SANTA CRUZ BIOTECHNOLOGY, INC.

OATP-D (L-16): sc-66566

SANTA CRUZ BIOTECHNOLOGY

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 SLCO1B3 (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^+-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

1. Hsiang, B., et al. 1999. A novel human hepatic organic anion transporting poly-peptide (OATP2). J. Biol. Chem. 274: 37161-37168.
2. Konig, J., et al. 2000. Localization and genomic organization of a new hepatocellular organic anion transporting polypeptide. J. Biol. Chem. 275: 23161-23168.
3. 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.
4. 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.
5. Patel, P., et al. 2002. Semi quantitative expression analysis of Mdr-3, FIC1, BSEP, Oatp-A, Oatp-C, Oatp-D, Oatp-E and NTCP gene transcripts in 1st and 3rd trimester human placenta. Placenta 24: 39-44.

CHROMOSOMAL LOCATION

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

SOURCE

OATP-D (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of OATP-D 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-66566 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.

RESEARCH USE

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

APPLICATIONS

OATP-D (L-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), 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-D (L-16) is also recommended for detection of OATP-D in additional species, including equine, canine, bovine, porcine 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.

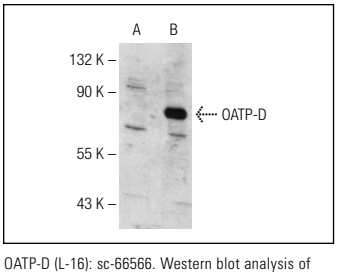
Molecular Weight of OATP3A1-v4 isoform: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Oatp-D (h): 293T Lysate: sc-159326 or rat testis extract: sc-2400.

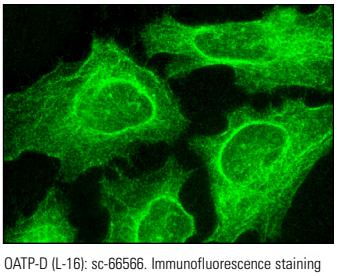
RECOMMENDED SECONDARY REAGENTS

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) 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-D (L-16): sc-66566. Western blot analysis of OATP-D expression in non-transfected: sc-117752 (**A**) and human OATP-D transfected: sc-159326 (**B**) 293T whole cell lysates.



OATP-D (L-16): sc-66566. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

PROTOCOLS

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