EAAT2 Recombinant Antibody [PS01-62] - Guinea pig IgG2 (Chimeric)

HA601504

Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Mouse, Rat
Applications:	IHC-Fr, WB
Molecular Wt:	Predicted band size: 62 kDa
Clone number:	PS01-62

Description: Excitatory amino acid transporter 2 (EAAT2) also known as solute carrier family 1 member 2 (SLC1A2) and glutamate transporter 1 (GLT-1) is a protein that in humans is encoded by the SLC1A2 gene. Alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. SLC1A2 / EAAT2 is a member of a family of the solute carrier family of 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. EAAT2 is responsible for over 90% of glutamate reuptake within the brain.

Immunogen: Synthetic peptide within Human EAAT2

Positive control: Mouse brain tissue lysate.

Subcellular location: Cell membrane.

Database links: SwissProt: P43006 Mouse | P31596 Rat

Recommended Dilutions:

IHC-Fr	1:200
WB	1:5,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

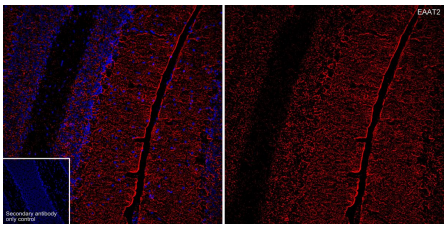

Fig1: Application: IHC-Fr

Species: Mouse

Site: cerebellum

Sample: Frozen section

Antibody concentration: 1/200

Antigen retrieval: Not required

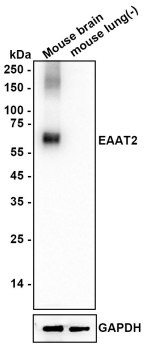

Fig2: Western blot analysis of EAAT2 on different lysates with Guinea pig anti-EAAT2 antibody (HA601504) at 1/5,000 dilution.

Lane 1: Mouse brain tissue lysate (no heat)
Lane 2: Mouse lung tissue lysate (negative) (no heat)

Notice: no heat means the lysate is not boiled.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 62 kDa
Observed band size: 62 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601504) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Rabbit anti-Guinea pig IgG H&L - HRP Secondary Antibody (HA1021) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. Blacker CJ et al. EAAT2 as a Research Target in Bipolar Disorder and Unipolar Depression: A Systematic Review. Mol Neuropsychiatry. 2020 Apr
2. Green JL et al. Role of glutamate excitotoxicity and glutamate transporter EAAT2 in epilepsy: Opportunities for novel therapeutics development. Biochem Pharmacol. 2021 Nov