

RhCG (E-14): sc-163288

BACKGROUND

RhCG (Rhesus blood group family type C glycoprotein), also known as RHGK (Rh glycoprotein kidney), PDRC2 (tumor-related protein DRC2) or SLC42A3, is a multi-pass membrane protein with three potential N-glycosylation sites that belongs to the Rh subfamily of the ammonium transporter family. Expressed in a wide variety of tissues with predominant expression in adult and fetal kidney, RhCG localizes to the apical and/or basolateral cell membrane (depending on the species) and is believed to function as a non-erythroid, bidirectional, electroneutral ammonium transporter. Specifically, RhCG is found throughout the kidney in sites such as the CNT (connecting segment), the DCT (distal convoluted tubule), the collecting duct and the ICT (initial collecting tubule), that are major contributors to renal ammonia secretion. This suggests that RhCG plays an important role in renal ammonia metabolism.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rhcg (mouse) mapping to 7 D3.

SOURCE

RhCG (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of RhCG of mouse origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-163288 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RhCG (E-14) is recommended for detection of RhCG of mouse and rat 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 RhCG siRNA (m): sc-152850, RhCG shRNA Plasmid (m): sc-152850-SH and RhCG shRNA (m) Lentiviral Particles: sc-152850-V.

Molecular Weight of RhCG: 58 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

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.

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.