

Glut6 (H-42): sc-134537

BACKGROUND

The oxidation of glucose functions as the dominant source of metabolic energy for mammals. The plasma membrane is impermeable to glucose, so the cellular uptake of this important nutrient is achieved by facultative hexose transporters (Gluts). Gluts are integral membrane proteins that transport glucose and related hexoses. Glucose binds to a Glut on one side of the membrane which provokes a conformational change causing it to release glucose to the other side. Members of the Glut family may enhance the metabolic activity of tumor cells. Glut6 is 48 kDa, and is part of the third out of three classes of Gluts. Glut6 is mainly expressed in the brain, spleen and peripheral leukocytes. It appears to be regulated by subcellular redistribution, because it is targeted to intracellular compartments by di-leucine motifs, recycling itself in a Dynamin-dependent manner.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC2A6 (human) mapping to 9q34.2; Slc2a6 (mouse) mapping to 2 A3.

SOURCE

Glut6 (H-42) is a rabbit polyclonal antibody raised against amino acids 226-267 mapping within an internal region of Glut6 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

Glut6 (H-42) is recommended for detection of Glut6 of human and, to a lesser extent, mouse and 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).

Suitable for use as control antibody for Glut6 siRNA (h): sc-60699, Glut6 shRNA Plasmid (h): sc-60699-SH and Glut6 shRNA (h) Lentiviral Particles: sc-60699-V.

Molecular Weight of Glut6: 55 kDa.

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.


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Try **Glut6 (B-3): sc-373973**, our highly recommended monoclonal alternative to Glut6 (H-42).