BT LAB
Bioassay Technology Laboratory
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LAT2 Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP10847
Host	Rabbit
Isotype	IgG
Size	100ul, 50ul, 20ul
Immunogen	Synthesized peptide derived from part region of human protein
Mol wt	N/A
Species reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Recommended application	WB, ELISA
Concentration	1 mg/ml
Full name	Large neutral amino acids transporter small subunit 2
Synonyms	Large neutral amino acids transporter small subunit 2 ;L-type amino acid transporter 2;hLAT2;Solute carrier family 7 member 8

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,Sodium-independent, high-affinity transport of small and large neutral amino acids such as alanine, serine, threonine, cysteine, phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Acts as an amino acid exchanger. Has higher affinity for L-phenylalanine than LAT1 but lower affinity for glutamine and serine. L-alanine is transported at physiological concentrations. Plays a role in basolateral (re)absorption of neutral amino acids. 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. Plays an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney.,induction:Activity in polarized intestinal cells is regulated by the association between SLC3A2/4F2 (in the SLC3A2/4F2-LAT2 heterodimer) and ICAM1.,miscellaneous:L-leucine transport activity inhibited by small zwitterionic amino acids (i.e. glycine, alanine, serine, threonine asparginine, glutamine, methionine, leucine, isoleucine, valine, phenylalanine, tyrosine, tryptophan, histidine and cysteine) and by glutamine and asparginine. Methionine uptake was inhibited by the L-system substrates L-leucine, 2-amino-bicyclo-(2,2,1)-heptane-2-carboxylate (BCH), L-cysteine and by the MeHg-L-cysteine complex and structurally related S-ethyl-L-cysteine. MeHg-L-cysteine uptake is inhibited by L-methionine, L-leucine, BCH and S-ethyl-L-cysteine. L-leucine uptake was inhibited by L-CNSO.,Belongs to the amino acid-polyamine-organocation (APC) superfamily. L-type amino acid transporter (LAT) (TC 2.A.3.8) family.,subcellular location:Localized to the cytoplasm when expressed alone but when coexpressed with SLC3A2/4F2hc, is localized to the plasma membrane. Colocalized with SLC3A2/4F2hc at the basolateral membrane of kidney cortex proximal tubules and small intestine epithelia of the villi.,subunit:Disulfide-linked heterodimer with the amino acid transport protein SLC3A2/4F2hc.,tissue specificity:Strongest expression is observed in kidney and moderate expression in placenta and brain, followed by liver, prostate, testis, ovary, lymph node, thymus, spleen, skeletal muscle and heart. Also expressed in fetal liver as well as in the retinal pigment epithelial cell line ARPE-19 and the intestinal epithelial cell line Caco-2.,

Recommended Dilution

WB: 1: 500 - 1: 2000

ELISA: 1: 5000 - 1: 20000

Not yet tested in other applications.

Images

No images.

Storage

-20°C for 1 year

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