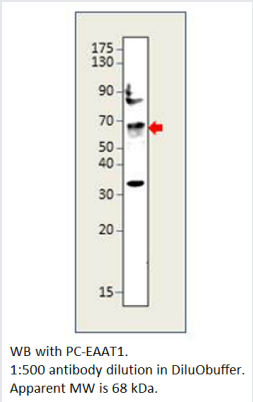
EAAT1 Positive Control

PRODUCT OVERVIEW

Product Name	EAAT1, Positive Control
Full Product Name	EAAT1 Positive Control
Product Gene Name	EAAT1 positive control
Product Synonym Names	EA6; EAAT1; Excitatory amino acid transporter 1; FLJ25094; GLAST; Glial high affinity glutamate transporter; glutamate/aspartate transporter, high affinity, sodium-dependent; High affinity neuronal glutamate transporter; Slc1a3; Sodium dependent glutamate/aspartate transporter; Solute carrier family 1 member 3 antibody
Form/Format	Prepared in SDS-sample buffer
Concentration	Empirically set for optimal signal-to-noise ratio (lot specific)
Preparation and Storage	Store at -20• degree C for long term storage
Matching Pairs	Antibody: EAAT1 (MBS540252) Positive Control: EAAT1 (MBS542722)
Matching Pairs	Antibody: EAAT1 (MBS541460) Positive Control: EAAT1 (MBS542722)
Matching Pairs	Antibody: EAAT1 (MBS541461) Positive Control: EAAT1 (MBS542722)
3D Structure	ModBase 3D Structure for P56564
Immunogen	Purified Protein
Expression	Purkinje cell layer in cerebellum, lung, spleen, skeletal muscle and testis.
Molecular Function	High-affinity glutamate transmembrane transporter activity;sodium:dicarboxylate symporter activity
Structure	Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A3 subfamily has a Transmembrane helix.
Subcellular Location	Plasma membrane; Cell surface; Fibril; Neuronal cell body
Applications Tested/Suitable for EAAT1 positive control	Western Blot (WB)
Application Notes for EAAT1 positive control	Western Blot: 1:500
Related Product Information for EAAT1 positive control	Western Blot Positive Control Excitatory Amino Acid Transporter 1 Antibody Transports L-glutamate and also L- and D-aspartate. Essential for terminating the postsynaptic action of glutamate by rapidly removing released glutamate from the synaptic cleft. Acts as a symport by cotransporting sodium.
Other Notes	Small volumes of EAAT1 positive control vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for EAAT1 purchase	MBS542722 is a positive control targeting EAAT1.



Western Blot (WB) of EAAT1 positive control
WB of MBS540252 with MBS542722 1:500 antibody dilution in DiliObuffer. Apparent MW: id 68kDa.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for EAAT1. It may not necessarily be applicable to this product.

NCBI GI #	24233554
NCBI GeneID	20512
NCBI Accession #	NP_683740.1
UniProt Primary Accession #	P56564
UniProt Secondary Accession #	Q99P53
UniProt Related Accession #	P56564
GenBank Nucleotide #	NM_148938.3
NCBI Official Full Name	excitatory amino acid transporter 1
NCBI Official Synonym Full Names	solute carrier family 1 (glial high affinity glutamate transporter), member 3
NCBI Official Symbol	Slc1a3
NCBI Official Synonym Symbols	Gmt1; Eaat1; GLAST; GLU-T; GluT-1; MGluT1; GLAST-1; AI504299; B430115D02Rik
UniProt Protein Name	Excitatory amino acid transporter 1
UniProt Synonym Protein Names	Glial high affinity glutamate transporter; High-affinity neuronal glutamate transporter; Sodium-dependent glutamate/aspartate transporter 1; GLAST-1; Solute carrier family 1 member 3
UniProt Gene Name	Slc1a3
UniProt Synonym Gene Names	Eaat1; Gmt1; GLAST-1
UniProt Entry Name	EAA1_MOUSE
NCBI Protein Information	excitatory amino acid transporter 1

UniProt Comments for EAAT1	SLC1A3: Transports L-glutamate and also L- and D-aspartate. Essential for terminating the postsynaptic action of glutamate by rapidly removing released glutamate from the synaptic cleft. Acts as a symport by cotransporting sodium. Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia. Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A3 subfamily. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Membrane protein, multi-pass; Mitochondrial; Transporter, SLC family; Transporter Cellular Component: basolateral plasma membrane; cell projection; cell soma; cell surface; dendritic spine; fibril; integral to membrane; membrane; mitochondrial inner membrane; neuron projection; plasma membrane; synapse Molecular Function: amino acid binding; glutamate binding; high-affinity glutamate transmembrane transporter activity; L-glutamate transmembrane transporter activity; protein binding; sodium:dicarboxylate symporter activity; symporter activity Biological Process: auditory behavior; cranial nerve development; dicarboxylic acid transport; gamma-aminobutyric acid biosynthetic process; glutamate biosynthetic process; glutamate metabolic process; L-glutamate import; L-glutamate transport; malate-aspartate shuttle; neuromuscular process controlling balance; neuron morphogenesis during differentiation; positive regulation of defense response to virus by host; positive regulation of synaptic transmission; response to amino acid stimulus; response to antibiotic; response to drug; response to inorganic substance; response to light stimulus; response to wounding; sensory perception of sound; transport
Research Articles on EAAT1	**1.** This study findings demonstrate that Ascl1(CreERT2) and Glast(CreERT2) mouse lines enable simple and reliable labeling of adult-born GC lineages within restricted time windows.
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