

SNAT4 (H-24): sc-134019

BACKGROUND

The sodium-coupled neutral amino acid transporters (SNAT) of the SLC38 gene family include system A subtypes SNAT1, SNAT2 and SNAT4 and system N subtypes SNAT3 and SNAT5. The SLC38 transporters are essential for the uptake of nutrients, energy production, metabolism, detoxification and the cycling of neurotransmitters. SNAT4, also designated ATA3, NAT3 or PAAT, has been mapped to human chromosome 12q13.11. Tissue expression of the SNAT4 protein is most predominant in embryonic and adult liver and to a much lesser extent in the muscle, kidney and pancreas. System A transport proteins may play a significant role in fetal development, and inhibition of the transport system has been associated with fetal growth retardation.

REFERENCES

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3. Gu, S., Roderick, H.L., Camacho, P. and Jiang, J.X. 2001. Characterization of an N-system amino acid transporter expressed in retina and its involvement in glutamine transport. *J. Biol. Chem.* 276: 24137-24144.
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5. Freeman, T.L., Thiele, G.M., Tuma, D.J., Machu, T.K. and Mailliard, M.E. 2002. ATA2-mediated amino acid uptake following partial hepatectomy is regulated by redistribution to the plasma membrane. *Arch. Biochem. Biophys.* 400: 215-222.
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CHROMOSOMAL LOCATION

Genetic locus: SLC38A4 (human) mapping to 12q13.11; Slc38a4 (mouse) mapping to 15 F1.

SOURCE

SNAT4 (H-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic SNAT4 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

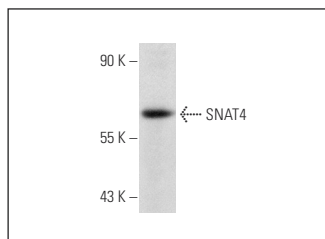
SNAT4 (H-24) is recommended for detection of SNAT4 of mouse, rat, human, *Drosophila melanogaster*, zebrafish and *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SNAT4 siRNA (h): sc-44994, SNAT4 siRNA (m): sc-44995, SNAT4 shRNA Plasmid (h): sc-44994-SH, SNAT4 shRNA Plasmid (m): sc-44995-SH, SNAT4 shRNA (h) Lentiviral Particles: sc-44994-V and SNAT4 shRNA (m) Lentiviral Particles: sc-44995-V.

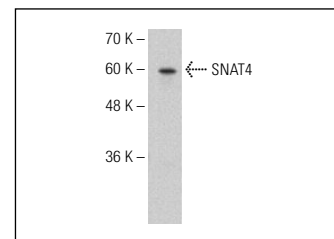
Molecular Weight of SNAT4: 60 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, mouse liver extract: sc-2256 or Caki-1 cell lysate: sc-2224.

DATA



SNAT4 (H-24): sc-134019. Western blot analysis of SNAT4 expression in mouse liver tissue extract.



SNAT4 (H-24): sc-134019. Western blot analysis of SNAT4 expression in Jurkat whole cell lysate.

STORAGE

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

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.



MONOS
Satisfaction
Guaranteed

Try **SNAT4 (F-5): sc-515125** or **SNAT4 (H-9): sc-376664**, our highly recommended monoclonal alternatives to SNAT4 (H-24).