

# Anti-EAAT2 Antibody

Catalog # ABO12744

## Product Information

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|--------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                                           |
| <b>Primary Accession</b> | <a href="#">P43004</a>                                                                                                       |
| <b>Host</b>              | Rabbit                                                                                                                       |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                                            |
| <b>Clonality</b>         | Polyclonal                                                                                                                   |
| <b>Format</b>            | Lyophilized                                                                                                                  |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Excitatory amino acid transporter 2(SLC1A2) detection. Tested with WB in Human;Mouse;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                         |

## Additional Information

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| <b>Gene ID</b>                  | 6506                                                                                                                                                                               |
| <b>Other Names</b>              | Excitatory amino acid transporter 2, Glutamate/aspartate transporter II, Sodium-dependent glutamate/aspartate transporter 2, Solute carrier family 1 member 2, SLC1A2, EAAT2, GLT1 |
| <b>Calculated MW</b>            | 62104                                                                                                                                                                              |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat                                                                                                                                     |
| <b>Subcellular Localization</b> | Membrane; Multi-pass membrane protein.                                                                                                                                             |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                          |
| <b>Protein Name</b>             | Excitatory amino acid transporter 2                                                                                                                                                |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                |
| <b>Immunogen</b>                | 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.                      |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                       |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                            |
| <b>Storage</b>                  | At -20° C for one year. After reconstitution, 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. |

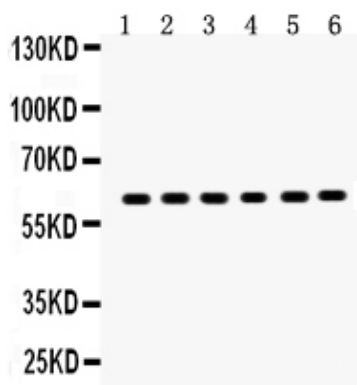
## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| Name              | SLC1A2 ( <a href="#">HGNC:10940</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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="#">14506254</a> , PubMed: <a href="#">15265858</a> , PubMed: <a href="#">26690923</a> , PubMed: <a href="#">7521911</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="#">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="#">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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 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.

## Images



Anti-EAAT2 antibody, ABO12744, Western blotting  
All lanes: Anti EAAT2 (ABO12744) at 0.5ug/ml  
Lane 1: Rat Brain Tissue Lysate at 50ug  
Lane 2: Mouse Brain Tissue Lysate at 50ug  
Lane 3: U87 Whole Cell Lysate at 40ug  
Lane 4: SMMC Whole Cell Lysate at 40ug  
Lane 5: PANC Whole Cell Lysate at 40ug  
Lane 6: A549 Whole Cell Lysate at 40ug  
Predicted bind size: 62KD  
Observed bind size: 62KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.