

OCTL1 (K-13): sc-103089

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

1. Ikegawa, S., et al. Y. 1999. Cloning and characterization of a novel gene (C8orf2), a human representative of a novel gene family with homology to *C. elegans* C42.C1.9. *Cytogenet. Cell Genet.* 85: 227-231.
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.

CHROMOSOMAL LOCATION

Genetic locus: SLC22A13 (human) mapping to 3p22.2; Slc22a13 (mouse) mapping to 9 F3.

SOURCE

OCTL1 (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of OCTL1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103089 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTL1 (K-13) is recommended for detection of OCTL1 of mouse, rat 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).

OCTL1 (K-13) is also recommended for detection of OCTL1 in additional species, including canine and porcine.

Suitable for use as control antibody for OCTL1 siRNA (h): sc-78381, OCTL1 siRNA (m): sc-150173, OCTL1 shRNA Plasmid (h): sc-78381-SH, OCTL1 shRNA Plasmid (m): sc-150173-SH, OCTL1 shRNA (h) Lentiviral Particles: sc-78381-V and OCTL1 shRNA (m) Lentiviral Particles: sc-150173-V.

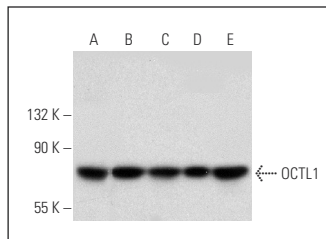
Molecular Weight of OCTL1: 61 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, KNRK whole cell lysate: sc-2214 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



OCTL1 (K-13): sc-103089. Western blot analysis of OCTL1 expression in A-431 (A), KNRK (B), HL-60 (C), Hep G2 (D) and HeLa (E) whole cell lysates.

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.



Try **OCTL1 (B-5): sc-390931** or **OCTL1 (A-5): sc-398622**, our highly recommended monoclonal alternatives to OCTL1 (K-13).