**SGLT-2 (D-6): sc-393350**

**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 two concentrative glucose transporters (SGLT-1, SGLT-2) and a sensor (SGLT-3). The 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-1 is responsible for the uptake of the dietary sugars glucose and galactose from the intestinal lumen, while SGLT-3 is involved in the detection of luminal glucose only. Both the sodium glucose co-transporters SGLT-1 and SGLT-2 are expressed in kidneys. Mutations in the gene encoding SGLT-2 result in familial renal glucosuria (FGU), an isolated disorder of proximal tubular glucose transport, characterized by abnormal urinary glucose excretion in the presence of normal blood glucose levels.

**CHROMOSOMAL LOCATION**

Genetic locus: SLC5A2 (human) mapping to 16p11.2; Slc5a2 (mouse) mapping to 7 F3.

**SOURCE**

SGLT-2 (D-6) is a mouse monoclonal antibody raised against amino acids 220-270 mapping within an internal region of SGLT-2 of human origin.

**PRODUCT**

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

SGLT-2 (D-6) is available conjugated to agarose (sc-393350 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393350 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-393350 PE), fluorescein (sc-393350 FITC), Alexa Fluor® 488 (sc-393350 AF488), Alexa Fluor® 546 (sc-393350 AF546), Alexa Fluor® 594 (sc-393350 AF594) or Alexa Fluor® 647 (sc-393350 AF647), 200 µg/ml, for WB (RGB), IF, HCP and FCM; and to either Alexa Fluor® 680 (sc-393350 AF680) or Alexa Fluor® 790 (sc-393350 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

SGLT-2 (D-6) is recommended for detection of SGLT-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunochemistry (including paraffin-embedded sections) (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-2: 70-77 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

**STORAGE**

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

**DATA**

![Image](https://www.scbt.com/)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.