

OATP-F (M-71): sc-134802

BACKGROUND

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-F (organic anion transporter F), also known as SLC01C1 (solute carrier organic anion transporter family member 1C1) or SLC21A14 (solute carrier family 21 member 14), is a 712 amino acid member of the organic anion transporter protein family. As a multi-pass membrane protein, OATP-F mediates the Na⁺-independent, high affinity transport of the thyroid hormones thyroxine (T4) and rT3 and other organic anions. OATP-F is also thought to transport estrone-3-sulfate and sulfobromophthalein (BSP), triiodothyronine (T3) and 17- β -glucuronosyl estradiol at a much lower efficiency. OATP-F is expressed highly in Leydig cells in testis and in brain.

REFERENCES

- Pizzagalli, F., Hagenbuch, B., Stieger, B., Klenk, U., Folkers, G. and Meier, P.J. 2002. Identification of a novel human organic anion transporting polypeptide as a high affinity thyroxine transporter. *Mol. Endocrinol.* 16: 2283-2296.
- Cai, S.Y., Wang, W., Soroka, C.J., Ballatori, N. and Boyer, J.L. 2002. An evolutionarily ancient Oatp: insights into conserved functional domains of these proteins. *Am. J. Physiol. Gastrointest. Liver Physiol.* 282: G702-710.
- Kato, Y., Yoshida, K., Watanabe, C., Sai, Y. and Tsuji, A. 2004. Screening of the interaction between xenobiotic transporters and PDZ proteins. *Pharm. Res.* 21: 1886-1894.
- Takagi, M., Morita, K., Nakai, D., Nakagomi, R., Tokui, T. and Koizumi, M. 2004. Enhancement of the inhibitory activity of Oatp antisense oligonucleotides by incorporation of 2'-O,4'-C-ethylene-bridged nucleic acids (ENA) without a loss of subtype selectivity. *Biochemistry* 43: 4501-4510.
- Funakoshi, S., Murakami, T., Yumoto, R., Kiribayashi, Y. and Takano, M. 2005. Role of organic anion transporting polypeptide and β -methylidigoxin in rats. *J. Pharm. Sci.* 94: 1196-1203.
- Nakao, N., Takagi, T., Iigo, M., Tsukamoto, T., Yasuo, S., Masuda, T., Yanagisawa, T., Ebihara, S. and Yoshimura, T. 2006. Possible involvement of organic anion transporting polypeptide 1c1 in the photoperiodic response of gonads in birds. *Endocrinology* 147: 1067-1073.

CHROMOSOMAL LOCATION

Genetic locus: SLC01C1 (human) mapping to 12p12.2; Slco1c1 (mouse) mapping to 6 G2.

SOURCE

OATP-F (M-71) is a rabbit polyclonal antibody raised against amino acids 1-71 mapping at the N-terminus of OATP-F of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

OATP-F (M-71) is recommended for detection of OATP-F of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OATP-F siRNA (h): sc-106823, OATP-F siRNA (m): sc-106987, OATP-F shRNA Plasmid (h): sc-106823-SH, OATP-F shRNA Plasmid (m): sc-106987-SH, OATP-F shRNA (h) Lentiviral Particles: sc-106823-V and OATP-F shRNA (m) Lentiviral Particles: sc-106987-V.

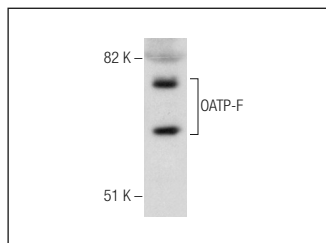
Molecular Weight of OATP-F: 79 kDa.

Positive Controls: rat brain extract: sc-2392.

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



OATP-F (M-71): sc-134802. Western blot analysis of OATP-F expression in rat brain tissue extract.

RESEARCH USE

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



Try **OATP-F (G-5): sc-398883**, our highly recommended monoclonal alternative to OATP-F (M-71).