

OCTL1 (S-14): sc-81882

BACKGROUND

Organic cations, such as quaternary ammoniums, are a group of compounds that carry a positive charge. OCTL1 (organic cation transporter-like 3), also known as SLC22A13, OCTL3 or ORCTL3, belongs to the major facilitator superfamily which includes the organic cation transport family. OCTL1 is a conserved 551 amino acid transmembrane protein that has a fundamental role in mammalian systems. OCTL1 functions in the uptake of catecholamines and neurotoxic organic cations. Organic cation transport is essential for drug absorption, targeting and deposition. OCTL1 is highly expressed in glial cells and kidney tissue, and is ubiquitously expressed at low levels in all other tissues.

REFERENCES

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2. 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.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604047. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
5. Haag, C., et al. 2004. The localisation of the extraneuronal monoamine transporter (EMT) in rat brain. *J. Neurochem.* 88: 291-297.
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.
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CHROMOSOMAL LOCATION

Genetic locus: SLC22A13 (human) mapping to 3p22.2.

SOURCE

OCTL1 (S-14) is a mouse monoclonal antibody raised against recombinant OCTL1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain 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

OCTL1 (S-14) is recommended for detection of OCTL1 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OCTL1 siRNA (h): sc-78381, OCTL1 shRNA Plasmid (h): sc-78381-SH and OCTL1 shRNA (h) Lentiviral Particles: sc-78381-V.

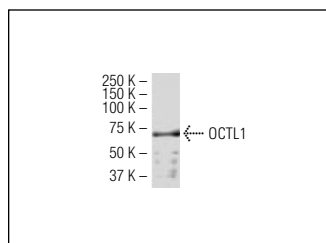
Molecular Weight of OCTL1: 61 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



OCTL1 (S-14): sc-81882. Western blot analysis of OCTL1 expression in A-431 whole cell lysate.

PROTOCOLS

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