SANTA CRUZ BIOTECHNOLOGY, INC.

OATP-F (N-18): sc-51350

BACKGROUND

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-F (organic anion transporter F), also known as SLCO1C1 (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

1. Pizzagalli, F., et al. 2002. Identification of a novel human organic anion transporting polypeptide as a high affinity thyroxine transporter. Mol. Endocrinol. 16: 2283-2296.
2. Cai, S.Y., et al. 2002. An evolutionarily ancient Oatp: insights into conserved functional domains of these proteins. Am. J. Physiol. Gastrointest. Liver Physiol. 282: G702-G710.
3. Kato, Y., et al. 2004. Screening of the interaction between xenobiotic transporters and PDZ proteins. Pharm. Res. 21: 1886-1894.
4. Takagi, M., et al. 2004. Enhancement of the inhibitory activity of Oatp antisense oligonucleo-tides by incorporation of 2'-O,4'-C-ethylene-bridged nucleic acids (ENA) without a loss of subtype selectivity. Biochemistry 43: 4501-4510.
5. Funakoshi, S., et al. 2005. Role of organic anion transporting polypeptide and β-methyldigoxin in rats. J. Pharm. Sci. 94: 1196-1203.
6. Nakao, N., et al. 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: SLCO1C1 (human) mapping to 12p12.2.

SOURCE

OATP-F (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of OATP-F of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-51350 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

OATP-F (N-18) is recommended for detection of OATP-F of human and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

OATP-F (N-18) is also recommended for detection of OATP-F in additional species, including porcine.

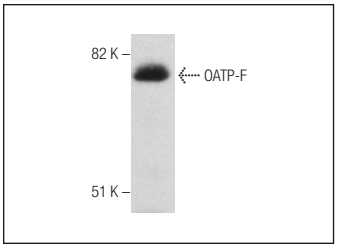
Suitable for use as control antibody for OATP-F siRNA (h): sc-106823, OATP-F shRNA Plasmid (h): sc-106823-SH and OATP-F shRNA (h) Lentiviral Particles: sc-106823-V.

Molecular Weight of OATP-F: 79 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



OATP-F (N-18): sc-51350. Western blot analysis of OATP-F expression in rat brain tissue extract.

SELECT PRODUCT CITATIONS

1. Kleberg, K., et al. 2012. Transporter function and cyclic AMP turnover in normal colonic mucosa from patients with and without colorectal neoplasia. BMC Gastroenterol. 12: 78.

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.