

Product datasheet

Anti-EAAT2 antibody [EPR19798] ab205248

Recombinant RabMAb

[6 References](#) [7 Images](#)

Overview

Product name	Anti-EAAT2 antibody [EPR19798]
Description	Rabbit monoclonal [EPR19798] to EAAT2
Host species	Rabbit
Tested applications	Suitable for: IHC-Fr, WB, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse and rat brain lysates. IHC-P: Mouse and rat striatum tissues. IHC-Fr: Mouse striatum tissue. IP: Mouse brain lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19798
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab205248 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
IHC-Fr		1/500.
WB		1/1000. Detects a band of approximately 65,180 kDa (predicted molecular weight: 62 kDa).
IP		1/30.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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.

Sequence similarities

Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A2 subfamily.

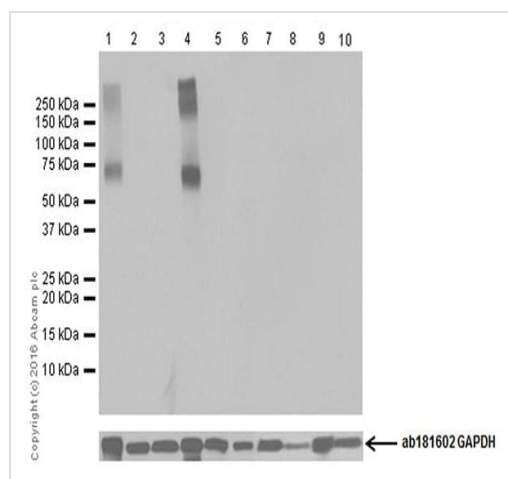
Post-translational modifications

Glycosylated.

Cellular localization

Membrane.

Images



Western blot - Anti-EAAT2 antibody [EPR19798] (ab205248)

All lanes : Anti-EAAT2 antibody [EPR19798] (ab205248) at 1/2000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse liver lysate

Lane 3 : Mouse kidney lysate

Lane 4 : Rat brain lysate

Lane 5 : Rat liver lysate

Lane 6 : Neuro-2a (Mouse neuroblastoma cell line) whole cell lysate

Lane 7 : C6 (Rat glial tumor cell line) whole cell lysate

Lane 8 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 9 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 10 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 62 kDa

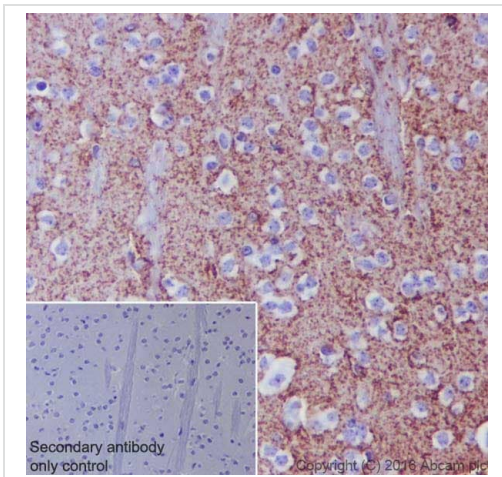
Observed band size: 180,65 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFD/MTBST.

1. EAAT2 is a multi-pass membrane protein, the main transporter that clears the excitatory neurotransmitter glutamate in the central nervous system. The bands around 180 kDa are multimers of EAAT2, which is consistent with what have been described in the literatures (PMID: 24569372 & 20193040).

2. EAAT2 is primarily expressed in astrocytes but is also expressed in neurons of the retina and during fetal development(PMID:12176072).

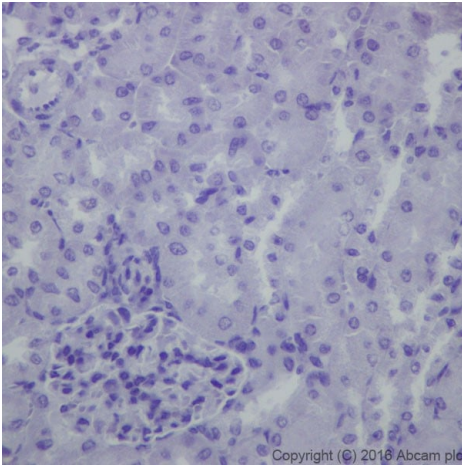


Immunohistochemical analysis of paraffin-embedded mouse striatum tissue labeling EAAT2 with ab205248 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Membrane staining on mouse striatum is observed [PMID 25391854]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT2 antibody [EPR19798] (ab205248)



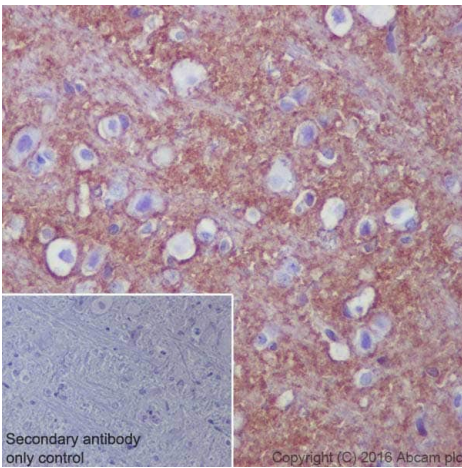
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT2 antibody [EPR19798] (ab205248)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling EAAT2 with ab205248 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Negative control: no staining on mouse kidney [PMID: 11038258].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

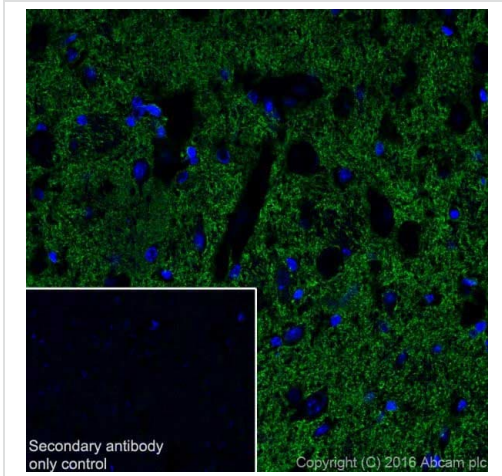


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EAAT2 antibody [EPR19798] (ab205248)

Immunohistochemical analysis of paraffin-embedded rat striatum tissue labeling EAAT2 with ab205248 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Membrane staining on Rat striatum is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is [ab97051](#) at 1/500 dilution.

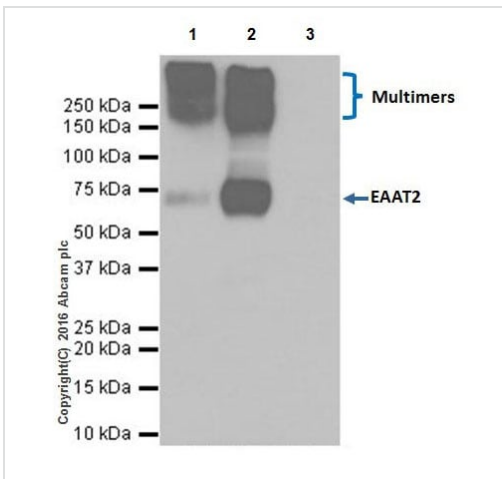
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-EAAT2 antibody [EPR19798] (ab205248)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen Mouse striatum tissue labeling EAAT2 with ab205248 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Membrane staining on mouse striatum is observed [PMID: 25391854]. The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** at 1/1000 dilution.



Immunoprecipitation - Anti-EAAT2 antibody [EPR19798] (ab205248)

EAAT2 was immunoprecipitated from 0.35 mg of Mouse brain lysate with ab205248 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab205248 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: Mouse brain lysate, 10µg (Input).





Lane 2: ab205248 IP in Mouse brain lysate.

Lane 3: Rabbit IgG, monoclonal [EPR25A]- Isotype Control (**ab172730**) instead of ab205248 in Mouse brain lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 1 second.

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-EAAT2 antibody [EPR19798] (ab205248)

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

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