

SGLT-4 (R-68): sc-135407

BACKGROUND

Glucose is the main source of energy for mammalian cells and its entry is mediated by various transporters. This process involves seven facilitative (GLUT-1 to -7) and multiple members of the SGLT family. SGLT family members use the electrochemical gradient of two sodium ions to transport one glucose molecule. The mRNA of SGLTs increase steadily from the fetal period to maturity along with an increase in their functional activity. SGLT-4 (sodium/glucose cotransporter 4), also known as SLC5A9 (solute carrier family 5 member 9), is a 681 amino acid multi-pass membrane protein that participates in the sodium-dependent transport of D-fructose, D-mannose and D-glucose. A member of the sodium:solute symporter (SSF) family, SGLT-4 is found in small intestine and kidney.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Slc5a9 (rat) mapping to 5q35.

SOURCE

SGLT-4 (R-68) is a rabbit polyclonal antibody raised against amino acids 1-68 mapping at the N-terminus of SGLT-4 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SGLT-4 (R-68) is recommended for detection of SGLT-4 of rat 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).

Molecular Weight of SGLT-4: 74 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214.

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.

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.