# OATP-D (F-16): sc-66564



The Power to Question

## **BACKGROUND**

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-D (organic anion transporter D), also known as SLC01B3 (solute carrier organic anion transporter family member 1B3), SLC21A11 (solute carrier family 21 member 11) or PGE1 transporter, is a 710 amino acid member of the organic anion transporter protein family. As a multi-pass membrane protein, OATP-D mediates the Na<sup>+</sup>-independent transport of vasopressin, prostaglandins (PG) E1 and E2, thyroxine (T4), deltorphin II and other organic anions, but not estrone-3-sulfate, DPDPE, taurocholate, DHEAS or digoxin. OATP-D is ubiquitously expressed with highest levels present in leukocytes and spleen. OATP-D is expressed as four isoforms produced by alternative splicing events.

# **REFERENCES**

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- 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, SLCO1B1). Pharmacogenetics 14: 429-440.

## CHROMOSOMAL LOCATION

Genetic locus: SLCO3A1 (human) mapping to 15q26.1; Slco3a1 (mouse) mapping to 7 D2.

## SOURCE

OATP-D (F-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of OATP-D of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66564 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

OATP-D (F-16) is recommended for detection of OATP-D of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-D (F-16) is also recommended for detection of OATP-D in additional species, including canine, bovine and avian.

Suitable for use as control antibody for OATP-D siRNA (h): sc-62713, OATP-D siRNA (m): sc-62714, OATP-D shRNA Plasmid (h): sc-62713-SH, OATP-D shRNA Plasmid (m): sc-62714-SH, OATP-D shRNA (h) Lentiviral Particles: sc-62713-V and OATP-D shRNA (m) Lentiviral Particles: sc-62714-V.

Molecular Weight of OATP3A1-v1 isoform: 77 kDa.

Molecular Weight of OATP3A1-v2 isoform: 74 kDa.

Molecular Weight of OATP3A1-v3 isoform: 62 kDa.

Molecular Weight of OATP3A1-v4 isoform: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SW480 cell lysate: sc-2219 or rat testis extract: sc-2400.

## **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) 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.

# **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.

#### **PROTOCOLS**

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

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**