

SLC1A2 Antibody (monoclonal) (M10)

Mouse monoclonal antibody raised against a partial recombinant SLC1A2. Catalog # AT3906a

Specification

SLC1A2 Antibody (monoclonal) (M10) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>P43004</u> <u>NM_004171</u> Human mouse Monoclonal IgG2a Kappa 62104

SLC1A2 Antibody (monoclonal) (M10) - 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

Target/Specificity SLC1A2 (NP_004162, 160 a.a. ~ 239 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions SLC1A2 Antibody (monoclonal) (M10) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC1A2 Antibody (monoclonal) (M10) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides



- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SLC1A2 Antibody (monoclonal) (M10) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (34.54 KDa).



Detection limit for recombinant GST tagged SLC1A2 is approximately 0.3ng/ml as a capture antibody.

SLC1A2 Antibody (monoclonal) (M10) - Background

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 described, but their full-length nature is not known.

SLC1A2 Antibody (monoclonal) (M10) - References

Analysis of 9p24 and 11p12-13 regions in autism spectrum disorders: rs1340513 in the JMJD2C gene is associated with ASDs in Finnish sample. Kantoj?rvi K, et al. Psychiatr Genet, 2010 Jun. PMID 20410850.Comprehensive copy number variant (CNV) analysis of neuronal pathways genes in psychiatric disorders identifies rare variants within patients. Saus E, et al. J Psychiatr Res, 2010 Apr 14. PMID 20398908.Personalized smoking cessation: interactions between nicotine dose,



dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Increased expression of cholesterol 24S-hydroxylase results in disruption of glial glutamate transporter EAAT2 association with lipid rafts: a potential role in Alzheimer's disease. Tian G, et al. J Neurochem, 2010 May. PMID 20193040.Comparative structural and functional analysis of the GLT-1/EAAT-2 promoter from man and rat. Allritz C, et al. J Neurosci Res, 2010 May 1. PMID 19998491.