



# SZABO SCANDIC

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### Zuschläge

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- Expressversand

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# SNAT4 (m2): 293T Lysate: sc-123681

## 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. 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

1. Wang, H., Huang, W., Sugawara, M., Devoe, L.D., Leibach, F.H., Prasad, P.D. and Ganapathy, V. 2000. Cloning and functional expression of ATA1, a subtype of amino acid transporter A, from human placenta. *Biochem. Biophys. Res. Commun.* 273: 1175-1179.
2. Hatanaka, T., Huang, W., Wang, H., Sugawara, M., Prasad, P.D., Leibach, F.H. and Ganapathy, V. 2000. Primary structure, functional characteristics and tissue expression pattern of human ATA2, a subtype of amino acid transport system A. *Biochim. Biophys. Acta* 1467: 1-6.
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.
6. Palii, S.S., Chen, H. and Kilberg, M.S. 2004. Transcriptional control of the human sodium-coupled neutral amino acid transporter system A gene by amino acid availability is mediated by an intronic element. *J. Biol. Chem.* 279: 3463-3471.
7. Sidoryk, M., Matyja, E., Dybel, A., Zielinska, M., Bogucki, J., Jaskólski, D.J., Liberski, P.P., Kowalczyk, P. and Albrecht, J. 2004. Increased expression of a glutamine transporter SNAT3 is a marker of malignant gliomas. *Neuroreport* 15: 575-578.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Slc38a4 (mouse) mapping to 15 F1.

## PRODUCT

SNAT4 (m2): 293T Lysate represents a lysate of mouse SNAT4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

SNAT4 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SNAT4 antibodies. Recommended use: 10-20 µl per lane.

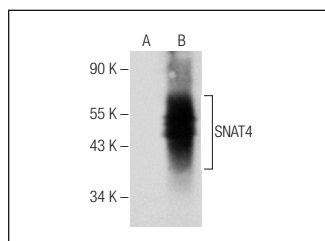
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SNAT4 (H-9): sc-376664 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SNAT4 expression in SNAT4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

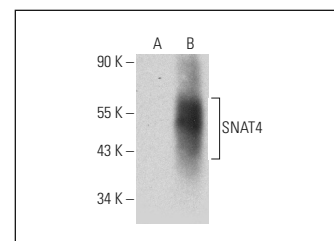
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



SNAT4 (H-9): sc-376664. Western blot analysis of SNAT4 expression in non-transfected: sc-117752 (A) and mouse SNAT4 transfected: sc-123681 (B) 293T whole cell lysates.



SNAT4 (A-4): sc-514047. Western blot analysis of SNAT4 expression in non-transfected: sc-117752 (A) and mouse SNAT4 transfected: sc-123681 (B) 293T whole cell lysates.

## RESEARCH USE

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