

Datasheet: AHP1827Z

Description:	RABBIT ANTI HUMAN LAT1:Preservative Free
Specificity:	LAT1
Other names:	L-TYPE AMINO ACID TRANSPORTER 1
Format:	Preservative Free
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Paraffin	■			5ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antiserum to human Lat1 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Keyhole limpet haemocyanin (KLH) conjugated synthetic peptide C-RHRKPEL, representing an internal portion of human LAT1 located towards the C-terminus (aa. 419-425).
External Database Links	UniProt: Q01650 Related reagents Entrez Gene: 8140 SLC7A5 Related reagents

Synonyms	CD98LC, LAT1, MPE16
Specificity	Rabbit anti Human LAT1 antibody recognizes human LAT1 (L-type amino acid transporter 1), a heterodimeric Na⁺-independent amino acid transporter protein and member of the amino acid-polyamine-organocation (APC) superfamily, involved in the high-affinity transport of large neutral amino acids, in association with SLC3A2/4F2hc. LAT1 is highly expressed in the brain and is involved in the transport of L-DOPA across the blood-brain barrier, in brain neurogenesis, and acts as a mediator of L-leucine transport across the inner blood-retinal barrier. LAT1 is involved in the cell membrane transport of the thyroid hormones triiodothyronine (T3) and thyroxine (T4) in the placenta, and is the foremost transporter of tyrosine in fibroblasts.
Histology Positive Control Tissue	Breast
References	1. Fraga, S. <i>et al.</i> (2005) Expression of LAT1 and LAT2 amino acid transporters in human and rat intestinal epithelial cells. Amino Acids. 29 (3): 229-33. 2. Soares-da-silva, P. <i>et al.</i> (2005) Expression and function of LAT1, a neutral amino acid exchanger, in renal porcine epithelial cell line LLC-PK. Acta Physiol Scand. 185 (1): 71-8. 3. Pinho, M.J. <i>et al.</i> (2011) LAT1 overexpression and function compensates downregulation of ASCT2 in an <i>in vitro</i> model of renal proximal tubule cell ageing. Mol Cell Biochem. 349 (1-2): 107-16.
Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet Documentation #10162 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...)	FITC
Sheep Anti Rabbit IgG (STAR35...)	RPE
Goat Anti Rabbit IgG (H/L) (STAR124...)	HRP
Goat Anti Rabbit IgG (Fc) (STAR121...)	Biotin , FITC , HRP
Sheep Anti Rabbit IgG (2AB02...)	Biotin
Sheep Anti Rabbit IgG (STAR36...)	DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800

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