

Anti-LAT2 Antibody
Rabbit polyclonal antibody to LAT2
Catalog # AP60187**Specification**

Anti-LAT2 Antibody - Product Information

Application	WB
Primary Accession	O9UHI5
Other Accession	O9QXW9
Reactivity	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58382

Anti-LAT2 Antibody - Additional Information**Gene ID** 23428**Other Names**LAT2; Large neutral amino acids transporter small subunit 2; L-type amino acid transporter 2;
hLAT2; Solute carrier family 7 member 8**Target/Specificity**

Recognizes endogenous levels of LAT2 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-LAT2 Antibody - Protein Information**Name** SLC7A8 ([HGNC:11066](#))**Function**

Associates with SLC3A2 to form a functional heterodimeric complex that translocates small and large neutral amino acids with broad specificity and a stoichiometry of 1:1. Functions as amino acid antiporter mediating the influx of extracellular essential amino acids mainly in exchange with the efflux of highly concentrated intracellular amino acids (PubMed:10391915, PubMed:11311135, PubMed:11847106, PubMed:12716892, PubMed:<a

[15081149](http://www.uniprot.org/citations/15081149), PubMed: [15918515](http://www.uniprot.org/citations/15918515), PubMed: [29355479](http://www.uniprot.org/citations/29355479), PubMed: [33298890](http://www.uniprot.org/citations/33298890), PubMed: [34848541](http://www.uniprot.org/citations/34848541)). Has relatively symmetrical selectivities but strongly asymmetrical substrate affinities at both the intracellular and extracellular sides of the transporter (PubMed: [11847106](http://www.uniprot.org/citations/11847106)). This asymmetry allows SLC7A8 to regulate intracellular amino acid pools (mM concentrations) by exchange with external amino acids (uM concentration range), equilibrating the relative concentrations of different amino acids across the plasma membrane instead of mediating their net uptake (PubMed: [10391915](http://www.uniprot.org/citations/10391915), PubMed: [11847106](http://www.uniprot.org/citations/11847106)). May play an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney (PubMed: [12716892](http://www.uniprot.org/citations/12716892)). 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 (PubMed: [12117417](http://www.uniprot.org/citations/12117417)). Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane (PubMed: [15769744](http://www.uniprot.org/citations/15769744)). Imports the thyroid hormone diiodothyronine (T2) and to a smaller extent triiodothyronine (T3) but not rT 3 or thyroxine (T4) (By similarity). Mediates the uptake of L-DOPA (By similarity). May participate in auditory function (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Note=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.

Tissue Location

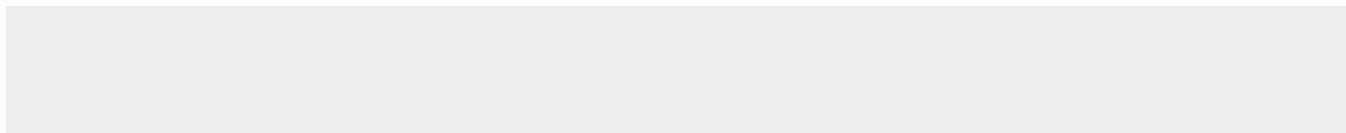
Strongest expression is observed in kidney and moderate expression in placenta and brain, followed by liver, prostate, testis, ovary, lymph node, thymus, spleen, skeletal muscle and heart. Also expressed in fetal liver as well as in the retinal pigment epithelial cell line ARPE-19 and the intestinal epithelial cell line Caco-2.

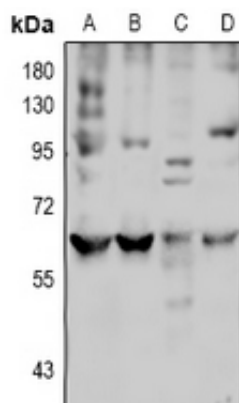
Anti-LAT2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-LAT2 Antibody - Images





Western blot analysis of LAT2 expression in HEK293T (A), HepG2 (B), mouse kidney (C), rat brain (D) whole cell lysates.

Anti-LAT2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human LAT2. The exact sequence is proprietary.