

# SNAT2 (C-12): sc-33444

## 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. SNAT2, also designated ATA2, PRO1068 and SAT2, is encoded by the human gene SLC38A2. The functional role of SNAT2 in the nervous system is unclear. Protein expression is notably enriched in the spinal cord and brain stem nuclei of the auditory system. System A transport proteins are also present in placental tissue. These SNAT proteins may play a significant role in fetal development, and inhibition of the transport system has been associated with fetal growth retardation.

## CHROMOSOMAL LOCATION

Genetic locus: SLC38A2 (human) mapping to 12q13.11; Slc38a2 (mouse) mapping to 15 F1.

## SOURCE

SNAT2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SNAT2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-33444 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

SNAT2 (C-12) is recommended for detection of SNAT2 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), 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).

SNAT2 (C-12) is also recommended for detection of SNAT2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SNAT2 siRNA (h): sc-44974, SNAT2 siRNA (m): sc-44975, SNAT2 shRNA Plasmid (h): sc-44974-SH, SNAT2 shRNA Plasmid (m): sc-44975-SH, SNAT2 shRNA (h) Lentiviral Particles: sc-44974-V and SNAT2 shRNA (m) Lentiviral Particles: sc-44975-V.

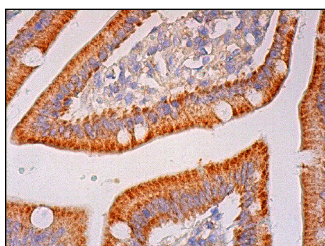
Molecular Weight of SNAT2: 60 kDa.

Positive Controls: U-87 MG cell lysate sc: 2411.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



SNAT2 (C-12): sc-33444. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

- Farley, D., et al. 2009. Feto-placental adaptations to maternal obesity in the baboon. *Placenta* 30: 752-760.
- Farley, D.M., et al. 2010. Placental amino acid transport and placental leptin resistance in pregnancies complicated by maternal obesity. *Placenta* 31: 718-724.
- Li, G., et al. 2015. Characterization and regulation of the amino acid transporter SNAT2 in the small intestine of piglets. *PLoS ONE* 10: e0128207.

## RESEARCH USE

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

## PROTOCOLS

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



Try **SNAT2 (C-6): sc-514037** or **SNAT2 (G-8): sc-166366**, our highly recommended monoclonal alternatives to SNAT2 (C-12).