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# Anti-EAAT2 Antibody
**Catalog # ABO12744**

## Specification

### Anti-EAAT2 Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P43004 |
| Host | **Rabbit** |
| Reactivity | **Human, Mouse, Rat** |
| Clonality | **Polyclonal** |
| Format | **Lyophilized** |

**Description**
Rabbit IgG polyclonal antibody for Excitatory amino acid transporter 2(SLC1A2) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-EAAT2 Antibody - Additional Information

**Gene ID** 6506

**Other Names**
Excitatory amino acid transporter 2, Glutamate/aspartate transporter II, Sodium-dependent glutamate/aspartate transporter 2, Solute carrier family 1 member 2, SLC1A2, EAAT2, GLT1

**Calculated MW**
62104 MW KDa

**Application Details**
Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**
Membrane; Multi-pass membrane protein.

**Protein Name**
Excitatory amino acid transporter 2

**Contents**
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**
E.coli-derived human EAAT2 recombinant protein (Position: T461-K574). Human EAAT2 shares 96% amino acid (aa) sequence identity with both mouse and rat EAAT2.

**Purification**
Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

| | |
|---|---|
| Storage | **At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.** |

## Anti-EAAT2 Antibody - Protein Information

**Name** SLC1A2 (HGNC:10940)

**Function**
Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:<a href="http://www.uniprot.org/citations/7521911" target="_blank">7521911</a>, PubMed:<a href="http://www.uniprot.org/citations/14506254" target="_blank">14506254</a>, PubMed:<a href="http://www.uniprot.org/citations/15265858" target="_blank">15265858</a>, PubMed:<a href="http://www.uniprot.org/citations/26690923" target="_blank">26690923</a>). 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:<a href="http://www.uniprot.org/citations/14506254" target="_blank">14506254</a>). 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:<a href="http://www.uniprot.org/citations/14506254" target="_blank">14506254</a>). Essential for the rapid removal of released glutamate from the synaptic cleft, and for terminating the postsynaptic action of glutamate (By similarity).

**Cellular Location**
Cell membrane; Multi-pass membrane protein

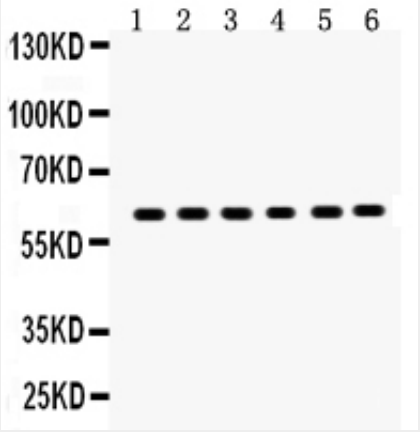
## Anti-EAAT2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-EAAT2 Antibody - Images

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Anti-EAAT2 antibody, ABO12744, Western blottingAll lanes: Anti EAAT2 (ABO12744) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugLane 4: SMMC Whole Cell Lysate at 40ugLane 5: PANC Whole Cell Lysate at 40ugLane 6: A549 Whole Cell Lysate at 40ugPredicted bind size: 62KDObserved bind size: 62KD

**Anti-EAAT2 Antibody - Background**

SLC1A2 is also known as EAAT2 or GLT-1. This gene encodes a member of a family of solute transporter proteins. The membrane-bound protein is the principal transporter that clears the excitatory neurotransmitter glutamate from the extracellular space at synapses in the central nervous system. Glutamate clearance is necessary for proper synaptic activation and to prevent neuronal damage from excessive activation of glutamate receptors. Mutations in and decreased expression of this protein are associated with amyotrophic lateral sclerosis. Alternatively spliced transcript variants of this gene have been identified.