SLC7A5 / CD98 Light Chain Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16300

Specification

SLC7A5 / CD98 Light Chain Antibody - Product Information

<table>
<thead>
<tr>
<th>Application</th>
<th>IHC, WB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Accession</td>
<td>Q01650</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Human</td>
</tr>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Calculated MW</td>
<td>55kDa KDa</td>
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</tbody>
</table>

SLC7A5 / CD98 Light Chain Antibody - Additional Information

Gene ID 8140

Other Names
Large neutral amino acids transporter small subunit 1, 4F2 light chain, 4F2 LC, 4F2LC, CD98 light chain, Integral membrane protein E16, L-type amino acid transporter 1, hLAT1, Solute carrier family 7 member 5, y+ system cationic amino acid transporter, SLC7A5, CD98LC, LAT1, MPE16

Reconstitution & Storage
Store at -20°C for up to one year.

Precautions
SLC7A5 / CD98 Light Chain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLC7A5 / CD98 Light Chain Antibody - Background

Sodium-independent, high-affinity transport of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Involved in cellular amino acid uptake. Acts as an amino acid exchanger. 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. Plays a role in neuronal cell proliferation (neurogenesis) in brain. 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...
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. May play an important role in high-grade gliomas. Mediates blood-to-retina L-leucine transport across the inner blood-retinal barrier which in turn may play a key role in maintaining large neutral amino acids as well as neurotransmitters in the neural retina. Acts as the major transporter of tyrosine in fibroblasts. When associated with LAPTM4B, recruits SLC3A2 and SLC7A5 to lysosomes to promote leucine uptake into these organelles and is required for mTORC1 activation (PubMed:<a href="http://www.uniprot.org/citations/25998567" target="_blank">25998567</a>).

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**Cellular Location**

Cytoplasm, cytosol. Apical cell membrane; Multi-pass membrane protein. Note=Located to the plasma membrane by SLC3A2/4F2hc. Localized to the apical membrane of placental syncytiophoblastic cells. Expressed in both luminal and abluminal membranes of brain capillary endothelial cells (By similarity)

**Tissue Location**

Expressed abundantly in adult lung, liver, brain, skeletal muscle, placenta, bone marrow, testis, resting lymphocytes and monocytes, and in fetal liver. Weaker expression in thymus, cornea, retina, peripheral leukocytes, spleen, kidney, colon and lymph node. During gestation, expression in the placenta was significantly stronger at full-term than at the mid-trimester stage. Also expressed in all human tumor cell lines tested and in the astrocytic process of primary astrocytic gliomas. Expressed in retinal endothelial cells and in the intestinal epithelial cell line Caco-2.

**Volume**

50 µl

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**SLC7A5 / CD98 Light Chain 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

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**SLC7A5 / CD98 Light Chain Antibody - References**