**BACKGROUND**

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. Oatp4, also known as Slco1b2 (solute carrier organic anion transporter family member 1B2), Slc21a10 (solute carrier family 21 member 10) or LST-1 (liver-specific organic anion transporter 1), is a 689 amino acid member of the organic anion transporter protein family. As a multi-pass membrane protein, Oatp4 mediates the Na+ transport of bromosulfophthalein, taurocholate and other organic anions. Oatp4 is also thought to transport steroid conjugates, such as 17β-glucuronosylestradiol, dehydroepiandrosterone sulfate, estrone-3-sulfate and prostaglandin E2. Oatp4 is liver-specific and expressed as three isoforms produced by alternative splicing.

**CHROMOSOMAL LOCATION**

Genetic locus: Slco1b3 (mouse) mapping to 6 G2.

**SOURCE**

Oatp4 (D-12) is a mouse monoclonal antibody raised against amino acids 571-652 mapping at the C-terminus of Oatp4 of rat origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Oatp4 (D-12) is available conjugated to agarose (sc-376904 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376904 HRP), 200 µg/ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-376904 PE), fluorescein (sc-376904 FITC), Alexa Fluor® 488 (sc-376904 AF488), Alexa Fluor® 546 (sc-376904 AF546), Alexa Fluor® 594 (sc-376904 AF594) or Alexa Fluor® 647 (sc-376904 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-376904 AF680) or Alexa Fluor® 790 (sc-376904 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**STORAGE**

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

**APPLICATIONS**

Oatp4 (D-12) is recommended for detection of Oatp4 isoforms 1, 2 and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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). Suitable for use as control antibody for Oatp4 siRNA (m): sc-61252, Oatp4 shRNA Plasmid (m): sc-61252-SH and Oatp4 shRNA (m) Lentiviral Particles: sc-61252-V.

Molecular Weight (predicted) of Oatp4: 77 kDa.

Molecular Weight (observed) of Oatp4: 98-107 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, rat liver extract: sc-2395 or c4 whole cell lysate: sc-364186.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

![Western blot analysis of Oatp4 expression in Hep G2 (A), PC-3 (B) and c4 (C) whole cell lysates.](image1)

Oatp4 (D-12): sc-376904. Western blot analysis of Oatp4 expression in rat liver (A) and rat heart (B) tissue extracts. Please note lack of reactivity with rat heart in lane B.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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