

Product Datasheet

EAAT2/GLT1 Antibody - Azide Free NBP1-20136

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NBP1-20136

EAAT2/GLT1 Antibody - Azide Free

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Reconstitution Instructions	Reconstitute in 0.1 ml of sterile water. Centrifuge to remove any insoluble material. Glycerol may be added (1:1) for additional stability. Please note the sample size is provided in reconstituted format.
Isotype	IgG
Purity	Unpurified
Buffer	Lyophilized from whole antisera

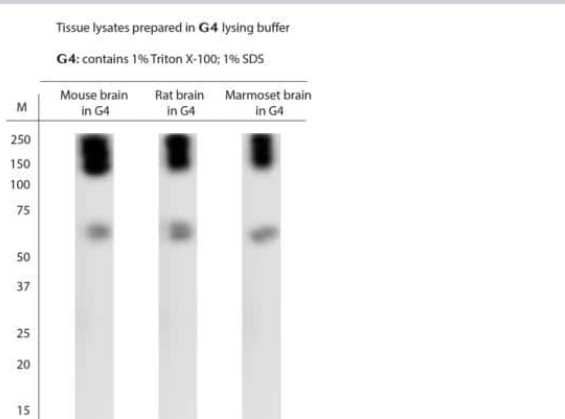
Product Description	
Host	Rabbit
Gene ID	6506
Gene Symbol	SLC1A2
Species	Human, Mouse, Rat, Monkey
Reactivity Notes	Marmoset
Immunogen	A synthetic peptide from mouse EAAT2/GLT1 conjugated to blue carrier protein was used as the antigen. The peptide is homologous in rat and human.

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, In vivo assay, In-situ Hybridization
Recommended Dilutions	Western Blot 1:1000, Flow Cytometry 1:10-1:1000, Immunohistochemistry 1:1000, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:1000, In-situ Hybridization, In vivo assay
Application Notes	Although not tested this antibody may work in IHC-Frozen. Use in flow was reported in scientific literature (PMID: 23793269). Use in In-vivo and in ICC/IF reported in scientific literature (PMID 25581361). Use in In-situ Hybridization reported in scientific literature (PMID: 26150391).

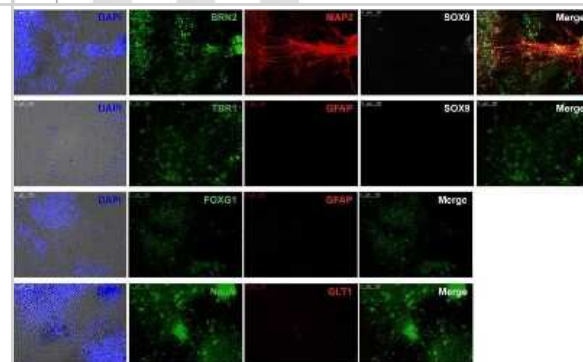


Images

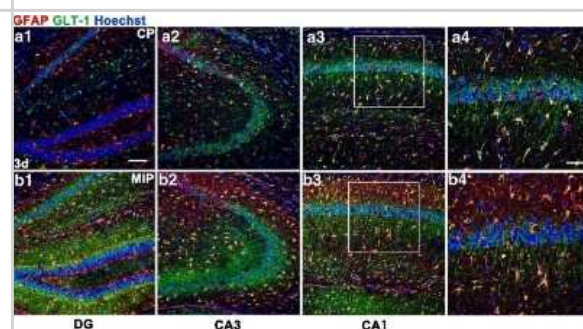
Western Blot: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Blocking: 1% LFDM for 30 min at RT; primary antibody: dilution 1:1000 incubated overnight at 4C.



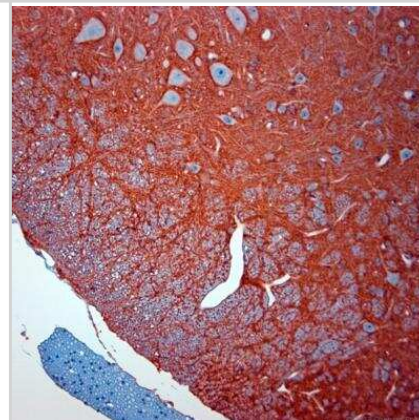
Immunocytochemistry/Immunofluorescence: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Human NPCs differentiate into mature neurons. Immunofluorescence staining of differentiated neurons derived from human dorsal NPCs (1323-2 line, day 35 after differentiation) for mature cortical neuronal markers expressed in the nucleus (BRN2, TBR1, NeuN) and cytoplasm (MAP2), glial markers (SOX9, GFAP, GLT1), and dorsal forebrain marker (FOXG1). Nuclei stained with DAPI, shown as an overlay over brightfield images. The merge is an overlay of the neuronal and glial markers. Scale bar 100 μ m. DAPI 4,6'-diamino-2-phenylindole Image collected and cropped by CiteAb from the following publication (<https://stemcellres.biomedcentral.com/articles/10.1186/s13287-018-0812-6>) licensed under a CC-BY license.



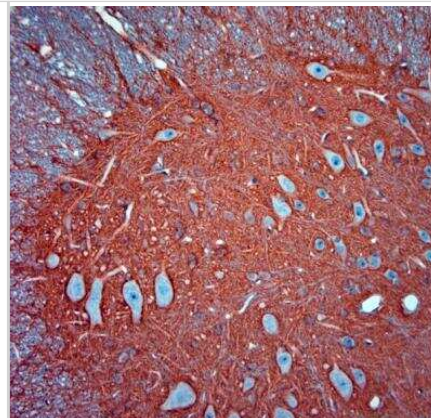
Immunohistochemistry: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Hippocampal GLT-1 and NR1 expression 3 days after SE with MyD88 inhibition. Sections from the hippocampi of mice in the CP group (A1-A3) and MIP group (B1-B3) 3 days after SE with GLT-1 immunoreactivity in astrocytes and neuronal processes. (A4, B4) Higher magnification of the boxes in (A3) and (B3). Scale bars: (A1-A3, B1-B3) 100 μ m; (A4, B4) 50 μ m. SE = status epilepticus, DG=dentate gyrus, hippocampal regions CA3 and CA1, CP = control peptide, MIP = MyD88 inhibitory peptide. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/30112701/>) licensed under a CC-BY license.



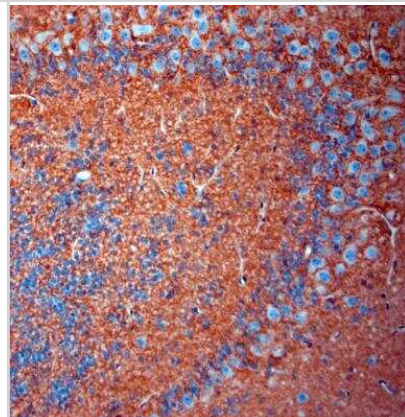
Immunohistochemistry-Paraffin: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Mouse spinal cord. The animal was perfused using Autoperfuser at a pressure of 130 mmHg with 300 ml 4% FA before being processed for paraffin embedding. HIER: Tris-EDTA, pH 9 for 20 min. Blocking: 0.2% LFDM in TBST filtered thru 0.2 μ m.



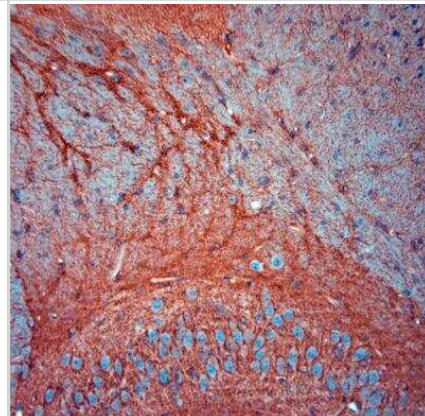
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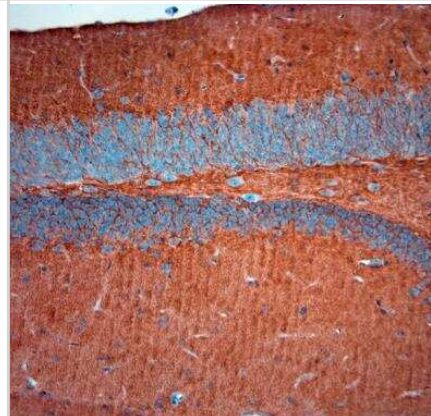
Immunohistochemistry-Paraffin: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Mouse olfactory bulbs. The animal was perfused using Autoperfuser at a pressure of 130 mmHg with 300 ml 4% FA before being processed for paraffin embedding. HIER: Tris-EDTA, pH 9 for 20 min. Blocking: 0.2% LFDM in TBST filtered thru 0.2 um.



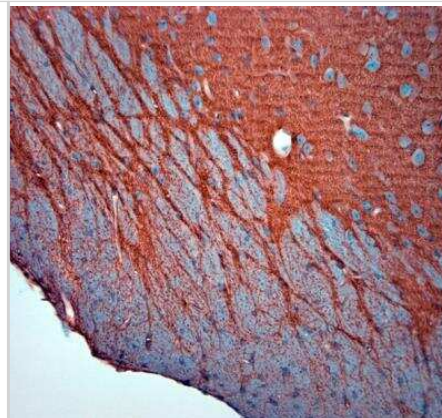
Immunohistochemistry-Paraffin: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Mouse brain (hippocampus). The animal was perfused at a pressure of 130 mmHg with 300 ml 4% FA before being processed for paraffin embedding. HIER: Tris-EDTA, pH 9 for 20 min.



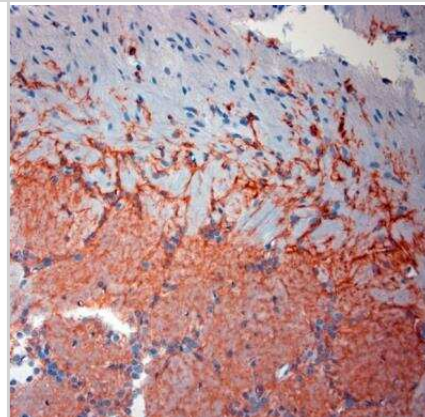
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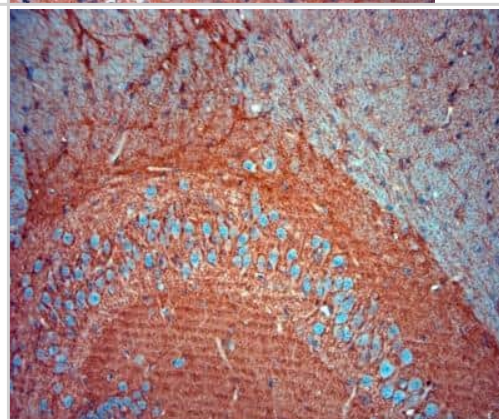
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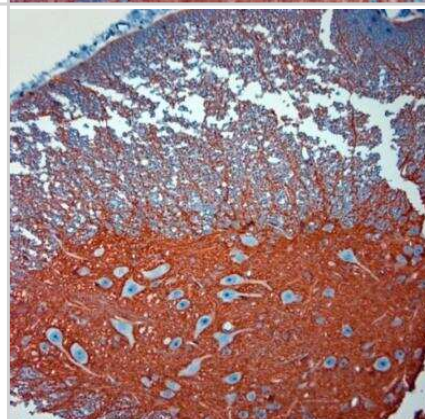
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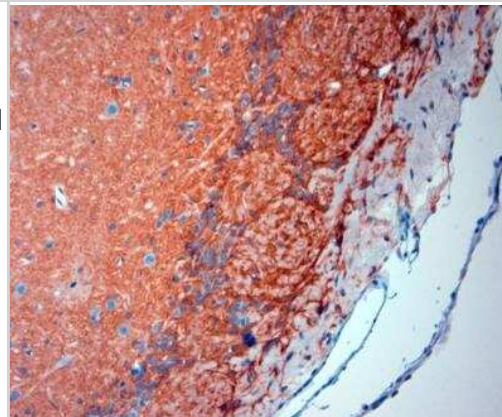
Immunohistochemistry-Paraffin: EAAT2/GLT1 Antibody - Azide Free [NBP1-20136] - Sections of mouse spinal cord. The animal was perfused using Autoperfuser at a pressure of 130 mmHg with 300 ml 4% FA before being processed for paraffin embedding. HIER: Tris-EDTA, pH 9 for 20 min. Blocking: 0.2% LFDM in TBST filtered thru 0.2 um.



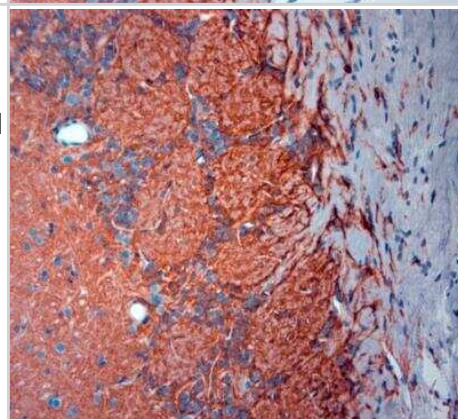
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Publications

Schneider, Y;Gauer, C;Andert, M;Hoffmann, A;Riemenschneider, MJ;Krebs, W;Chalmers, N;Lötzsch, C;Naumann, UJ;Xiang, W;Rothhammer, V;Beckervordersandforth, R;Schlachetzki, JCM;Winkler, J; Distinct forebrain regions define a dichotomous astrocytic profile in multiple system atrophy *Acta neuropathologica communications* 2024-01-02 [PMID: 38167307]

Tsuboi M, Nakamura Y, Sakuma H Direct effect of 2-palmitoyl glycerol on promotion of gamma aminobutyric acid synthesis in normal human fetal-derived astrocytes *FEBS open bio* 2023-05-18 [PMID: 37199045] (IHC, Human)

Thomason EJ, Suarez-Pozos E, Afshari FS et al. Deletion of the Sodium-Dependent Glutamate Transporter GLT-1 in Maturing Oligodendrocytes Attenuates Myelination of Callosal Axons During a Postnatal Phase of Central Nervous System Development *Frontiers in cellular neuroscience* 2022-06-03 [PMID: 35722615] (FLOW, Mouse)

Radulescu AR, Todd GC, Williams CL et al. Estimating the glutamate transporter surface density in distinct sub-cellular compartments of mouse hippocampal astrocytes *PLoS computational biology* 2022-02-01 [PMID: 35120128] (Cytometric Bead Assay Standard, Mouse)

Gur G, Topuz R, Kizilay G The Effect of Ceftriaxone in Valproic Acid-Induced Mouse Model of Autism *Advanced Pharmaceutical Bulletin* 2021-10-06 [PMID: 36415629] (WB, IHC-P, Mouse)

Filippini A, Mutti V, Faustini G et al. Extracellular clusterin limits the uptake of alpha-synuclein fibrils by murine and human astrocytes *Glia* 2020-10-12 [PMID: 33045109] (WB, Mouse)

Yamashiro LH, Wilson SC, Morrison HM et al. Interferon-independent STING signaling promotes resistance to HSV-1 in vivo *Nat Commun* 2020-07-07 [PMID: 32636381] (Mouse)

Napit PR, Ali MH, Shakya M et al. NLRX1 Enhances Glutamate Uptake and Inhibits Glutamate Release by Astrocytes Cells 2019-04-30 [PMID: 31052241] (FLOW, Mouse)

Blanco-Suarez E, Liu TF, Kopelevich A, Allen NJ. Astrocyte-Secreted Chordin-like 1 Drives Synapse Maturation and Limits Plasticity by Increasing Synaptic GluA2 AMPA Receptors. *Neuron*. 2018-10-12 [PMID: 30344043] (IF/IHC, Mouse)

Zhang M, Ngo J, Pirozzi F et al. Highly efficient methods to obtain homogeneous dorsal neural progenitor cells from human and mouse embryonic stem cells and induced pluripotent stem cells. *Stem Cell Res Ther*. 2018-03-15 [PMID: 29544541] (ICC/IF, Human)

Schwarz JM. Using Fluorescence Activated Cell Sorting to Examine Cell-Type-Specific Gene Expression in Rat Brain Tissue *J Vis Exp*. 2015-06-13 [PMID: 26065673]

Murphy-Royal C, Dupuis JP, Varela JA et al. Surface diffusion of astrocytic glutamate transporters shapes synaptic transmission *Nat. Neurosci*. 2015-02-01 [PMID: 25581361] (In Vivo, ISH, ICC/IF, Rat)

More publications at <http://www.novusbio.com/NBP1-20136>



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NBP2-24891	Rabbit IgG Isotype Control
H00006506-Q01-10ug	Recombinant Human EAAT2/GLT1 GST (N-Term) Protein

Limitations

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