

SVCT2 (S-19): sc-9926

BACKGROUND

The sodium-dependent vitamin C transporters SVCT1 and SCVT2 are membrane transporters for L-ascorbic acid (vitamin C). Both SVCT proteins mediate high affinity Na⁺-dependent L-ascorbic acid transport and are necessary for the uptake of vitamin C in many tissues. SVCT1 is a 604 amino acid protein that is expressed mainly in epithelial tissues, including intestine, kidney and liver. SVCT2 is a 592 amino acid protein that shares 65% homology to SVCT1 and has been detected in various metabolically active cells as well as in specialized tissues such as eye and brain. A non-functional splice variant of SVCT1 has been identified in normal human intestine.

CHROMOSOMAL LOCATION

Genetic locus: SLC23A2 (human) mapping to 20p13; Slc23a2 (mouse) mapping to 2 F2.

SOURCE

SVCT2 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SVCT2 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with 0.1% sodium azide and 0.2% gelatin.

Blocking peptide available for competition studies, sc-9926 P, (100 µg peptide in 0.5 ml PBS containing 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SVCT2 (S-19) is recommended for detection of SVCT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SVCT2 (S-19) is also recommended for detection of SVCT2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SVCT2 siRNA (h): sc-41008, SVCT2 siRNA (m): sc-41009, SVCT2 shRNA Plasmid (h): sc-41008-SH, SVCT2 shRNA Plasmid (m): sc-41009-SH, SVCT2 shRNA (h) Lentiviral Particles: sc-41008-V and SVCT2 shRNA (m) Lentiviral Particles: sc-41009-V.

Molecular Weight of human SVCT2: 50 kDa.

Molecular Weight of mouse/rat SVCT2: 65-75 kDa.

Positive Controls: SVCT2 (m): 293T Lysate: sc-127617.

STORAGE

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

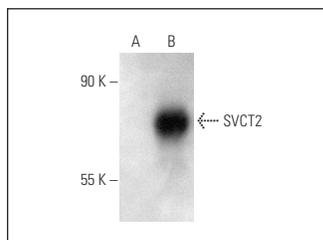
PROTOCOLS

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

RESEARCH USE

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

DATA



SVCT2 (S-19) : sc-9926. Western blot analysis of SVCT2 expression in non-transfected: sc-117752 (A) and mouse SVCT2 transfected: sc-127617 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Li, X., et al. 2003. Ascorbic acid spares α -tocopherol and decreases lipid peroxidation in neuronal cells. *Biochem. Biophys. Res. Commun.* 305: 656-661.
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- Chi, X. and May, J.M. 2009. Oxidized lipoprotein induces the macrophage ascorbate transporter (SVCT2): protection by intracellular ascorbate against oxidant stress and apoptosis. *Arch. Biochem. Biophys.* 485: 174-182.
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