

ARG41013 anti-SLC7A5 / LAT1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SLC7A5 / LAT1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SLC7A5 / LAT1
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-125 of Human SLC7A5 (NP_003477.4).
Conjugation	Un-conjugated
Alternate Names	MPE16; LAT1; CD98; D16S469E; Solute carrier family 7 member 5; 4F2LC; E16; Large neutral amino acids transporter small subunit 1; 4F2 LC; y+ system cationic amino acid transporter; Integral membrane protein E16; 4F2 light chain; hLAT1; L-type amino acid transporter 1; CD98 light chain

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	
Observed Size	45 kDa	

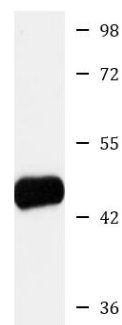
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	SLC7A5
Gene Full Name	solute carrier family 7 (amino acid transporter light chain, L system), member 5
Function	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]
Calculated Mw	55 kDa
Cellular Localization	Cytoplasm, cytosol. Apical cell membrane; Multi-pass membrane protein. Note=Located to the plasma membrane by SLC3A2/4F2hc. Localized to the apical membrane of placental syncytiotrophoblastic cells. Expressed in both luminal and abluminal membranes of brain capillary endothelial cells (By similarity). [UniProt]

Images



A549

ARG41013 anti-SLC7A5 / LAT1 antibody WB image

Western blot: 25 µg of A549 cell lysate stained with ARG41013 anti-SLC7A5 / LAT1 antibody at 1:1000 dilution through one-step method.