SANTA CRUZ BIOTECHNOLOGY, INC.

# OATP8 (C-14): sc-47273

## BACKGROUND

The organic anion transporter family of proteins includes OATP1, OATP2, OATP3, OATP4, OATP-E, OATP-F and OATP8. OATP1 and OATP2 mediate hepatic uptake of cardiac glycosides. OATP1 and OATP2 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. The integral multi-pass membrane proteins OATP3, OATP4, OATP-E, OATP-F and OATP8 (also designated SLC21A7, SLC21A10, SLCO4A1 and SLCO1B3, respectively) mediate the $NA^+$-independent transport of organic anions, such as taurocholate, leukotriene C4, thyroid hormones T3 and T4, dehydroepiandrosterone sulfate (DHEAS) and methotrexate, during the absorption of bile acids in the liver. The expression of the OATP proteins is highest in liver tissue.

## REFERENCES


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2. Abe, T., Unno, M., Onogawa, T., Tokui, T., Kondo, T.N., Nakagomi, R., Adachi, H., Fujiwara, K., Okabe, M., Suzuki, T., Nunoki, K., Sato, E., Kakyo, M., Nishio, T., Sugita, J., Asano, N., Tanemoto, M., Seki, M., Date, F., Ono, K., et al. 2001. LST-2, a human liver-specific organi sensitivity in gastrointestinal cancers. Gastroenterology 120: 1689-1699.
3. Meier-Abt, F., Faulstich, H. and Hagenbuch, B. 2004. Identification of phalloidin uptake systems of rat and human liver. Biochim. Biophys. Acta. 1664: 64-69.
4. Letschert, K., Keppler, D. and Konig, J. 2004. Mutations in the SLCO1B3 gene affecting the substrate specificity of the hepatocellular uptake transporter OATP1B3 (OATP8). Pharmacogenetics 14: 441-452.
5. Letschert, K., et al. 2005. Vectorial transport of the peptide CCK-8 by double-transfected MDCKII cells stably expressing the organic anion transporter OATP1B3 (OATP8) and the export pump ABCC2. J. Pharmacol. Exp. Ther. 313: 549-556.


## CHROMOSOMAL LOCATION

Genetic locus: SLCO1B3 (human) mapping to 12p12.

## SOURCE

OATP8 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of OATP8 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-47273 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.

## APPLICATIONS

OATP8 (C-14) is recommended for detection of OATP8 of 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).

Suitable for use as control antibody for OATP8 siRNA (h): sc-61253.

Molecular Weight of OATP8: 120 kDa.

## 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.

## 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.