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SLC1A2 Antibody (monoclonal) (M10)

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

Product Information

Application	WB, E
Primary Accession	P43004
Other Accession	NM_004171
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4G8
Calculated MW	62104

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.

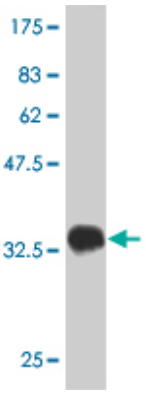
Background

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.

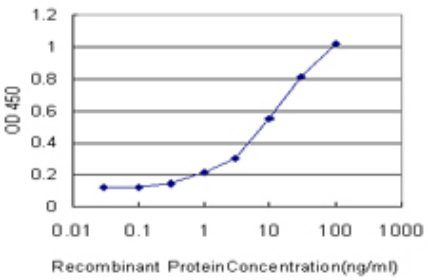
References

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.

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.