



SLC10A3 (h3): 293T Lysate: sc-158964

BACKGROUND

The SLC10 family of sodium/bile salt cotransporters contains over 50 members in animal, plant and bacterial species. SLC10A3 (solute carrier family 10 [sodium/bile acid cotransporter family], member 3), also known as P3 or DXS253E, is a 477 amino acid multi-pass membrane protein belonging to the sodium:bile acid symporter family. A few members of the sodium:bile acid symporter family, such as NTCP (also known as SLC10A1) and Asbt (also known as SLC10A2), are involved in maintaining enterohepatic circulation of bile acids by mediating the first step of active bile transport through membrane barriers of liver and intestine. Other family members, including SLC10A6, play an important role in the cellular delivery of specific prohormones in testes, placenta, adrenal gland and other peripheral tissues. Family members such as SLC10A3 are uncharacterized and their functions are unknown. SLC10A3 is encoded by a gene located on human chromosome Xq28.

REFERENCES

1. Filippi, M., et al. 1990. Linkage and sequence conservation of the X-linked genes DXS253E (P3) and DXS254E (GdX) in mouse and man. *Genomics* 7: 453-457.
2. Hagenbuch, B. and Dawson, P. 2004. The sodium bile salt cotransport family SLC10. *Pflugers Arch.* 447: 566-570.
3. Mita, S., et al. 2006. Inhibition of bile acid transport across Na⁺/taurocholate cotransporting polypeptide (SLC10A1) and bile salt export pump (ABCB 11)-coexpressing LLC-PK1 cells by cholestasis-inducing drugs. *Drug Metab. Dispos.* 34: 1575-1581.
4. Geyer, J., et al. 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.
5. Fernandes, C.F., et al. 2007. The novel putative bile acid transporter SLC10A5 is highly expressed in liver and kidney. *Biochem. Biophys. Res. Commun.* 361: 26-32.
6. Godoy, J.R., et al. 2007. Molecular and phylogenetic characterization of a novel putative membrane transporter (SLC10A7), conserved in vertebrates and bacteria. *Eur. J. Cell Biol.* 86: 445-460.
7. Alrefai, W.A. and Gill, R.K. 2007. Bile acid transporters: structure, function, regulation and pathophysiological implications. *Pharm. Res.* 24: 1803-1823.
8. Geyer, J., et al. 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.
9. Cheng, L., et al. 2010. Analysis of chemotherapy response programs in ovarian cancers by the next-generation sequencing technologies. *Gynecol. Oncol.* 117: 159-169.

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.

CHROMOSOMAL LOCATION

Genetic locus: SLC10A3 (human) mapping to Xq28.

PRODUCT

SLC10A3 (h3): 293T Lysate represents a lysate of human SLC10A3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

SLC10A3 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive SLC10A3 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.