

OATP-E (M-145): sc-134867

BACKGROUND

The organic anion transporter family of proteins mediate hepatic uptake of cardiac glycosides. OATP-E (organic anion transporter E), also known as SLC04A1 (solute carrier organic anion transporter family member 4A1), SLC21A12 (solute carrier family 21 member 12) or POAT, is a 722 amino acid member of the organic anion transporter protein family. As a multi-pass membrane protein, OATP-E mediates the Na⁺-independent transport of estrone-3-sulfate, taurocholate and the thyroid hormones T3 (triiodo-L-thyronine), T4 (thyroxine) and rT3. OATP-E is ubiquitously expressed except in leukocytes and spleen. OATP-E is expressed as four isoforms produced by alternative splicing events.

REFERENCES

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2. Fujiwara, K., et al. 2001. Identification of thyroid hormone transporters in humans: different molecules are involved in a tissue-specific manner. *Endocrinology* 142: 2005-2012.
3. Ito, A., et al. 2003. Distribution of rat organic anion transporting polypeptide-E (OATP-E) in the rat eye. *Invest. Ophthalmol. Vis. Sci.* 44: 4877-4884.
4. Sato, K., et al. 2003. Expression of organic anion transporting polypeptide E (OATP-E) in human placenta. *Placenta* 24: 144-148.
5. Nozawa, T., et al. 2004. Involvement of estrone-3-sulfate transporters in proliferation of hormone-dependent breast cancer cells. *J. Pharmacol. Exp. Ther.* 311: 1032-1037.
6. Wang, P., et al. 2005. Interaction with PDZK1 is required for expression of organic anion transporting protein 1A1 on the hepatocyte surface. *J. Biol. Chem.* 280: 30143-30149.
7. Sai, Y., et al. 2006. Predominant contribution of organic anion transporting polypeptide OATP-B (OATP2B1) to apical uptake of estrone-3-sulfate by human intestinal Caco-2 cells. *Drug Metab. Dispos.* 34: 1423-1431.

CHROMOSOMAL LOCATION

Genetic locus: Slco4a1 (mouse) mapping to 2 H4.

SOURCE

OATP-E (M-145) is a rabbit polyclonal antibody raised against amino acids 1-145 mapping at the N-terminus of OATP-E of mouse origin.

PRODUCT

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

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-E (M-145) is recommended for detection of all isoforms of OATP-E of mouse and 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).

Suitable for use as control antibody for OATP-E siRNA (m): sc-61248, OATP-E shRNA Plasmid (m): sc-61248-SH and OATP-E shRNA (m) Lentiviral Particles: sc-61248-V.

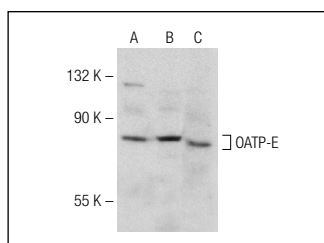
Molecular Weight of OATP-E: 68 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or RAW 264.7 whole cell lysate: sc-2211.

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-E (M-145): sc-134867. Western blot analysis of OATP-E expression in NIH/3T3 (A), RPE-J (B) and RAW 264.7 (C) whole cell lysates.

PROTOCOLS

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