

Glut4 Polyclonal Antibody

Catalog No :	YT5523
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Glut4
Fields :	>>FoxO signaling pathway;>>AMPK signaling pathway;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Type II diabetes mellitus;>>Insulin resistance;>>Diabetic cardiomyopathy
Gene Name :	SLC2A4
Protein Name :	Solute carrier family 2 facilitated glucose transporter member 4
Human Gene Id :	6517
Human Swiss Prot No :	P14672
Mouse Gene Id :	20528
Mouse Swiss Prot No :	P14142
Rat Gene Id :	25139
Rat Swiss Prot No :	P19357
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
Dilution :	WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet

tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 56kD

Cell Pathway : Insulin_Receptor;Adipocytokine;Type II diabetes mellitus;

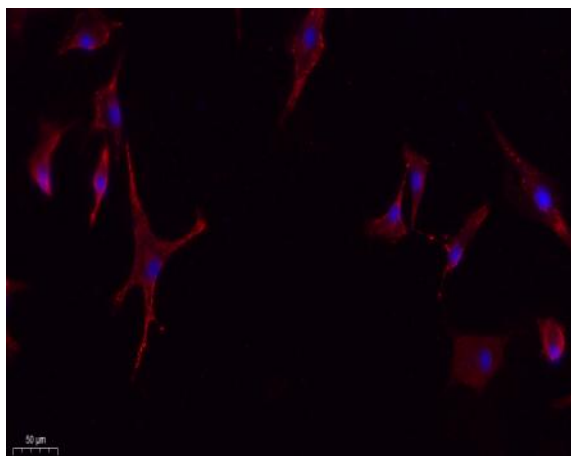
Background : This gene is a member of the solute carrier family 2 (facilitated glucose transporter) family and encodes a protein that functions as an insulin-regulated facilitative glucose transporter. In the absence of insulin, this integral membrane protein is sequestered within the cells of muscle 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],

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

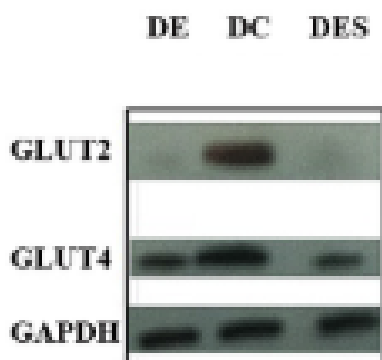
Subcellular Location : Cell membrane ; Multi-pass membrane protein . Endomembrane system ; Multi-pass membrane protein . Cytoplasm, perinuclear region . Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized (PubMed:8300557). The dileucine internalization motif is critical for intracellular sequestration (PubMed:8300557). Insulin stimulation induces translocation to the cell membrane (By similarity). .

Expression : Skeletal and cardiac muscles; brown and white fat.

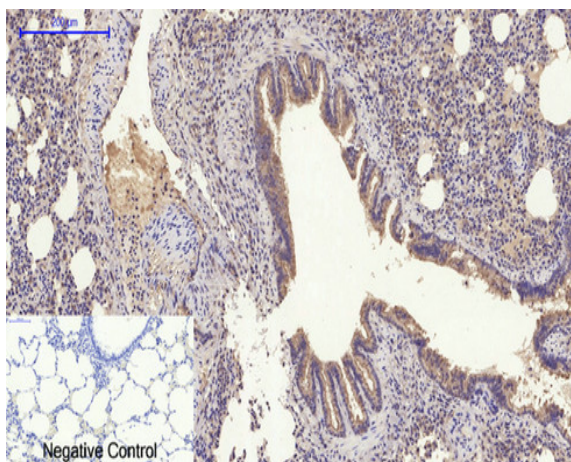
Products Images



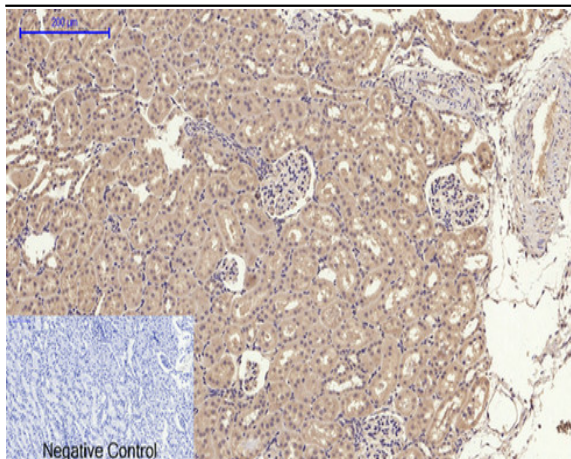
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



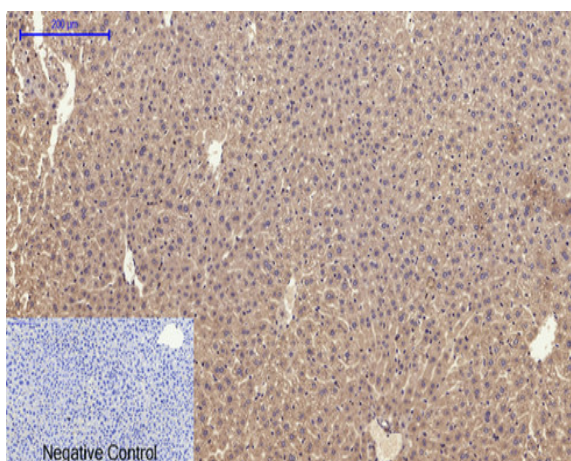
Long, Min-hui, et al. "PM2.5 aggravates diabetes via the systemically activated IL-6-mediated STAT3/SOCS3 pathway in rats' liver." *Environmental Pollution* 256 (2020): 113342.



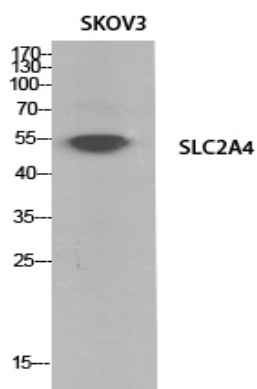
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,Glut4 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary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



Western Blot analysis of SKOV3 cells using Glut4 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000