



Glut4 Polyclonal Antibody

Catalog No	YP-Ab-00773
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	SLC2A4
Immunogen	The antiserum was produced against synthesized peptide derived from the N-terminal region of human SLC2A4. AA range:21-70
Specificity	Glut4 Polyclonal Antibody detects endogenous levels of Glut4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300 Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SLC2A4;3G7C9;Glucose transporter GLUT 4;Glucose transporter type 4;insulin-; Glut4;Solute carrier family 2 facilitated glucose transporter member 4;Solute carrier family 2;facilitated glucose transporter member 4;insulin-responsive; GLUT-4
Observed Band	48-50 kD
Calculated Molecular Weight	55 kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Endomembrane system ; Multi-pass membrane protein . Cytoplasm, perinuclear region . Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized (PubMed:8300557). The dileucine internalization motif is critical for intracellular sequestration (PubMed:8300557). Insulin stimulation induces translocation to the cell membrane (By similarity). .
Tissue Specificity	Skeletal and cardiac muscles; brown and white fat.
Function	disease:Defects in SLC2A4 may be a cause of noninsulin-dependent diabetes mellitus (NIDDM) [MIM:125853]. Defects in SLC2A4 may be a cause of certain post-receptor defects in NIDDM. The variant in position Ile-383 is found in a small number of NIDDM patients, but seems not to be found in nondiabetic



subjects.,function:Insulin-regulated facilitative glucose transporter.,
miscellaneous:Insulin-stimulated phosphorylation of TBC1D4 is required for
GLUT4 translocation.,online information:GLUT4 entry,PTM:Sumoylated.,
similarity:Belongs to the major facilitator superfamily. Sugar transporter (TC
2.A.1.1) family. Glucose transporter subfamily.,subcellular location:Localizes
primarily to the perinuclear region, undergoing continued recycling to the plasma
membrane where it is rapidly reinternalized. The dileucine internalization motif is
critical for intracellular sequestration.,subunit:Binds to DAX

Background

This gene is a member of the solute carrier family 2 (facilitated glucose transporter) family and encodes a protein that functions as an insulin-regulated facilitative glucose transporter. In the absence of insulin, this integral membrane protein is sequestered within the cells of muscle and adipose tissue. Within minutes of insulin stimulation, the protein moves to the cell surface and begins to transport glucose across the cell membrane. Mutations in this gene have been associated with noninsulin-dependent diabetes mellitus (NIDDM). [provided by RefSeq, Jul 2008],

matters needing attention

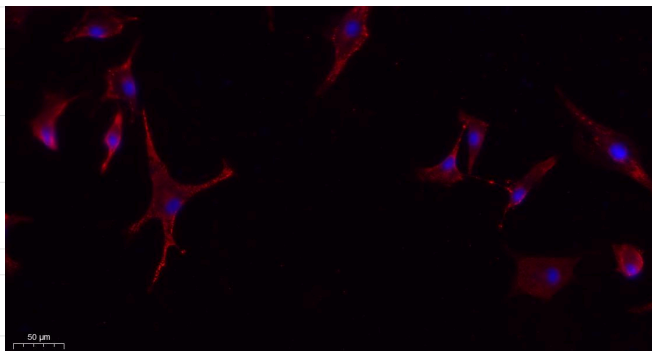
Avoid repeated freezing and thawing!

Usage suggestions

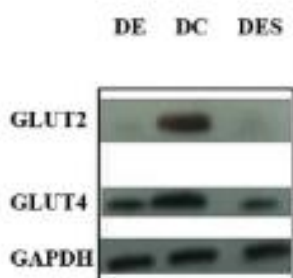
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



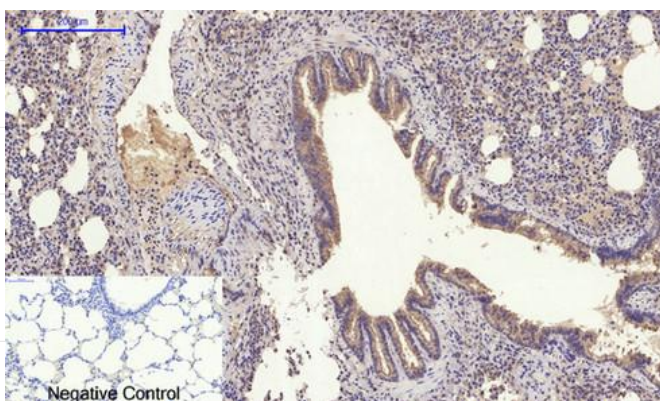
Products Images



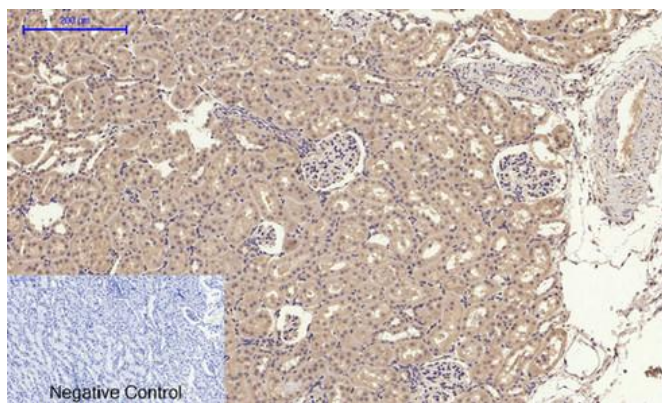
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



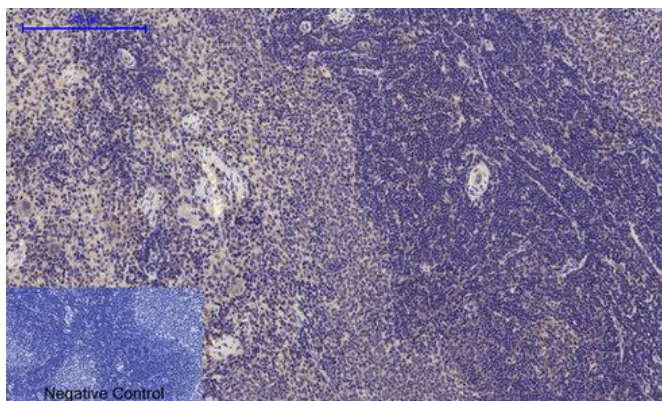
Long, Min-hui, et al. "PM2.5 aggravates diabetes via the systemically activated IL-6-mediated STAT3/SOCS3 pathway in rats' liver." Environmental Pollution 256 (2020): 113342.



Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, GLUT4 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, Glut4 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1, Glut4 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.