abcam

Product datasheet

Anti-EAAT1 antibody [EPR12686] - BSA and Azide free ab240235

Recombinant RabMAb

9 Images

Overview

Product name	Anti-EAAT1 antibody [EPR12686] - BSA and Azide free
Description	Rabbit monoclonal [EPR12686] to EAAT1 - BSA and Azide free
Host species	Rabbit
Specificity	Unsuitable for human ICC/IF.
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Monkey
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse brain, rat brain and human cerebellum lysates. IHC-P: Human , Mouse and Rat cerebral cortex tissue sections. ICC/IF: Mouse and rat primary neural / glia cells.
General notes	ab240235 is the carrier-free version of **ab181036**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR12686
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240235 in the following tested applications.

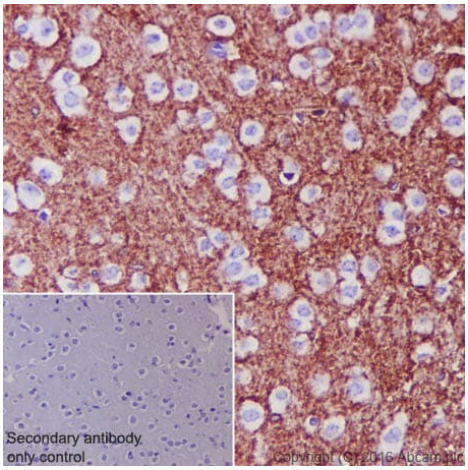
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 59 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

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

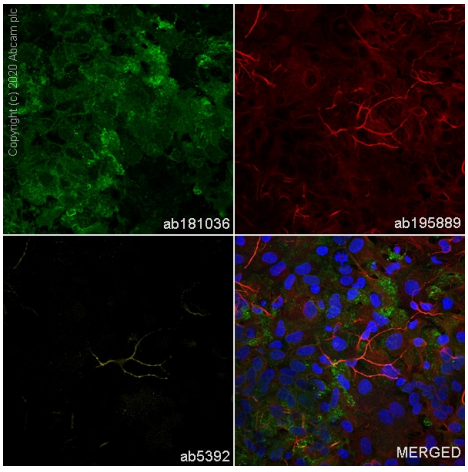


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

ab181036 staining EAAT1 in mouse cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at 1/500.

Negative control 1: PBS in place of primary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181036**).

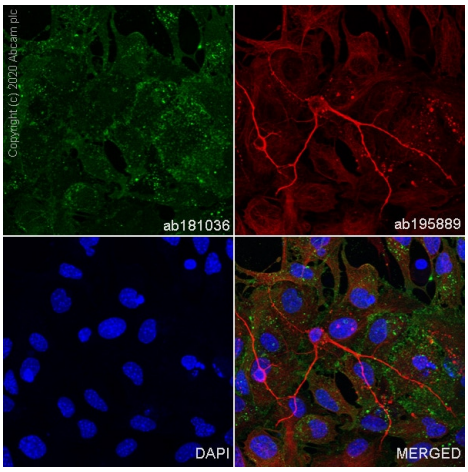


Immunocytochemistry/ Immunofluorescence - Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

This data was developed using **ab181036**, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neural / glia cells labelling EAAT1 with **ab181036** at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in rat primary glia cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1000 2 ug/ml dilution.



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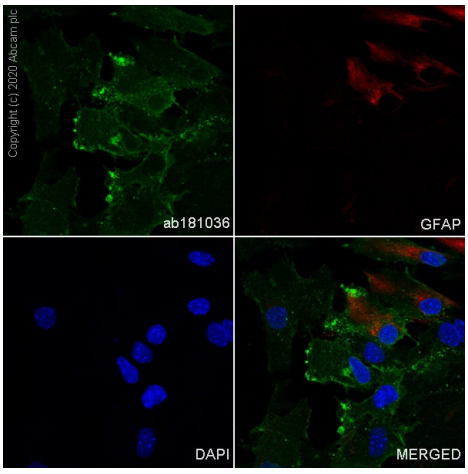

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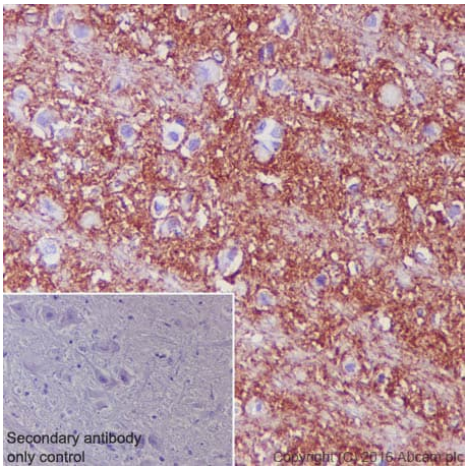
Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

ab181036 staining EAAT1 in rat cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at 1/500.

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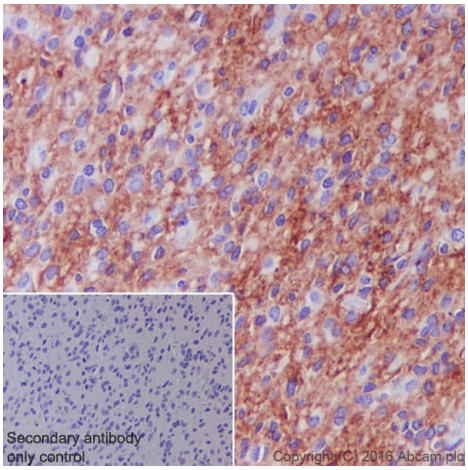

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

ab181036 staining EAAT1 in human glioma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at 1/500.

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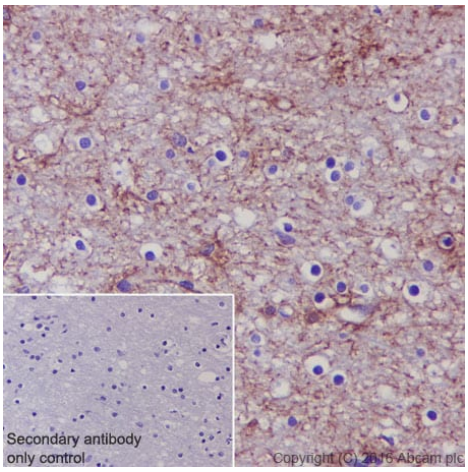

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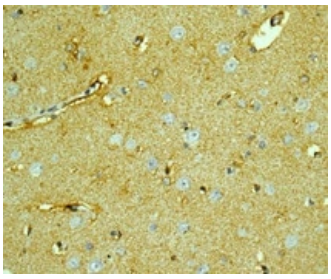

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

Immunohistochemical staining of EAAT1 in paraffin-embedded human brain tissue using **ab181036** at a 1/50 dilution.

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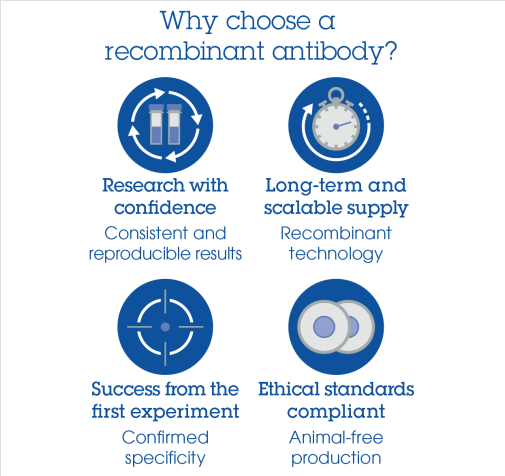
Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-EAAT1 antibody [EPR12686] - BSA and Azide free (ab240235)

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