

SLC7A5 / CD98 Polyclonal Antibody | anti-SLC7A5 antibody

SLC7A5 / CD98 Light Chain

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA12328	SLC7A5/ CD98 Light Chain Antibody was produced in Rabbit.	Human, Monkey, Dog.Predicted: Bat, Rabbit	Immunohistochemistry

PRODUCT SYNONYMS

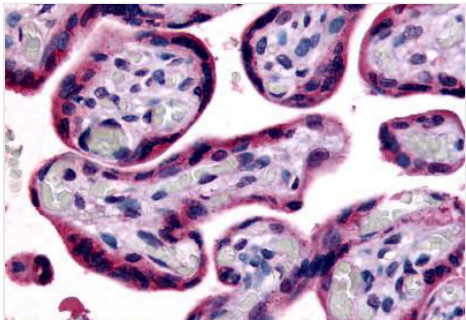
SLC7A5 / CD98; Polyclonal Antibody; SLC7A5 / CD98 Light Chain; SLC7A5 Antibody; 4F2 LC Antibody; 4F2 light chain Antibody; 4F2LC Antibody; CD98 Antibody; CD98 light chain Antibody; CD98LC Antibody; D16S469E Antibody; Integral membrane protein E16 Antibody; Membrane protein E16 Antibody; MPE16 Antibody; LAT1 Antibody; E16 Antibody; HLAT1 Antibody; TA1 Antibody; anti-SLC7A5 antibody

PRODUCT SPECIFICATIONS

Host	SLC7A5/ CD98 Light Chain Antibody was produced in Rabbit.
Reactivity	Human, Monkey, Dog. Predicted: Bat, Rabbit
Clonality	Polyclonal
Specificity	Human SLC7A5. BLAST analysis of the peptide immunogen showed no homology with other human proteins.
Purity/Purification	Immunoaffinity Purified
Form/Format	PBS, 0.1% sodium azide.
Concentration	1 mg/ml (varies by lot)
Sequence Length	507
Applicable Applications for anti-SLC7A5 antibody	IHC (Immunohistochemistry)
Application Notes	IHC-P (7 ug/ml) Optimal dilution to be determined by the researcher.
Family/Subfamily	Transporter/ Cationic amino acid transporter
Immunogen Species	SLC7A5/CD98 Light Chain antibody was raised against Human
Immunogen	SLC7A5 / CD98 Light Chain antibody was raised against synthetic 15 amino acid peptide from internal region of human SLC7A5. Percent identity with other species by BLAST analysis: Monkey, Marmoset, Dog (100%); Human, Panda, Bat, Rabbit (93%); Elephant, Bovine, Horse (87%).
Antigen Type	Synthetic peptide
Immunogen Description	Synthetic 15 amino acid peptide from internal region of human SLC7A5. Percent identity with other species by BLAST analysis: Monkey, Marmoset, Dog (100%); Human, Panda, Bat, Rabbit (93%); Elephant, Bovine, Horse (87%).
Epitope	Internal
Presentation	PBS, less than 0.1% sodium azide.
Disclaimer	Due to the highly specific nature of antibodies and antigens, we cannot predict or be held responsible with respect to how this antibody will behave in your systems. Researchers using this antibody should conduct optimization studies to achieve the most optimal result possible for their intended application.

Recommended Immunohistochemistry Protocol	The following protocol is a recommendation only, and AAA Biotech, Inc. makes no guarantee of the results: Tissue Preparation: Formalin fixation and embedding in paraffin wax. Tissue Sectioning: Make 4-um sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-dryingoven for 45 minutes at 60°C. Deparaffinization: Wash dry slides in 3 changes of xylene - 5 minutes each @ RT Rehydration: Wash slides in 3 changes of 100% alcohol - 3 minutes each @ RT Wash slides in 2 changes of 95% alcohol - 3 minutes each @ RT Wash slides in 1 change of 80% alcohol - 3 minutes @ RT Rinse slides in gentle running distilled water - 5 minutes @ RT Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes Remove from heat and let stand at room temperature in buffer - 20 minutes Rinse in 1X TBS with Tween (TBST) -1 minute @ RT Immunostaining: (Do not allow tissues to dry at any time during the staining procedure) Apply a universal protein block - 20 minutes @ RT Drain protein block from slides, apply diluted primary antibody - 45 minutes @ RT Rinse slides in 1 X TBST - 1 minute @ RT Apply a biotinylated secondary antibody appropriate for the primary antibody - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase streptavidin - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase chromogen substrate - 30 minutes @ RT Wash slides in distilled water - 1 minute @ RT Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB) Wash slides in 2 changes of 80% alcohol - 1 minute each @ RT Wash slides in 2 changes of 95% alcohol - 1 minute each @ RT Wash slides in 3 changes of 100% alcohol - 1 minute each @ RT Wash slides in 3 changes of xylene - 1 minute each @ RT Apply coverslip Preparation and Storage Aliquot and store undiluted at -20°C or below for up to 1 year. Can be stored undiluted at 4°C for up to 1 month. Avoid freeze thaw cycles.
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IMAGES



IHC (Immunohistochemistry)
Anti-SLC7A5 antibody IHC of human placenta, terminal villi. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.

ADDITIONAL INFORMATION

Related Product Information for anti-SLC7A5 antibody	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 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.
Product Categories/Family for anti-SLC7A5 antibody	Family: Transporter ; Subfamily: Cationic amino acid transporter

NCBI AND UNIPROT INFORMATION

NCBI GI #	71979932
NCBI GeneID	8140
NCBI Accession #	NP_003477.4
NCBI GenBank Nucleotide #	NM_003486.5
UniProt Accession #	Q01650 ; Q8IV97 ; Q9UBN8 ; Q9UP15 ; Q9UQC0
NCBI Official Full Name	large neutral amino acids transporter small subunit 1
NCBI Official Synonym Full Names	solute carrier family 7 (amino acid transporter light chain, L system), member 5
NCBI Official Symbol	SLC7A5
NCBI Official Synonym Symbols	E16; CD98; LAT1; 4F2LC; MPE16; hLAT1; D16S469E
NCBI Protein Information	large neutral amino acids transporter small subunit 1; 4F2 LC; 4F2 light chain; CD98 light chain; integral membrane protein E16; L-type amino acid transporter 1; solute carrier family 7 member 5; large neutral amino acids transporter 1; y+ system cationic amino acid transporter; sodium-independent neutral amino acid transporter LAT1; solute carrier family 7 (cationic amino acid transporter, y+ system), member 5
UniProt Protein Name	Large neutral amino acids transporter small subunit 1
UniProt Gene Name	SLC7A5
UniProt Synonym Gene Names	CD98LC; LAT1; MPE16; 4F2 LC; 4F2LC; hLAT1
UniProt Entry Name	LAT1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/slc7a5-cd98-antibody-immunohistochemistry-elisa/12328>