

Product datasheet

Biotin Anti-CD98 antibody [MEM-108] ab26009

[2 Images](#)

Overview

Product name	Biotin Anti-CD98 antibody [MEM-108]
Description	Biotin Mouse monoclonal [MEM-108] to CD98
Host species	Mouse
Conjugation	Biotin
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to CD98. Burkitt's lymphoma cell line Raji
Positive control	Flow Cyt: Human peripheral whole blood.
General notes	<p>The antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.097% Sodium azide</p> <p>Constituent: PBS</p>
Clonality	Monoclonal
Clone number	MEM-108
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab26009 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
Flow Cyt		Use a concentration of 3 µg/ml.

Target

Function

Required for the function of light chain amino-acid transporters. Involved in sodium-independent, high-affinity transport of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan. Involved in guiding and targeting of LAT1 and LAT2 to the plasma membrane. When associated with SLC7A6 or SLC7A7 acts as an arginine/glutamine exchanger, following an antiport mechanism for amino acid transport, influencing arginine release in exchange for extracellular amino acids. Plays a role in nitric oxide synthesis in human umbilical vein endothelial cells (HUVECs) via transport of L-arginine. Required for normal and neoplastic cell growth. When associated with SLC7A5/LAT1, is also involved in the transport of L-DOPA across the blood-brain barrier, and that of thyroid hormones triiodothyronine (T3) and thyroxine (T4) across the cell membrane in tissues such as placenta. 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. When associated with SLC7A5 or SLC7A8, involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane. Together with ICAM1, regulates the transport activity LAT2 in polarized intestinal cells, by generating and delivering intracellular signals. When associated with SLC7A5, plays an important role in transporting L-leucine from the circulating blood to the retina across the inner blood-retinal barrier.

Tissue specificity

Expressed ubiquitously in all tissues tested with highest levels detected in kidney, placenta and testis and weakest level in thymus. During gestation, expression in the placenta was significantly stronger at full-term than at the mid-trimester stage. Expressed in HUVECS and at low levels in resting peripheral blood T-lymphocytes and quiescent fibroblasts. Also expressed in fetal liver and in the astrocytic process of primary astrocytic gliomas. Expressed in retinal endothelial cells and in the intestinal epithelial cell line C2BBE1.

Sequence similarities

Belongs to the SLC3A transporter family.

Post-translational modifications

Phosphorylation on Ser-406; Ser-408 or Ser-410 and on Ser-527 or Ser-531 by ecto-protein kinases favors heterotypic cell-cell interactions.

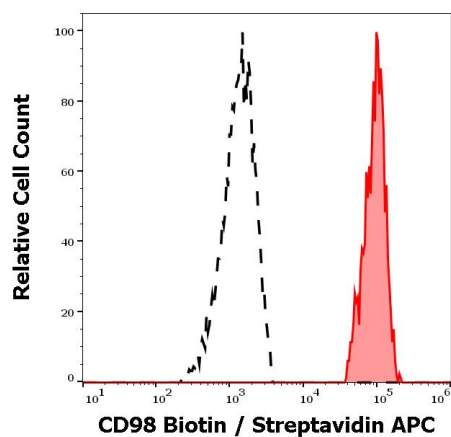
Cellular localization

Apical cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Localized to the plasma membrane when associated with SLC7A5 or SLC7A8. Localized to the placental apical membrane. Located selectively at cell-cell adhesion sites (By similarity). Colocalized with SLC7A8/LAT2 at the basolateral membrane of kidney proximal tubules and small intestine epithelia. Expressed in both luminal and abluminal membranes of brain capillary endothelial cells (By similarity).

Form

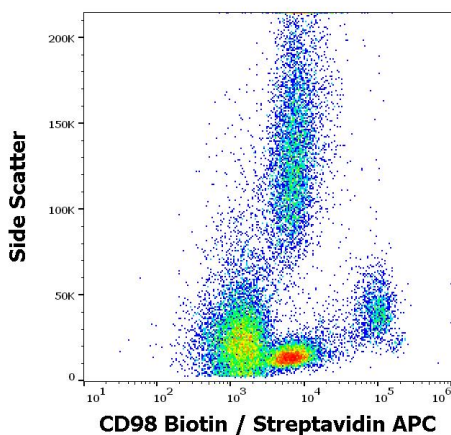
There are 4 isoforms produced by alternative splicing.

Images



Separation of human monocytes (red-filled) from CD98 negative blood debris (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood using **ab25323** at 2 µg/ml.

Flow Cytometry - Biotin Anti-CD98 antibody [MEM-108] (ab26009)



Flow cytometry surface staining pattern of human peripheral whole blood stained using **ab25323** at 2 µg/ml.

Flow Cytometry - Biotin Anti-CD98 antibody [MEM-108] (ab26009)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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