

Product datasheet

Anti-VGluT1 antibody [N28-9] ab134283

★★★★★ [6 Abreviews](#) [3 References](#) [3 Images](#)

Overview

Product name	Anti-VGluT1 antibody [N28-9]
Description	Mouse monoclonal [N28-9] to VGluT1
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human, Mouse and Rat brain tissue lysates. IHC-P: Rat brain tissue.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 6.97% L-Arginine</p>
Purity	Protein G purified
Clonality	Monoclonal
Clone number	N28-9
Myeloma	Sp2/0
Isotype	IgG1

Light chain type

kappa

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab134283 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 5 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 61 kDa).
IHC-P	★★★★★ (2)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function

Mediates the uptake of glutamate into synaptic vesicles at presynaptic nerve terminals of excitatory neural cells. May also mediate the transport of inorganic phosphate.

Tissue specificity

Expressed in several regions of the brain including amygdala, cerebellum, cerebral cortex, hippocampus, frontal lobe, medulla, occipital lobe, putamen and temporal lobe.

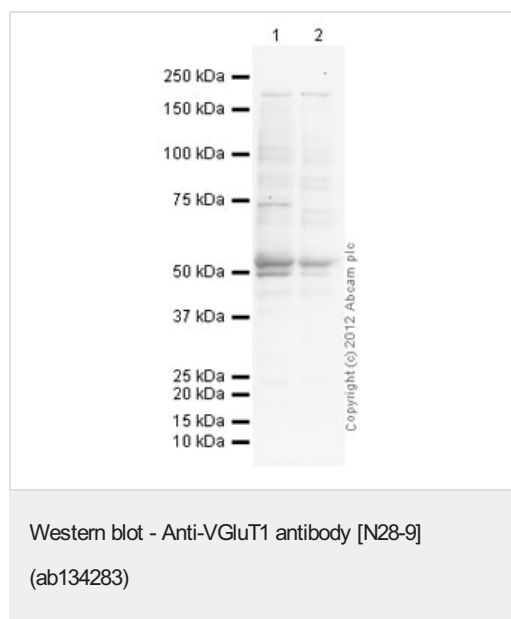
Sequence similarities

Belongs to the major facilitator superfamily. Sodium/anion cotransporter family. VGLUT subfamily.

Cellular localization

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Membrane. Cell junction, synapse, synaptosome.

Images



All lanes : Anti-VGluT1 antibody [N28-9] (ab134283) at 5 µg/ml

Lane 1 : Human brain tissue lysate - total protein ([ab29466](#))

Lane 2 : Brain (Rat) Tissue Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal Secondary Antibody to Mouse IgG - H&L (HRP), pre-adsorbed at 1/10000 dilution

Developed using the ECL technique.

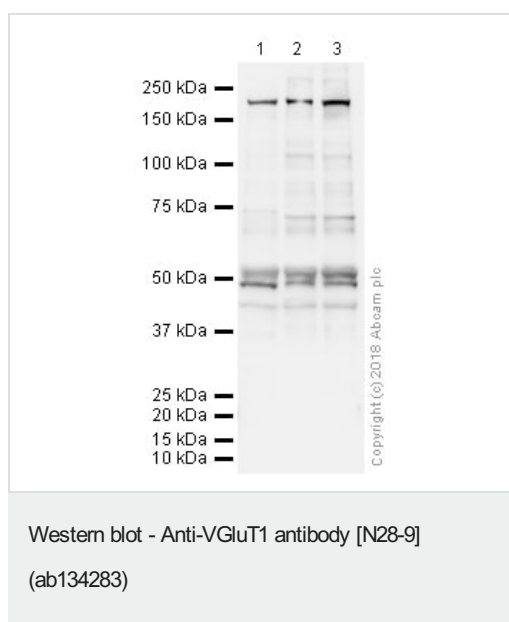
Performed under reducing conditions.

Predicted band size: 61 kDa

Observed band size: 50,55 kDa

Exposure time: 20 minutes

This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab134283 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.



All lanes : Anti-VGluT1 antibody [N28-9] (ab134283) at 5 µg

Lane 1 : Human Brain Tissue Lysate

Lane 2 : Rat Brain Tissue Lysate

Lane 3 : Mouse Brain Tissue Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) ([ab65485](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 61 kDa

Observed band size: 50,55 kDa

Additional bands at: 200 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds

This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab134283 overnight at

4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.



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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VGluT1 antibody [N28-9] (ab134283)

IHC image of VGluT1 staining in rat brain formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab134283, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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