

LST-3TM12 (C-13): sc-139153

BACKGROUND

The Major facilitator superfamily (MFS) is a large group of secondary transporters that includes uniporters, symporters and antiporters. MFS proteins transport a variety of substrates across membranes, such as sugar phosphates, drugs, neurotransmitters, amino acids, ions, peptides and nucleosides. As a member of the MFS superfamily, LST-3TM12 (liver-specific organic anion transporter 3TM12) is a 640 amino acid protein that contains a kazal-type serine protease inhibitor domain, which is usually detected in SLC21 family members and may regulate the specificity of anion uptake. The LST-3TM12 gene is located within a region on chromosome 12 that has been associated with hepatic transporter reduced affinity for bilirubin.

REFERENCES

- Saidijam, M., Benedetti, G., Ren, Q., Xu, Z., Hoyle, C.J., Palmer, S.L., Ward, A., Bettaney, K.E., Szakonyi, G., Mueller, J., Morrison, S., Pos, M.K., Butaye, P., Walravens, K., Langton, K., Herbert, R.B., Skurray, R.A., Paulsen, I.T., O'reilly, J., Rutherford, N.G., Brown, M.H., Bill, R.M. and Henderson, P.J. 2006. Microbial drug efflux proteins of the major facilitator superfamily. *Curr. Drug Targets*. 7: 793-811.
- Law, C.J., Maloney, P.C. and Wang, D.N. 2008. Ins and outs of major facilitator superfamily antiporters. *Annu. Rev. Microbiol.* 62: 289-305.
- Sekito, T., Fujiki, Y., Ohsumi, Y. and Kakinuma, Y. 2008. Novel families of vacuolar amino acid transporters. *IUBMB Life*. 60: 519-525.
- Fluman, N. and Bibi, E. 2009. Bacterial multidrug transport through the lens of the major facilitator superfamily. *Biochim. Biophys. Acta* 1794: 738-747.
- Johnson, A.D., Kavousi, M., Smith, A.V., Chen, M.H., Dehghan, A., Aspelund, T., Lin, J.P., van Duijn, C.M., Harris, T.B., Cupples, L.A., Uitterlinden, A.G., Launer, L., Hofman, A., Rivadeneira, F., Stricker, B., Yang, Q., O'Donnell, C.J., Gudnason, V. and Witteman, J.C. 2009. Genome-wide association meta-analysis for total serum bilirubin levels. *Hum. Mol. Genet.* 18: 2700-2710.
- Sanna, S., Busonero, F., Maschio, A., McArdle, P.F., Usala, G., Dei, M., Lai, S., Mulas, A., Piras, M.G., Perseu, L., Masala, M., Marongiu, M., Crisponi, L., Naitza, S., Galanello, R., Abecasis, G.R., Shuldiner, A.R., Schlessinger, D., Cao, A. and Uda, M. 2009. Common variants in the SLC01B3 locus are associated with bilirubin levels and unconjugated hyperbilirubinemia. *Hum. Mol. Genet.* 18: 2711-2718.

CHROMOSOMAL LOCATION

Genetic locus: LST-3TM12 (human) mapping to 12p12.2.

SOURCE

LST-3TM12 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of LST-3TM12 of human origin.

STORAGE

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

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-139153 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LST-3TM12 (C-13) is recommended for detection of LST-3TM12 of human 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).

Suitable for use as control antibody for LST-3TM12 siRNA (h): sc-95739, LST-3TM12 shRNA Plasmid (h): sc-95739-SH and LST-3TM12 shRNA (h) Lentiviral Particles: sc-95739-V.

Molecular Weight of LST-3TM12: 71 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) 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.

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.