

# SGLT-5 (D-12): sc-136852

## 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<sup>+</sup>-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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4. Zhao, F.Q., et al. 2005. Cloning and expression of bovine sodium/glucose cotransporters. *J. Dairy Sci.* 88: 182-194.
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## CHROMOSOMAL LOCATION

Genetic locus: SLC5A10 (human) mapping to 17p11.2; Slc5a10 (mouse) mapping to 11 B2.

## SOURCE

SGLT-5 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an 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-136852 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SGLT-5 (D-12) is recommended for detection of SGLT-5 isoforms 1-4 of mouse, rat and human 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); non cross-reactive with other SGLT family members.

SGLT-5 (D-12) is also recommended for detection of SGLT-5 isoforms 1-4 in additional species, including equine and porcine.

Suitable for use as control antibody for SGLT-5 siRNA (h): sc-93861, SGLT-5 siRNA (m): sc-153421, SGLT-5 shRNA Plasmid (h): sc-93861-SH, SGLT-5 shRNA Plasmid (m): sc-153421-SH, SGLT-5 shRNA (h) Lentiviral Particles: sc-93861-V and SGLT-5 shRNA (m) Lentiviral Particles: sc-153421-V.

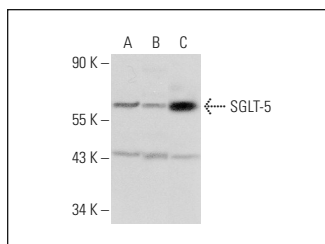
Molecular Weight of SGLT-5: 64 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, K-562 whole cell lysate: sc-2203 or Hep G2 cell lysate: sc-2227.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



SGLT-5 (D-12): sc-136852. Western blot analysis of SGLT-5 expression in NTERA-2 cl.D1 (A), K-562 (B) and Hep G2 (C) whole cell lysates.

## RESEARCH USE

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