

# SLC10A6 (C-13): sc-136875

## BACKGROUND

The SLC10 family of sodium/bile salt cotransporters contains over 50 members in animal, plant and bacterial species. SLC10A6 (solute carrier family 10, member 6), also known as SOAT (sodium-dependent organic anion transporter), is a 373 amino acid multi-pass membrane protein belonging to the sodium:bile acid symporter family. Highly expressed in testis, placenta and pancreas, SLC10A6 transports sulfoconjugated steroid hormones, as well as taurothiocholic acid-3-sulfate and sulfoconjugated pyrenes in a sodium-dependent manner. SLC10A6 plays an important role in the cellular delivery of specific prohormones in testis, placenta, adrenal gland and other peripheral tissues. SLC10A6 has nine transmembrane domains, with an N-terminus outside the cell and an intracellular C-terminus.

## REFERENCES

- Geyer, J., Godoy, J.R. and Petzinger, E. 2004. Identification of a sodium-dependent organic anion transporter from rat adrenal gland. *Biochem. Biophys. Res. Commun.* 316: 300-306.
- Hagenbuch, B. and Dawson, P. 2004. The sodium bile salt cotransport family SLC10. *Pflugers Arch.* 447: 566-570.
- Geyer, J., Wilke, T. and Petzinger, E. 2006. The solute carrier family SLC10: more than a family of bile acid transporters regarding function and phylogenetic relationships. *Naunyn Schmiedeberg's Arch. Pharmacol.* 372: 413-431.
- Fernandes, C.F., Godoy, J.R., Döring, B., Cavalcanti, M.C., Bergmann, M., Petzinger, E. and Geyer, J. 2007. The novel putative bile acid transporter SLC10A5 is highly expressed in liver and kidney. *Biochem. Biophys. Res. Commun.* 361: 26-32.
- Godoy, J.R., Fernandes, C., Döring, B., Beuerlein, K., Petzinger, E. and Geyer, J. 2007. Molecular and phylogenetic characterization of a novel putative membrane transporter (SLC10A7), conserved in vertebrates and bacteria. *Eur. J. Cell Biol.* 86: 445-460.
- Geyer, J., Döring, B., Meerkamp, K., Ugele, B., Bakhiya, N., Fernandes, C.F., Godoy, J.R., Glatt, H. and Petzinger, E. 2007. Cloning and functional characterization of human sodium-dependent organic anion transporter (SLC10A6). *J. Biol. Chem.* 282: 19728-19741.
- Geyer, J., Fernandes, C.F., Döring, B., Burger, S., Godoy, J.R., Rafalzik, S., Hübschle, T., Gerstberger, R. and Petzinger, E. 2008. Cloning and molecular characterization of the orphan carrier protein SLC10A4: expression in cholinergic neurons of the rat central nervous system. *Neuroscience* 152: 990-1005.
- Zheng, Y., Cai, X., Luo, X., Hu, Z. and Jing, Z. 2008. Characterization of a new gene (SLC10) with a spliced leader from *Taenia solium*. *Vet. J.* 175: 96-101.

## CHROMOSOMAL LOCATION

Genetic locus: SLC10A6 (human) mapping to 4q21.3.

## STORAGE

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

## SOURCE

SLC10A6 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of SLC10A6 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-136875 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

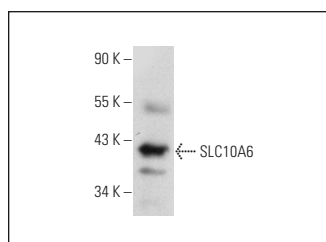
SLC10A6 (C-13) is recommended for detection of SLC10A6 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other SLC10A family members.

Suitable for use as control antibody for SLC10A6 siRNA (h): sc-89120, SLC10A6 shRNA Plasmid (h): sc-89120-SH and SLC10A6 shRNA (h) Lentiviral Particles: sc-89120-V.

Molecular Weight of SLC10A6: 42 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812.

## DATA



SLC10A6 (C-13): sc-136875. Western blot analysis of SLC10A6 expression in SH-SY5Y whole cell lysate.

## 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.