

Product datasheet

Anti-EAAT1 antibody ab235203

[2 Images](#)

Overview

Product name	Anti-EAAT1 antibody
Description	Chicken polyclonal to EAAT1
Host species	Chicken
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Rat pup PND2-6 - minimal cortex brain lysate. ICC/IF: Post-natal rat pup (PND1) heterogeneous brain cells.
General notes	<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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituent: PBS
Purity	IgY fraction
Clonality	Polyclonal
Isotype	IgY

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab235203 in the following tested applications.

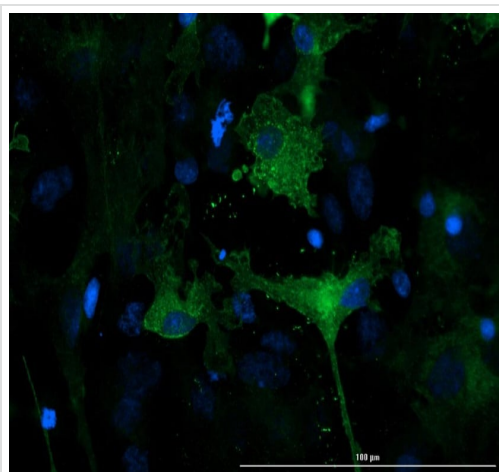
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500. Predicted molecular weight: 59 kDa.
ICC/IF		Use a concentration of 15 µg/ml.

Target

Function	Transports L-glutamate and also L- and D-aspartate. Essential for terminating the postsynaptic action of glutamate by rapidly removing released glutamate from the synaptic cleft. Acts as a symport by cotransporting sodium.
Tissue specificity	Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia.
Involvement in disease	Defects in SLC1A3 are the cause of episodic ataxia type 6 (EA6) [MIM:612656]. EA6 is characterized by episodic ataxia, seizures, migraine and alternating hemiplegia.
Sequence similarities	Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A3 subfamily.
Post-translational modifications	Glycosylated.
Cellular localization	Membrane.

Images



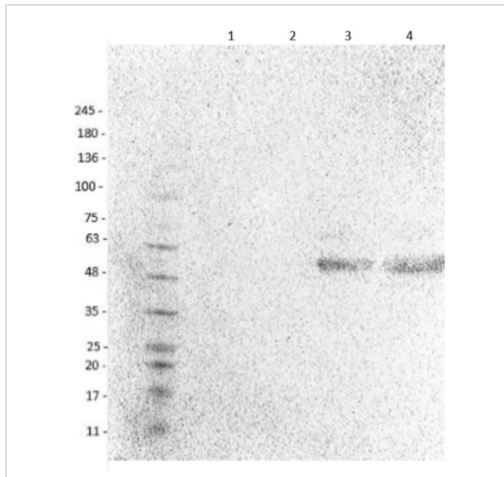
Immunocytochemistry/ Immunofluorescence - Anti-EAAT1 antibody (ab235203)

4% PFA fixed, 0.15% Triton X-100 permeabilized post-natal rat pup (PND1) heterogeneous brain cells* labeling EAAT1 using ab235203 at 15 µg/ml, O/N at +4°C (green) followed by Goat Anti-Chicken IgG DyLight™ 488 conjugated preadsorbed at 5 µg/ml for 1 h at RT, in ICC/IF. Nuclear probe is visualized in blue (DAPI).

*UniprotID Expression Tissue Specificity and Subcellular Localization, as well as additional information found in Human Protein Atlas.

Expected localization: Cell membrane (mitochondria, nucleus)
Observed localization: punctate staining indicates mitochondrial detection**

**Staining as confirmed in Gensat for Slc1a3 (high affinity glial glutamate transporter): <http://www.gensat.org/imagenavigator.jsp?imageID=10581>



Western blot - Anti-EAAT1 antibody (ab235203)

All lanes : Anti-EAAT1 antibody (ab235203) at 1/500 dilution

Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate at 20 µg

Lane 2 : Adult mouse whole liver lysate at 20 µg

Lane 3 : Rat pup PND2-6 - minimal cortex brain lysate* at 20 µg

Lane 4 : Rat pup PND2-6 - minimal cortex brain lysate* at 40 µg

Secondary

All lanes : Goat Anti-Chicken IgY H&L (HRP) preadsorbed (**ab7118**) at 1/40000 dilution

Predicted band size: 59 kDa

Observed band size: 54 kDa

Exposure time: 60 seconds

*UniprotID Expression Tissue Specificity: Detected in brain and cerebellum (PubMed:1279699, PubMed:8387171). Both isoform EAAT1/GLAST-1 and EAAT1/GLAST-1A are expressed in bone and brain (PubMed:11086157). In brain isoform EAAT1/GLAST-1 is highly enriched in the Purkinje cell layer in cerebellum (PubMed:11086157).

Minimal cortex defined: minimal cortex brain samples have had a portion of the cortex removed, with 1/3 cortex, cerebellum and other brain components present in the final lysate.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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