



UT-A (S-15): sc-85202

BACKGROUND

Water balance is tightly regulated in the kidneys. Through urinary concentration mechanisms, the kidney prevents the unnecessary excretion of water, thereby protecting the body from dehydration. UT-A (Urea transporter, kidney), also known as SLC14A2 and HUT2, is a 920 amino acid multi-pass membrane protein that functions as a specialized low-affinity vasopressin-regulated urea-transporter. Expressed in the inner medulla of the kidney and localized to the apical membrane, UT-A mediates rapid transepithelial urea transport across the inner medullary collecting duct. There are two isoforms of UT-A that are produced as a result of alternative splicing events. Isoform 1 interacts with Snapin, a SNARE-associated protein, which is thought to help in its recruitment to the plasma membrane. Interestingly, isoform 1 expression is induced by low protein in the diet, whereas isoform 2 expression is induced by dehydration.

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CHROMOSOMAL LOCATION

Genetic locus: SLC14A2 (human) mapping to 18q12.3.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

UT-A (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UT-A 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-85202 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UT-A (S-15) is recommended for detection of UT-A of 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).

Suitable for use as control antibody for UT-A siRNA (h): sc-76876, UT-A shRNA Plasmid (h): sc-76876-SH and UT-A shRNA (h) Lentiviral Particles: sc-76876-V.

Molecular Weight of UT-A: 100 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.

PROTOCOLS

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