



## SLC7A8 peptide (DAG-P1751)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Antigen Description</b>	Sodium-independent, high-affinity transport of small and large neutral amino acids such as alanine, serine, threonine, cysteine, phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Acts as an amino acid exchanger. Has higher affinity for L-phenylalanine than LAT1 but lower affinity for glutamine and serine. L-alanine is transported at physiological concentrations. Plays a role in basolateral (re)absorption of neutral amino acids. 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. Plays an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney.
<b>Specificity</b>	Strongest expression is observed in kidney and moderate expression in placenta and brain, followed by liver, prostate, testis, ovary, lymph node, thymus, spleen, skeletal muscle and heart. Also expressed in fetal liver as well as in the retinal pigment ep
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the amino acid-polyamine-organocation (APC) superfamily. L-type amino acid transporter (LAT) (TC 2.A.3.8) family.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

<b>Gene Name</b>	<a href="#">SLC7A8 solute carrier family 7 (amino acid transporter light chain, L system), member 8 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	SLC7A8
<b>Synonyms</b>	SLC7A8; solute carrier family 7 (amino acid transporter light chain, L system), member 8; LAT2; LPI-PC1; large neutral amino acids transporter small subunit 2; integral membrane protein E16H; L-type amino acid transporter 2; solute carrier family 7 (amino acid transporter, L-type), member 8; solute carrier family 7 (cationic amino acid transporter, y+ system), member 8;
<b>Entrez Gene ID</b>	<a href="#">23428</a>
<b>mRNA Refseq</b>	<a href="#">NM_001267036.1</a>
<b>Protein Refseq</b>	<a href="#">NP_001253965.1</a>
<b>UniProt ID</b>	Q9UHI5
<b>Chromosome Location</b>	14q11.2
<b>Pathway</b>	Amino acid transport across the plasma membrane, organism-specific biosystem; Basigin interactions, organism-specific biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Hemostasis, organism-specific biosystem; Protein digestion and absorption, organism-specific biosystem; Protein digestion and absorption, conserved biosystem; SLC-mediated transmembrane transport, organism-specific biosystem; Transmembrane transport of small molecules, organism-specific biosys
<b>Function</b>	L-amino acid transmembrane transporter activity; amino acid transmembrane transporter activity; amino acid transmembrane transporter activity; amino acid transmembrane transporter activity; neutral amino acid transmembrane transporter activity; organic ca