

Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody
Catalog # ABO13797**Specification****Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC
Primary Accession	P43003
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody - Additional Information

Gene ID 6507

Other Names

Excitatory amino acid transporter 1, Sodium-dependent glutamate/aspartate transporter 1, GLAST-1, Solute carrier family 1 member 3, SLC1A3 ([HGNC:10941](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=10941))

Calculated MW

59572 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200

Subcellular Localization

Membrane; Multi-pass membrane protein.

Tissue Specificity

Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human EAAT1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody - Protein Information

Name SLC1A3 ([HGNC:10941](#))

Function

Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:20477940, PubMed:26690923, PubMed:28032905, PubMed:28424515, PubMed:7521911, PubMed:8123008). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion (PubMed:20477940). Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport (PubMed:20477940). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

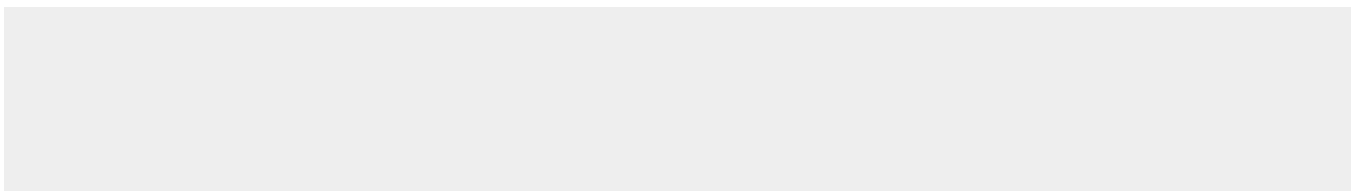
Detected in brain (PubMed:7521911, PubMed:8123008, PubMed:8218410). Detected at very much lower levels in heart, lung, placenta and skeletal muscle (PubMed:7521911, PubMed:8123008). Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia (PubMed:7521911).

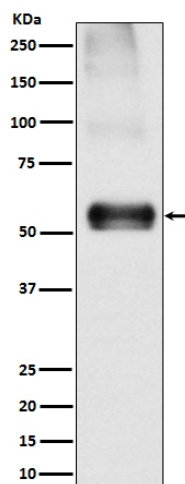
Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

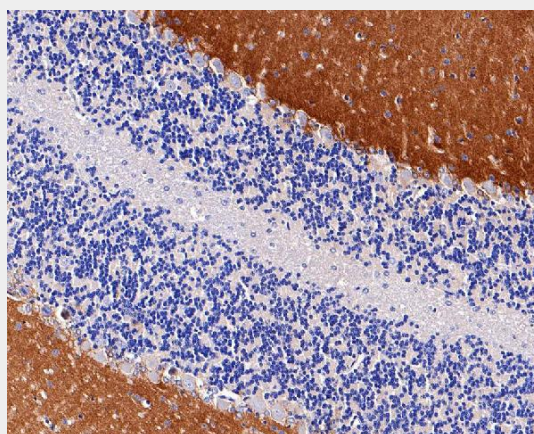
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EAAT1 SLC1A3 Rabbit Monoclonal Antibody - Images

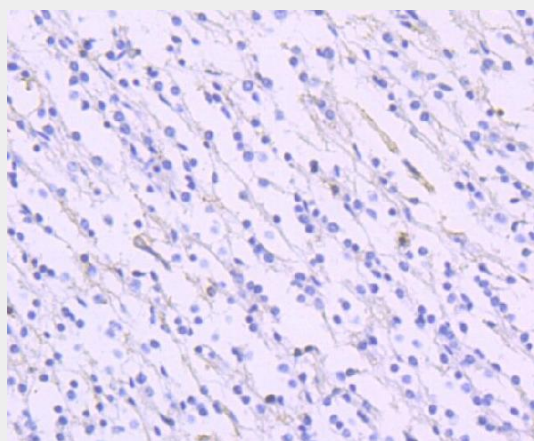




Western blot analysis of EAAT1 expression in Mouse brain lysate.



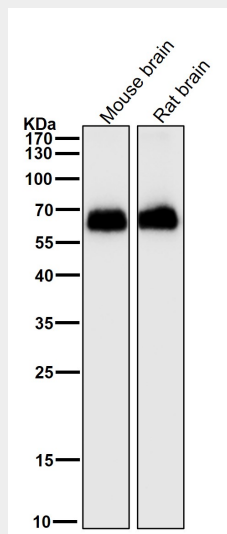
Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rabbit anti-EAAT1 antibody at 1/200 dilution.



Immunohistochemical analysis of paraffin-embedded human brain tissue using anti-EAAT1 antibody.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (1/50) for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer

system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.