

SLC7A6 (G-12): sc-136884

BACKGROUND

SLC7A6 (solute carrier family 7 member 6), also known as LAT3, LAT-2 or γ +LAT-2 (Y+L amino acid transporter 2), is a 515 amino acid multi-pass membrane protein belonging to the amino acid-polyamine-organocation (APC) superfamily and the L-type amino acid transporter (LAT) family. Expressed in normal fibroblasts, HUVECs (human umbilical vein endothelial cells), monocytes, RPE (retinal pigment epithelial) cells and various carcinoma cell lines, SLC7A6 is involved in the sodium-independent uptake of dibasic amino acids and sodium-dependent uptake of some neutral amino acids. SLC7A6 also acts as an arginine/glutamine exchanger, following an antiport mechanism for amino acid transport, influencing arginine release in exchange for extracellular amino acids. SLC7A6 may exist as a disulfide-linked heterodimer with the amino acid transport protein CD98. SLC7A6 plays a role in nitric oxide synthesis in HUVECs via transport of L-arginine, and is involved in the transport of L-arginine in monocytes and reduces uptake of ornithine in RPE cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC7A6 (human) mapping to 16q22.1.

SOURCE

SLC7A6 (G-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of SLC7A6 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136884 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC7A6 (G-12) is recommended for detection of SLC7A6 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other SLC7A proteins.

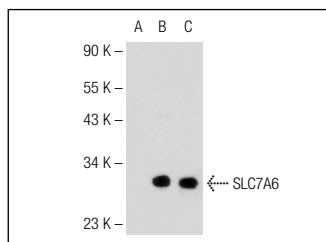
SLC7A6 (G-12) is also recommended for detection of SLC7A6 in additional species, including bovine.

Suitable for use as control antibody for SLC7A6 siRNA (h): sc-93502, SLC7A6 shRNA Plasmid (h): sc-93502-SH and SLC7A6 shRNA (h) Lentiviral Particles: sc-93502-V.

Molecular Weight of SLC7A6: 58 kDa.

Positive Controls: SLC7A6 (m): 293T Lysate: sc-123627 or mouse small intestine tissue extract.

DATA



SLC7A6 (G-12): sc-136884. Western blot analysis of SLC7A6 expression in non-transfected: sc-117752 (A) and mouse SLC7A6 transfected: sc-123627 (B) 293T whole cell lysates and mouse small intestine tissue extract (C).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.