

SLC10A3 (L-12): sc-136869

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

- 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.
- Hagenbuch, B. and Dawson, P. 2004. The sodium bile salt cotransport family SLC10. *Pflugers Arch.* 447: 566-570.
- 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.
- Geyer, J., et al. 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., et al. 2007. The novel putative bile acid transporter SLC10A5 is highly expressed in liver and kidney. *Biochem. Biophys. Res. Commun.* 361: 26-32.

CHROMOSOMAL LOCATION

Genetic locus: SLC10A3 (human) mapping to Xq28; Slc10a3 (mouse) mapping to X A7.3.

SOURCE

SLC10A3 (L-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLC10A3 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-136869 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

SLC10A3 (L-12) is recommended for detection of SLC10A3 of mouse, rat and 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.

SLC10A3 (L-12) is also recommended for detection of SLC10A3 in additional species, including porcine.

Suitable for use as control antibody for SLC10A3 siRNA (h): sc-91006, SLC10A3 siRNA (m): sc-153484, SLC10A3 shRNA Plasmid (h): sc-91006-SH, SLC10A3 shRNA Plasmid (m): sc-153484-SH, SLC10A3 shRNA (h) Lentiviral Particles: sc-91006-V and SLC10A3 shRNA (m) Lentiviral Particles: sc-153484-V.

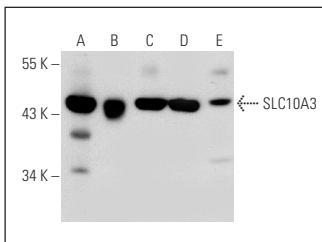
Molecular Weight of SLC10A3: 50 kDa.

Positive Controls: mouse liver extract: sc-2256, RAW 264.7 whole cell lysate: sc-2211 or mouse placenta extract: sc-364247.

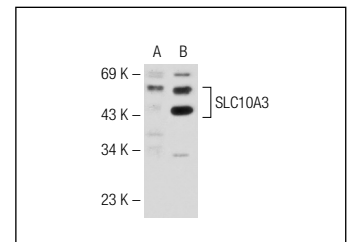
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

DATA



SLC10A3 (L-12): sc-136869. Western blot analysis of SLC10A3 expression in mouse liver (A) and mouse placenta (B) tissue extracts and RAW 264.7 (C), C2C12 (D) and MDA-MB-231 (E) whole cell lysates.



SLC10A3 (L-12): sc-136869. Western blot analysis of SLC10A3 expression in T24 whole cell lysate (A) and mouse spleen tissue extract (B).

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.