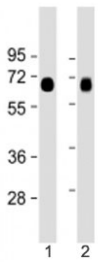
LAT1 Antibody / L-type amino Acid Transporter 1 / SLC7A5 (N-Terminal Region) (F54110)

Catalog No.	Formulation	Size
F54110-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54110-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q01650
Applications	WB: 1:2000
Limitations	This LAT1 antibody is available for research use only.



Western blot testing of LAT1 antibody at 1:2000: Lane 1) human lung and 2) placenta lysate. Predicted molecular weight ~55 kDa.

Description

Large neutral amino acids transporter small subunit 1 / LAT1 / SLC7A5 is a sodium-independent, high-affinity transport of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Involved in cellular amino acid uptake. Acts as an amino acid exchanger. Involved in the transport of L-DOPA across the blood- brain barrier, and that of thyroid hormones triiodothyronine (T3) and thyroxine (T4) across the cell membrane in tissues such as placenta. Plays a role in neuronal cell proliferation (neurogenesis) in brain. Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence

plays a role in metal ion homeostasis and toxicity. Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L- nitrosocysteine (L-CNSO) across the transmembrane. May play an important role in high-grade gliomas. Mediates blood-to-retina L- leucine transport across the inner blood-retinal barrier which in turn may play a key role in maintaining large neutral amino acids as well as neurotransmitters in the neural retina. Acts as the major transporter of tyrosine in fibroblasts. [UniProt]

Application Notes

The stated application concentrations are suggested starting points. Titration of the LAT1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 15-45 from human LAT1 was used as the immunogen for the LAT1 antibody.

Storage

Aliquot the LAT1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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