

OAT6 (C-14): sc-168815

BACKGROUND

The organic anion transporter (OAT) family of proteins is comprised of OAT1 (SLC22A6), OAT2 (SLC22A7), OAT3 (SLC22A8), OAT4 (SLC22A11), OAT5 (SLC22A19), OAT6 (SLC22A20) and URAT1 (SLC22A12). The OAT family mediates the absorption, distribution and excretion of endogenous metabolites, such as urate and acidic neurotransmitter metabolites, as well as a multitude of exogenous compounds, including antibiotics, antihypertensives, antivirals, anti-inflammatory drugs, diuretics and uricosurics. Members of the OAT family are mainly located in kidney with some specific members also being expressed in liver, placenta and brain. Disruption of OAT function in any of these organs may lead to renal, hepatic, neurological and fetal toxicity and diseases. OAT6 (organic anion transporter 6) is a 555 amino acid multi-pass membrane protein that belongs to the major facilitator superfamily and organic cation transporter family. Existing as two alternatively spliced isoforms, OAT6 mediates the uptake of estrone sulfate. OAT6 is inhibited by probenecid, propionate, 2-methylbutyrate, 3-methylbutyrate, benzoate, heptanoate and 2-ethylhexanoate and may act as an odorant transporter.

REFERENCES

- Monte, J.C., et al. 2004. Identification of a novel murine organic anion transporter family member, OAT6, expressed in olfactory mucosa. *Biochem. Biophys. Res. Commun.* 323: 429-436.
- Schnabolk, G.W., et al. 2006. Transport of estrone sulfate by the novel organic anion transporter Oat6 (Slc22a20). *Am. J. Physiol. Renal Physiol.* 291: F314-F321.
- Kaler, G., et al. 2006. Olfactory mucosa-expressed organic anion transporter, Oat6, manifests high affinity interactions with odorant organic anions. *Biochem. Biophys. Res. Commun.* 351: 872-876.
- Jacobsson, J.A., et al. 2007. Identification of six putative human transporters with structural similarity to the drug transporter SLC22 family. *Genomics* 90: 595-609.

CHROMOSOMAL LOCATION

Genetic locus: SLC22A20 (human) mapping to 11q13.1; Slc22a20 (mouse) mapping to 19 A.

SOURCE

OAT6 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of OAT6 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-168815 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

OAT6 (C-14) is recommended for detection of OAT6 of mouse 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); non cross-reactive with other OAT family members.

Suitable for use as control antibody for OAT6 siRNA (h): sc-96860, OAT6 siRNA (m): sc-150153, OAT6 shRNA Plasmid (h): sc-96860-SH, OAT6 shRNA Plasmid (m): sc-150153-SH, OAT6 shRNA (h) Lentiviral Particles: sc-96860-V and OAT6 shRNA (m) Lentiviral Particles: sc-150153-V.

Molecular Weight of OAT6 isoforms 1/2: 60/37 kDa.

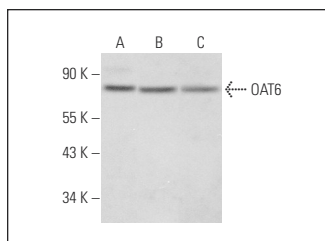
Molecular Weight (observed) of OAT6: 80 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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



OAT6 (C-14): sc-168815. Western blot analysis of OAT6 expression in HeLa (A), Jurkat (B) and K-562 (C) whole cell lysates.

RESEARCH USE

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



Try **OAT6 (D-5): sc-514966**, our highly recommended monoclonal alternative to OAT6 (C-14).