SANTA CRUZ BIOTECHNOLOGY, INC.

SLC10A6 (E-12): sc-136876



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 taurolithocholic acid-3-sulfate and sulfoconjugated pyrenes in a sodiumdependent 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 sodiumdependent 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 Schmiedebergs 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.. 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.
- Visser, W.E., Wong, W.S., van Mullem, A.A., Friesema, E.C., Geyer, J. and Visser, T.J. 2009. Study of the transport of thyroid hormone by transporters of the SLC10 family. Mol. Cell. Endocrinol. E-published.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: Slc10a6 (mouse) mapping to 5 E5.

SOURCE

SLC10A6 (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of SLC10A6 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-136876 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC10A6 (E-12) is recommended for detection of SLC10A6 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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 (m): sc-153487, SLC10A6 shRNA Plasmid (m): sc-153487-SH and SLC10A6 shRNA (m) Lentiviral Particles: sc-153487-V.

Molecular Weight of SLC10A6: 42 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.