

Large neutral amino acids transporter small subunit 1 (SLC7A5) Recombinant Protein | SLC7A5 recombinant protein

Recombinant Human Large neutral amino acids transporter small subunit 1 (SLC7A5)-VLPs

CATALOG # AAA279272	HOST Mammalian cell
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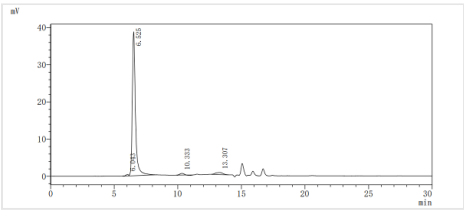
PRODUCT SYNONYMS

Large neutral amino acids transporter small subunit 1 (SLC7A5); Recombinant Human Large neutral amino acids transporter small subunit 1 (SLC7A5)-VLPs; 4F2 light chain; 4F2 LC; 4F2LC; CD98 light chain; Integral membrane protein E16; E16; L-type amino acid transporter 1; hLAT1; Solute carrier family 7 member 5; y+ system cationic amino acid transporter; SLC7A5 recombinant protein

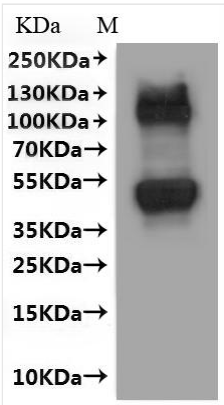
PRODUCT SPECIFICATIONS

Host	Mammalian cell
Purity/Purification	The purity information is not available for VLPs proteins.
Form/Format	Lyophilized powder Lyophilized from a 0.2 um filtered PBS, 6% Trehalose, pH 7.4.
Sequence Positions	1-507aa; Full Length Protein
Sequence	MAGAGPKRRA LAAPAAEEKE EAREKMLAAK SADGSAPAGE GEGVTLQRNI TLLNGVAIIV GTIIGSGIFV TPTGVLKEAG SPGLALVWA ACGVFSIVGA LCYaelGTTI SKSGGDYAYM LEVYGSLPAF LKLWIELLII RPSSQYIVAL VFATYLLKPL FPTCPVPEEA AKLVACLCLV LLTAVNCYSV KAATRVQDAF AAKLLALAL IILGQVQIG KGDVSNLDPN FSFEGTKLDV GNIVLALYSG LFAYGGWNYL NFVTEEMINP YRNLPLAIII SLPIVTLVYV LTNLAYFTTL STEQMLSSEA VAVDFGNYHL GVMSWIIPVF VGLSCFGSVN GSLFTSSRLF FVGSREGHLP SILSMIHPQL LTPVPSLVFT CVMTLLYAFS KDIFSVINFF SFFNWLCVAL AIIGMIWLRH RKPELERPIK VNLALPVFFI LACFLIAVS FWKTPVECGI GFTIILSGLP VYFFGVWWKN KPWLLQGIF STTVLCQKLM QVVPQET
Species	Homo sapiens (Human)
Tag	C-terminal 10xHis-tagged (This tag can be tested only under denaturing conditions)
Research Area	Signal Transduction
Transmembrane Domain	12TM
Preparation and Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 degree C/-80 degree C. The shelf life of lyophilized form is 12 months at -20 degree C/-80 degree C. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. Aliquot for long-term storage at -80 degree C. Solubilize for 60 minutes at room temperature with occasional gentle mixing. Avoid vigorous shaking or vortexing. The VLPs are expressed from human 293 cells (HEK293). Mix the sample gently by repeatedly pipetting it up and down. Do not vortex. Repeated freezing and thawing is not recommended. Store the protein at -20 degree C/-80 degree C upon receiving it, and ensure to avoid repeated freezing and thawing, otherwise, it will affect the protein activity. The immunization strategy should be optimized (antigen dose, regimen and adjuvant).

IMAGES



Application Data
The purity of VLPs was greater than 90% as determined by SEC-HPLC



Application Data
detected by Mouse anti-6*His monoclonal antibody.

ADDITIONAL INFORMATION

Related Product Information for SLC7A5 recombinant protein	The heterodimer with SLC3A2 functions as sodium-independent, high-affinity transporter that mediates uptake of large neutral amino acids such as phenylalanine, tyrosine, L-DOPA, leucine, histidine, methionine and tryptophan. Functions as an amino acid exchanger. May play a role in the transport of L-DOPA across the blood-brain barrier. May act as the major transporter of tyrosine in fibroblasts (Probable). May mediate blood-to-retina L-leucine transport across the inner blood-retinal barrier. Can mediate the transport of thyroid hormones triiodothyronine (T3) and thyroxine (T4) across the cell membrane. When associated with LAPTMB, the heterodimer formed by SLC3A2 and SLC7A5 is recruited to lysosomes to promote leucine uptake into these organelles, and thereby mediates mTORC1 activation. Involved in the uptake of toxic methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes. Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the membrane. (Microbial infection) In case of hepatitis C virus/HCV infection, the complex formed by SLC3A2 and SLC7A5/LAT1 plays a role in HCV propagation by facilitating viral entry into host cell and increasing L-leucine uptake-mediated mTORC1 signaling activation, thereby contributing to HCV-mediated pathogenesis.
Product Categories/Family for SLC7A5 recombinant protein	MP-VLP Transmembrane Protein & Developed Protein

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
Molecular Weight	55,010 Da
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
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://stage.aaabiotech.com/slc7a5-recombinant-protein-mammalian-cell/279272>