

Datasheet: AHP1139

Description:	RABBIT ANTI HUMAN CD98 LIGHT CHAIN (N-TERMINAL)
Specificity:	CD98 LIGHT CHAIN (N-TERMINAL)
Other names:	4F2 LIGHT CHAIN
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			15 - 25ug/ml
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			1 - 10ug/ml
Functional Assays			▪	

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.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to CD98 light chain were raised by repeated immunisations of rabbit with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative	0.1% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Synthetic peptide corresponding to the N-terminal region of CD98 light chain

External Database Links**UniProt:**[Q01650](#) [Related reagents](#)**Entrez Gene:**[8140](#) SLC7A5 [Related reagents](#)

Synonyms CD98LC, LAT1, MPE16

RRID AB_2190983

Specificity **Rabbit anti Human CD98 light chain antibody** detects an epitope within the N-terminal (NT) region of the CD98 light chain (CD98LC), also known as the 4F2 light chain, or LAT-1. CD98LC is a ~40 kDa multi-pass membrane glycoprotein which forms a heterodimer with the CD98 heavy chain to allow transport of large branched chain, neutral amino acids into the cell. This transport system leads to the uptake of seven amino acids, including isoleucine, phenylalanine, and methionine.

The expression levels of CD98LC are upregulated in a wide spectrum of primary human cancers. Changes in amino acid transporter expression are thought to be an early change in oncogenesis, as they impart growth and survival advantages.

Histology Positive Control Tissue Placenta

Western Blotting AHP1139 detects a band of approximately 50-55kDa in human liver cell lysates.

References

1. Padbury, J.F. *et al.* (2004) Transcriptional regulation of the LAT-1/CD98 light chain. [Biochem Biophys Res Commun. 318 \(2\): 529-34.](#)
2. Fuchs, B.C. & Bode, B.P. (2005) Amino acid transporters ASCT2 and LAT1 in cancer: partners in crime? [Semin Cancer Biol. 15 \(4\): 254-66.](#)

Storage Store at +4°C or at -20°C if preferred.
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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[100x ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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