

Product datasheet for **CF500503**

LAT2 (SLC7A8) Mouse Monoclonal Antibody [Clone ID: OTI5A9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI5A9
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	WB 1:500, IHC 1:50, IF 1:100, FLOW 1:100, IP 2ug/500ul
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human SLC7A8 expression vector .
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	58.4 kDa
Gene Name:	solute carrier family 7 member 8
Database Link:	NP_036376 Entrez Gene 23428 Human Q9UHI5



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Background:

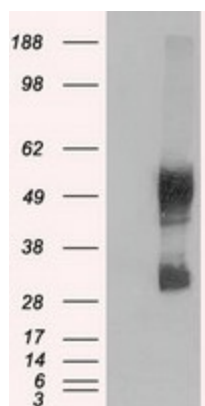
Sodium-independent, high-affinity transport of small and large neutral amino acids such as alanine, serine, threonine, cysteine, phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Acts as an amino acid exchanger. Has higher affinity for L-phenylalanine than 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.

Synonyms:

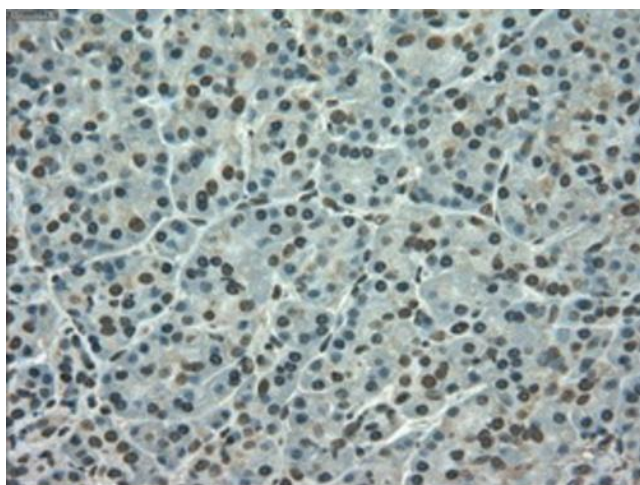
LAT2; LPI-PC1

Protein Families:

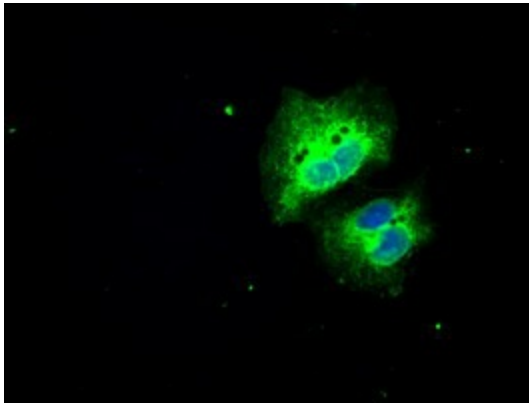
Druggable Genome, Transmembrane

Product images:

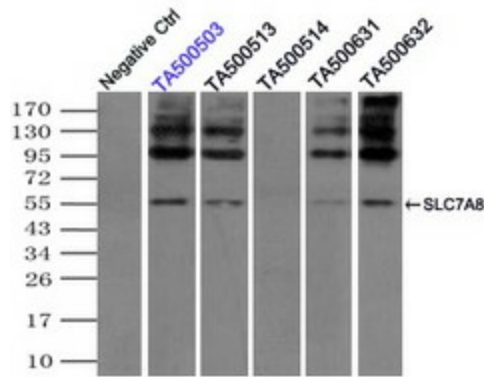
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SLC7A8 (Cat# [RC208586], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SLC7A8 (Cat# [TA500503]). Positive lysates [LY402177] (100ug) and [LC402177] (20ug) can be purchased separately from OriGene.



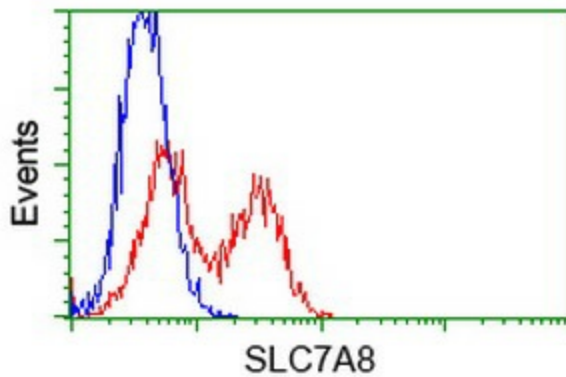
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-SLC7A8 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-SLC7A8 mouse monoclonal antibody ([TA500503]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY SLC7A8 ([RC208586]).



Immunoprecipitation (IP) of SLC7A8 by using TrueMab monoclonal anti-SLC7A8 antibodies (Negative control: IP without adding anti-SLC7A8 antibody.). For each experiment, 500ul of DDK tagged SLC7A8 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-SLC7A8 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immunoprecipitated products were analyzed with rabbit anti-DDK polyclonal antibody.



HEK293T cells transfected with either [RC208586] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-SLC7A8 antibody ([TA500503]), and then analyzed by flow cytometry.