OATP-B (H-189): sc-135099



Die America Countries

BACKGROUND

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-A and OATP-C are both pravastatin transporters, suggesting that they are responsible for the hepatic uptake of the liver-specific hydroxymethylglutaryl-CoA reductase inhibitor in mouse, rat and human. OATP-A is expressed in liver and kidney and helps mediate sodium-independent uptake of the anionic steroid conjugates dehydroepiandrosterone sulfate, estradiol-17-glucuronide and prostaglandin. OATP-C is exclusively expressed in liver and is localized to the basolateral hepatocyte membrane. OATP-B, also known as Slco2b1 or Slc21a9, mediates the NA+ independent transport of organic anions such as taurocholate, leukotriene C4, thromboxane B2 and iloprost during the absorption of bile acids in the liver.

REFERENCES

- 1. Nagase, T., et al. 1999. Prediction of the coding sequences of unidentified human genes. XII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 5: 355-364.
- St-Pierre, M.V., et al. 2002. Characterization of an organic anion transporting polypeptide (OATP-B) in human placenta. J. Clin. Endocrinol. Metab. 87: 1856-1863.
- 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.
- 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.
- Takagi, M., et al. 2004. Enhancement of the inhibitory activity of Oatp antisense oligonucleotides by incorporation of 2'-0,4'-C-ethylene-bridged nucleic acids (ENA) without a loss of subtype selectivity. Biochemistry 43: 4501-4510.
- Niemi, M., et al. 2004. High plasma pravastatin concentrations are associated with single nucleotide polymorphisms and haplotypes of organic anion transporting polypeptide-C (OATP-C, SLC01B1). Pharmacogenetics 14: 429-440.
- Satoh, H., et al. 2005. Citrus juices inhibit the function of human organic anion transporting polypeptide OATP-B. Drug Metab. Dispos. 33: 518-523.
- 8. Kopplow, K., et al. 2005. Human hepatobiliary transport of organic anions analyzed by quadruple-transfected cells. Mol. Pharmacol. 68: 1031-1038.
- Fuchikami, H., et al. 2006. Effects of herbal extracts on the function of human organic anion transporting polypeptide OATP-B. Drug Metab. Dispos. 34: 577-582.

CHROMOSOMAL LOCATION

Genetic locus: SLCO2B1 (human) mapping to 11q13.4; Slco2b1 (mouse) mapping to 7 E1.

SOURCE

OATP-B (H-189) is a rabbit polyclonal antibody raised against amino acids 521-709 mapping at the C-terminus of OATP-B of human origin.

PRODUCT

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

APPLICATIONS

OATP-B (H-189) is recommended for detection of OATP-B of human and, to a lesser extent, mouse and rat 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-B siRNA (h): sc-62711, OATP-B siRNA (m): sc-62712, OATP-B shRNA Plasmid (h): sc-62711-SH, OATP-B shRNA Plasmid (m): sc-62712-SH, OATP-B shRNA (h) Lentiviral Particles: sc-62711-V and OATP-B shRNA (m) Lentiviral Particles: sc-62712-V.

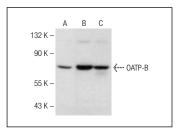
Molecular Weight of OATP-B: 85 kDa.

Positive Controls: JAR cell lysate: sc-2276, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

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-B (H-189): sc-135099. Western blot analysis of OATP-B expression in JAR (**A**), HeLa (**B**) and Hep G2 (**C**) whole cell lysates.

STORAGE

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

RESEARCH USE

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