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Goat anti-SLC7A6 / y+LAT-2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF4449a

Product Information

Application	WB, IHC, Pep-ELISA
Primary Accession	Q92536
Other Accession	NP_003974.3
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Clone Names	SLC7A6
Calculated MW	56828

Additional Information

Gene ID	9057
Other Names	SLC7A6; solute carrier family 7 (amino acid transporter light chain, y+L system), member 6; LAT-2; LAT3; y+LAT-2; Y+L amino acid transporter 2; amino acid permease; cationic amino acid transporter, y+ system; solute carrier family 7 (cationic amino acid t
Dilution	WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
Immunogen	Reported variants represent identical protein: NP_003974.3, NP_001070253.1
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat anti-SLC7A6 / y+LAT-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC7A6 (HGNC:11064)
Function	Heterodimer with SLC3A2, that functions as an antiporter which operates as an efflux route by exporting cationic amino acids such as L-arginine from inside the cells in exchange with neutral amino acids like L-leucine, L-glutamine and isoleucine, plus sodium ions and may participate in nitric oxide synthesis (PubMed:10903140, PubMed:11311135, PubMed:14603368,

PubMed:15756301, PubMed:16785209, PubMed:17329401, PubMed:19562367, PubMed:31705628, PubMed:9829974). Also exchanges L-arginine with L-lysine in a sodium-independent manner (PubMed:10903140). The transport mechanism is electroneutral and operates with a stoichiometry of 1:1 (PubMed:10903140). Contributes to ammonia-induced increase of L-arginine uptake in cerebral cortical astrocytes leading to ammonia-dependent increase of nitric oxide (NO) production via inducible nitric oxide synthase (iNOS) induction, and protein nitration (By similarity). May mediate transport of ornithine in retinal pigment epithelial (RPE) cells (PubMed:17197568). May also transport glycine betaine in a sodium dependent manner from the cumulus granulosa into the enclosed oocyte (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in normal fibroblasts and those from LPI patients (PubMed:11078698). Also expressed in HUVECs, monocytes, RPE cells, and various carcinoma cell lines (PubMed:11742806, PubMed:14603368, PubMed:15280038, PubMed:17197568, PubMed:17329401) Expressed in brain, heart, testis, kidney, small intestine and parotis (PubMed:10903140). Highly expressed in T lymphocytes (PubMed:31705628)