

# SLC22A11 (N-17): sc-162195

## BACKGROUND

SLC22A11 (solute carrier family 22 (organic anion/urate transporter), member 11), also known as OAT4 (organic anion transporter 4), is a 550 amino acid multi-pass membrane protein that belongs to the organic cation transporter subfamily of major facilitator proteins. Expressed in kidney and placenta, SLC22A11 functions to mediate the saturable uptake of dehydroepiandrosterone sulfate, estrone sulfate and other related compounds, possibly playing a role in preventing harmful organic anions from reaching the developing fetus. SLC22A11 exists as multiple alternatively spliced isoforms and is subject to post-translational N-glycosylation. The gene encoding SLC22A11 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

## REFERENCES

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2. Enomoto, A., et al. 2002. Molecular identification of a renal urate anion exchanger that regulates blood urate levels. *Nature* 417: 447-452.
3. Ekaratanawong, S., et al. 2004. Human organic anion transporter 4 is a renal apical organic anion/dicarboxylate exchanger in the proximal tubules. *J. Pharmacol. Sci.* 94: 297-304.
4. Zhou, F., et al. 2004. The role of glycine residues in the function of human organic anion transporter 4. *Mol. Pharmacol.* 65: 1141-1147.
5. Zhou, F., et al. 2005. The role of N-linked glycosylation in protein folding, membrane targeting, and substrate binding of human organic anion transporter hOAT4. *Mol. Pharmacol.* 67: 868-876.
6. Hagos, Y., et al. 2007. Human renal organic anion transporter 4 operates as an asymmetric urate transporter. *J. Am. Soc. Nephrol.* 18: 430-439.
7. Lee, W.K., et al. 2008. Co-localization and interaction of human organic anion transporter 4 with caveolin-1 in primary cultured human placental trophoblasts. *Exp. Mol. Med.* 40: 505-513.
8. Lee, W.K., et al. 2008. Identification and characterization of single nucleotide polymorphisms of SLC22A11 (hOAT4) in Korean women osteoporosis patients. *Mol. Cells* 25: 265-271.
9. Zhou, F., et al. 2008. Comparison of the interaction of human organic anion transporter hOAT4 with PDZ proteins between kidney cells and placental cells. *Pharm. Res.* 25: 475-480.

## CHROMOSOMAL LOCATION

Genetic locus: SLC22A11 (human) mapping to 11q13.1.

## SOURCE

SLC22A11 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of SLC22A11 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-162195 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SLC22A11 (N-17) is recommended for detection of SLC22A11 of 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 SLC22A family members.

Suitable for use as control antibody for SLC22A11 siRNA (h): sc-97017, SLC22A11 shRNA Plasmid (h): sc-97017-SH and SLC22A11 shRNA (h) Lentiviral Particles: sc-97017-V.

Molecular Weight of SLC22A11 isoforms: 60/48 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.