

Glut2 (H-67): sc-9117

BACKGROUND

Glucose is fundamental to the metabolism of mammalian cells. Its passage across cell membranes is mediated by a family of transporters termed glucose transporters or Gluts. Glut1, Glut3 and Glut4 are high-affinity transporters, whereas Glut2 is a low-affinity transporter. In adipose and muscle tissue, Insulin stimulates a rapid and dramatic increase in glucose uptake, which is largely due to the redistribution of the Insulin-inducible glucose transporter Glut4. In response to Insulin, Glut4 is quickly shuttled from an intracellular storage site to the plasma membrane, where it binds glucose. In contrast, the ubiquitously expressed glucose transporter Glut1 is constitutively targeted to the plasma membrane and shows a much less dramatic translocation in response to Insulin. Glut2 expression is seen in pancreatic beta cells, hepatocytes and basolateral membranes of intestinal and epithelial cells, while the highest expression of Glut3 has been found in neuronal tissue.

CHROMOSOMAL LOCATION

Genetic locus: SLC2A2 (human) mapping to 3q26.2; Slc2a2 (mouse) mapping to 3 A3.

SOURCE

Glut2 (H-67) is a rabbit polyclonal antibody raised against amino acids 32-98 of Glut2 of human origin.

PRODUCT

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

APPLICATIONS

Glut2 (H-67) is recommended for detection of Glut2 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), immunohistochemistry (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).

Suitable for use as control antibody for Glut2 siRNA (h): sc-35495, Glut2 siRNA (m): sc-35496, Glut2 shRNA Plasmid (h): sc-35495-SH, Glut2 shRNA Plasmid (m): sc-35496-SH, Glut2 shRNA (h) Lentiviral Particles: sc-35495-V and Glut2 shRNA (m) Lentiviral Particles: sc-35496-V.

Molecular Weight of Glut2: 60-62 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411, T98G cell lysate: sc-2294 or Glut2 (m): 293T Lysate: sc-120518.

STORAGE

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

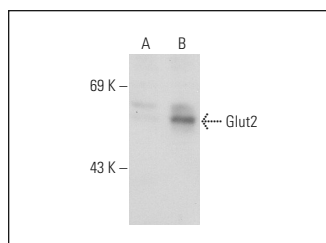
PROTOCOLS

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

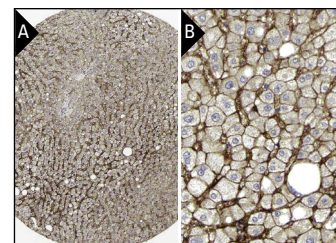
RESEARCH USE

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

DATA



Glut2 (H-67): sc-9117. Western blot analysis of Glut2 expression in non-transfected: sc-117752 (A) and mouse Glut2 transfected: sc-120518 (B) 293T whole cell lysates.



Glut2 (H-67): sc-9117. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing membrane staining of hepatocytes at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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