

OCTL2 (N-15): sc-100072

BACKGROUND

Organic cations, such as quaternary ammoniums, are a group of compounds that carry a positive charge. Organic cation transport is essential for drug absorption, targeting and deposition. OCTL2, also known as SLC22A14 (solute carrier family 22 member 14) or ORCTL4 (organic cation transporter-like 4), is a 594 amino acid multi-pass membrane protein belonging to the major facilitator superfamily and organic cation transporter family. OCTL2 contains 11 transmembrane domains as well as motifs characteristic of membrane transporter proteins. Ubiquitously expressed, OCTL2 shares 32-35% protein sequence identity with OCTL1, OCT1 and a group of eukaryotic and prokaryotic sugar-transporting proteins. The gene encoding OCTL2 maps to human chromosome 3p22.2.

REFERENCES

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2. Nishiwaki, T., et al. 1998. Molecular cloning, mapping, and characterization of two novel human genes, ORCTL3 and ORCTL4, bearing homology to organic-cation transporters. *Cytogenet. Cell Genet.* 83: 251-255.
3. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604048. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/604048>
4. Daigo, Y., et al. 1999. Characterization of a 1200-kb genomic segment of chromosome 3p22-p21.3. *DNA Res.* 6: 37-44.
5. Wieland, A., et al. 2000. Analysis of the gene structure of the human (SLC22A3) and murine (Slc22a3) extraneuronal monoamine transporter. *J. Neural Transm.* 107: 1149-1157.
6. Yamada, H., et al. 2005. Effect of splice-site polymorphisms of the TMPRSS4, NPHP4 and ORCTL4 genes on their mRNA expression. *J. Genet.* 84: 131-136.
7. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.

CHROMOSOMAL LOCATION

Genetic locus: SLC22A14 (human) mapping to 3p22.2.

SOURCE

OCTL2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of OCTL2 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-100072 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OCTL2 (N-15) is recommended for detection of OCTL2 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 family member OCTL1.

Suitable for use as control antibody for OCTL2 siRNA (h): sc-78076, OCTL2 shRNA Plasmid (h): sc-78076-SH and OCTL2 shRNA (h) Lentiviral Particles: sc-78076-V.

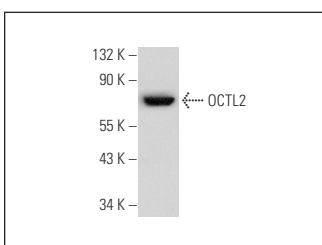
Molecular Weight of OCTL2: 67 kDa.

Positive Controls: Daudi cell lysate: sc-2415.

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



OCTL2 (N-15): sc-100072. Western blot analysis of OCTL2 expression in Daudi whole cell lysate.

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 or our catalog for detailed protocols and support products.