

Datasheet for ABIN3043436

anti-SLC1A2 antibody (AA 461-574)



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Overview

Quantity:	100 µg
Target:	SLC1A2
Binding Specificity:	AA 461-574
Reactivity:	Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC1A2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	Anti-EAAT2/GLT-1/SLC1A2 Antibody Picoband®
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-EAAT2/GLT-1/SLC1A2 Antibody (ABIN3043436). Tested in IF, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	SLC1A2
Alternative Name:	SLC1A2 (SLC1A2 Products)
Background:	<p>Synonyms: Excitatory amino acid transporter 2, Glutamate/aspartate transporter II, Sodium-dependent glutamate/aspartate transporter 2, Solute carrier family 1 member 2, SLC1A2, EAAT2, GLT1,</p> <p>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.</p> <p>Sequence Similarities: Belongs to the peptidase S1 family. Plasminogen subfamily.</p>
Molecular Weight:	65 kDa
Gene ID:	6506
UniProt:	P43004
Pathways:	Dicarboxylic Acid Transport

Application Details

Application Notes:	<p>Western blot, 0.1-0.5 µg/mL, Mouse, Rat</p> <p>Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/mL, Mouse, Rat</p> <p>Immunofluorescence, 5 µg/mL, Mouse, Rat</p> <p>1. Jiménez-Jiménez FJ, et al. The solute carrier family 1 (glial high affinity glutamate transporter), member 2 gene, SLC1A2, rs3794087 variant and assessment risk for restless legs syndrome. Sleep Med, 2014 Feb. 2. Poletti S, et al. Effect of early stress on hippocampal gray matter is influenced by a functional polymorphism in EAAT2 in bipolar disorder. Prog Neuropsychopharmacol Biol Psychiatry, 2014 Jun 3. 3. Tanaka K. Role of glutamate transporters in the pathophysiology of major mental illnesses. Nihon Yakurigaku Zasshi, 2013 Dec.</p>
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

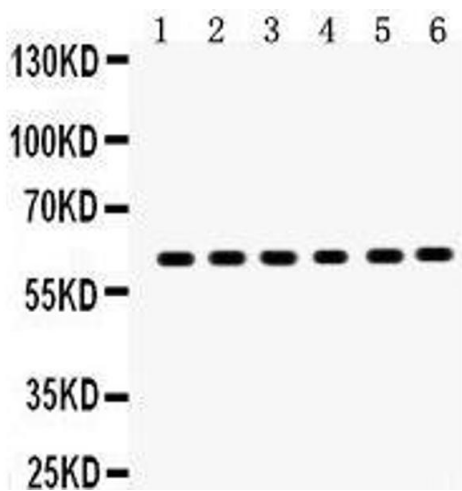
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in:	Ding, Zhang, Liu, Zhang, Ma, Bruce, Zhang: "Tumor necrosis factor- α promotes the expression of excitatory amino-acid transporter 2 in astrocytes: Optimal concentration and incubation time." in: Experimental and therapeutic medicine , Vol. 8, Issue 6, pp. 1909-1913, (2014) (PubMed).
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Images



Western Blotting

Image 1. Anti-EAAT2 antibody, Western blotting All lanes: Anti EAAT2 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