of VGLUT1 was observed in the brain and heart tissues using Anti-VGLUT1 Polyclonal Antibody (Product # 48-2400) in Western Blot. {RE}



VGLUT1 Antibody (48-2400) in WB

Western Blot was performed using Anti-VGLUT1 Polyclonal Antibody (Product # 48-2400) and a 50 kDa band corresponding to VGLUT1 was observed in Mouse and Rat Brain tissue. (30 µg lysate) of Mouse Brain (Lane 1), Rat Brain (Lane 2), Mouse Heart (Lane 3), Rat Heart (Lane 4) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # LC2002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:200) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



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Western Blot (7)

<div>EBioMedicine</div> <div>Long-term progression of retinal degeneration in a preclinical model of CLN7 Batten disease as a baseline for testing clinical therapeutics.</div> <div>"Published figure using VGLUT1 polyclonal antibody (Product # 48-2400) in Western Blot"</div> <div>Authors: Rowe AA,Chen X,Nettesheim ER,Issioui Y,Dong T,Hu Y,Messahel S,Kayani SN,Gray SJ,Wert KJ</div>	<div>Year</div> <div>2022</div> <div>Species</div> <div>Mouse</div> <div>Dilution</div> <div>1:1000</div>
<div>NPJ genomic medicine</div> <div>Synaptosome microRNAs regulate synapse functions in Alzheimer's disease.</div> <div>"Published figure using VGLUT1 polyclonal antibody (Product # 48-2400) in Western Blot"</div> <div>Authors: Kumar S,Orlov E,Gowda P,Bose C,Swerdlow RH,Lahiri DK,Reddy PH</div>	<div>Year</div> <div>2022</div> <div>Species</div> <div>Human</div>

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Immunohistochemistry (9)

<div>Cells</div> <div>Long-Term Hyperglycemia Causes Depressive Behaviors in Mice with Hypoactive Glutamatergic Activity in the Medial Prefrontal Cortex, Which Is Not Reversed by Insulin Treatment.</div> <div>"Published figure using VGLUT1 polyclonal antibody (Product # 48-2400) in Immunohistochemistry"</div> <div>Authors: Baek JH,Son H,Kang JS,Yoo DY,Chung HJ,Lee DK,Kim HJ</div>	<div>Year</div> <div>2022</div>
<div>EBioMedicine</div> <div>Long-term progression of retinal degeneration in a preclinical model of CLN7 Batten disease as a baseline for testing clinical therapeutics.</div> <div>"Published figure using VGLUT1 polyclonal antibody (Product # 48-2400) in Western Blot"</div> <div>Authors: Rowe AA,Chen X,Nettesheim ER,Issioui Y,Dong T,Hu Y,Messahel S,Kayani SN,Gray SJ,Wert KJ</div>	<div>Year</div> <div>2022</div> <div>Species</div> <div>Mouse</div> <div>Dilution</div> <div>1:1000</div>

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- IHC (Free) (1)
- ICC/IF (6)
- Misc (1)

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