

Product datasheet

Anti-LAT2 antibody ab233088

3 Images

Overview

Product name	Anti-LAT2 antibody
Description	Rabbit polyclonal to LAT2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Rat
Immunogen	<p>Recombinant fragment (His-T7-tag) corresponding to Rat LAT2 aa 32-192. Expressed in E.coli. N-terminal tags.</p> <p>Sequence:</p> <p>RPGVKRNEKIYEQRNQQENEQSVASSQTYSLARPVRT GLQMDAASNKSFE RKNKLLFSHLEGPESPRYQNFYKGSRRRESDAAYVDPI PTDYYNWGCQKP PEDNDSNSYENVLICKPSTPESGTEESEDYQNSVSILQ WRESKRTMGART SPSGSPDEEPD</p> <p>Database link: Q9WVR6</p> <p style="text-align: right;"> Run BLAST with  Run BLAST with</p>
Positive control	IHC-P: Rat spleen tissue. WB: Rat spleen lysate; Recombinant rat LAT2 protein.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol</p>
Purity	Immunogen affinity purified
Purification notes	ab233088 was purified by antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab233088** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.2 - 2 µg/ml. Predicted molecular weight: 58 kDa.
IHC-P		Use a concentration of 5 - 20 µg/ml.

Target

Function

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.

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.

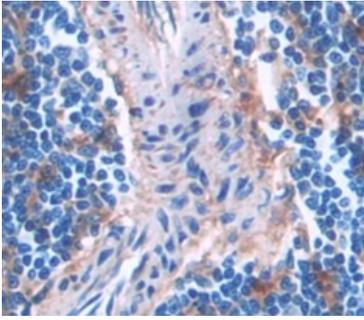
Sequence similarities

Belongs to the amino acid-polyamine-organocation (APC) superfamily. L-type amino acid transporter (LAT) (TC 2.A.3.8) family.

Cellular localization

Cytoplasm. Basolateral cell membrane. 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.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAT2 antibody (ab233088)

Formalin-fixed, paraffin-embedded rat spleen tissue stained for LAT2 using ab233088 at 20 µg/ml in immunohistochemical analysis. DAB staining.



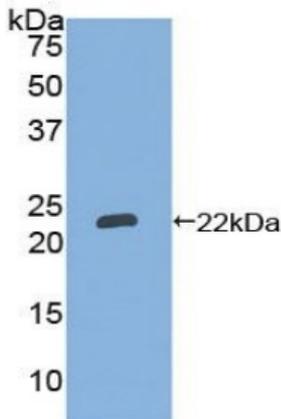
Western blot - Anti-LAT2 antibody (ab233088)

Anti-LAT2 antibody (ab233088) at 2 µg/ml + Rat spleen lysate

Secondary

HRP-Linked Goat Anti-Rabbit IgG at 0.2 µg/ml

Predicted band size: 58 kDa



Western blot - Anti-LAT2 antibody (ab233088)

Anti-LAT2 antibody (ab233088) at 2 µg/ml + Recombinant rat LAT2 protein

Predicted band size: 58 kDa

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