

ORCTL2 (K-13): sc-109741

BACKGROUND

ORCTL2 (organic cation transporter-like protein 2), also known as HET, ITM, BWR1A, IMPT1, TSSC5, BWSCR1A, SLC22A1L, p45-BWR1A or SLC22A18, is a 424 amino acid multi-pass membrane protein that localizes at the apical membrane surface of renal proximal tubules. ORCTL2 is expressed at high levels in the kidney, liver, colon and in fetal renal proximal tubules and present at lower levels in heart, brain and lung. Belonging to the major facilitator superfamily, ORCTL2 may act as a transporter of organic cations based on a proton efflux antiport mechanism and may also play a role in the transport of chloroquine and quinidine-related compounds in kidney. Defects in ORCTL2 are associated with breast and lung cancer and are the cause of rhabdomyosarcoma type 1, a malignant tumor derived from striated muscle.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC22A18 (human) mapping to 11p15.4; Slc22a18 (mouse) mapping to 7 F5.

SOURCE

ORCTL2 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ORCTL2 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-109741 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ORCTL2 (K-13) is recommended for detection of ORCTL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ORCTL2S.

ORCTL2 (K-13) is also recommended for detection of ORCTL2 in additional species, including equine and canine.

Suitable for use as control antibody for ORCTL2 siRNA (h): sc-96398, ORCTL2 siRNA (m): sc-151311, ORCTL2 shRNA Plasmid (h): sc-96398-SH, ORCTL2 shRNA Plasmid (m): sc-151311-SH, ORCTL2 shRNA (h) Lentiviral Particles: sc-96398-V and ORCTL2 shRNA (m) Lentiviral Particles: sc-151311-V.

Molecular Weight of ORCTL2: 30 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) 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 or our catalog for detailed protocols and support products.