

SGLT-5 (P-13): sc-136853

BACKGROUND

Glucose, an essential substrate that is necessary for proper metabolism, is a polar molecule that is transported through biological membranes via specific transport proteins. The family of Na⁺-dependent glucose cotransporters (SGLT) mediate an active, sodium-linked transport process against an electrochemical gradient. The SGLT family of proteins are essential for absorption of dietary D-glucose and D-galactose from the intestinal lumen and in the reabsorption of D-glucose from the glomerular filtrate in kidney. SGLT-5, also known as SLC5A10 (solute carrier family 5 (sodium/glucose cotransporter), member 10), is a 596 amino acid multi-pass membrane protein belonging to the sodium: solute symporter (SSF) family that may function as a glucose transporter.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC5A10 (human) mapping to 17p11.2.

SOURCE

SGLT-5 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of SGLT-5 of human 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-136853 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SGLT-5 (P-13) is recommended for detection of SGLT-5 isoforms 1-4 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); non cross-reactive with other SGLT family members.

Suitable for use as control antibody for SGLT-5 siRNA (h): sc-93861, SGLT-5 shRNA Plasmid (h): sc-93861-SH and SGLT-5 shRNA (h) Lentiviral Particles: sc-93861-V.

Molecular Weight of SGLT-5: 64 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.

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.