



## Rabbit Anti-GLUT2 antibody

SL0351R

<b>Product Name:</b>	GLUT2
<b>Chinese Name:</b>	葡萄糖Transporter2抗体
<b>Alias:</b>	liver; Glucose Transporter 2; Glucose Transporter GLUT2; Glucose transporter type 2; Glucose transporter type 2 liver; GLUT-2; GLUT2; GLUT 2; GTR2_HUMAN; SLC2A2; Solute carrier family 2 (facilitated glucose transporter) member 2; Solute carrier family 2 facilitated glucose transporter member 2; Solute carrier family 2, facilitated glucose transporter member 2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,Goat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/testIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	54kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human GLUT2:431-524/524<Cytoplasmic>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Glucose transporter 2 isoform is an integral plasma membrane glycoprotein of the liver, islet beta cells, intestine, and kidney epithelium. It mediates facilitated bidirectional

glucose transport. Because of its low affinity for glucose, it has been suggested as a glucose sensor. [provided by RefSeq, Jul 2008].

**Function:**

Facilitative glucose transporter. This isoform likely mediates the bidirectional transfer of glucose across the plasma membrane of hepatocytes and is responsible for uptake of glucose by the beta cells; may comprise part of the glucose-sensing mechanism of the beta cell. May also participate with the Na(+)/glucose cotransporter in the transcellular transport of glucose in the small intestine and kidney.

**Subcellular Location:**

Membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Liver, insulin-producing beta cell, small intestine and kidney.

**Post-translational modifications:**

N-glycosylated; required for stability and retention at the cell surface of pancreatic beta cells.

**DISEASE:**

Defects in SLC2A2 are the cause of Fanconi-Bickel syndrome (FBS) [MIM:227810]. FBS is a rare, well-defined clinical entity, inherited in an autosomal recessive mode and characterized by hepatorenal glycogen accumulation, proximal renal tubular dysfunction, and impaired utilization of glucose and galactose.

**Similarity:**

Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.

**SWISS:**

P11168

**Gene ID:**

6514

**Database links:**

[Entrez Gene: 6514](#)Human

[Entrez Gene: 20526](#)Mouse

[Entrez Gene: 25351](#)Rat

[Omim: 138160](#)Human

[SwissProt: P11168](#)Human

[SwissProt: P14246](#)Mouse

[SwissProt: P12336](#)Rat

[Unigene: 167584](#)Human

[Unigene: 18443](#)Mouse

[Unigene: 89295](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

交换和转运 (Trafficking and Transport)

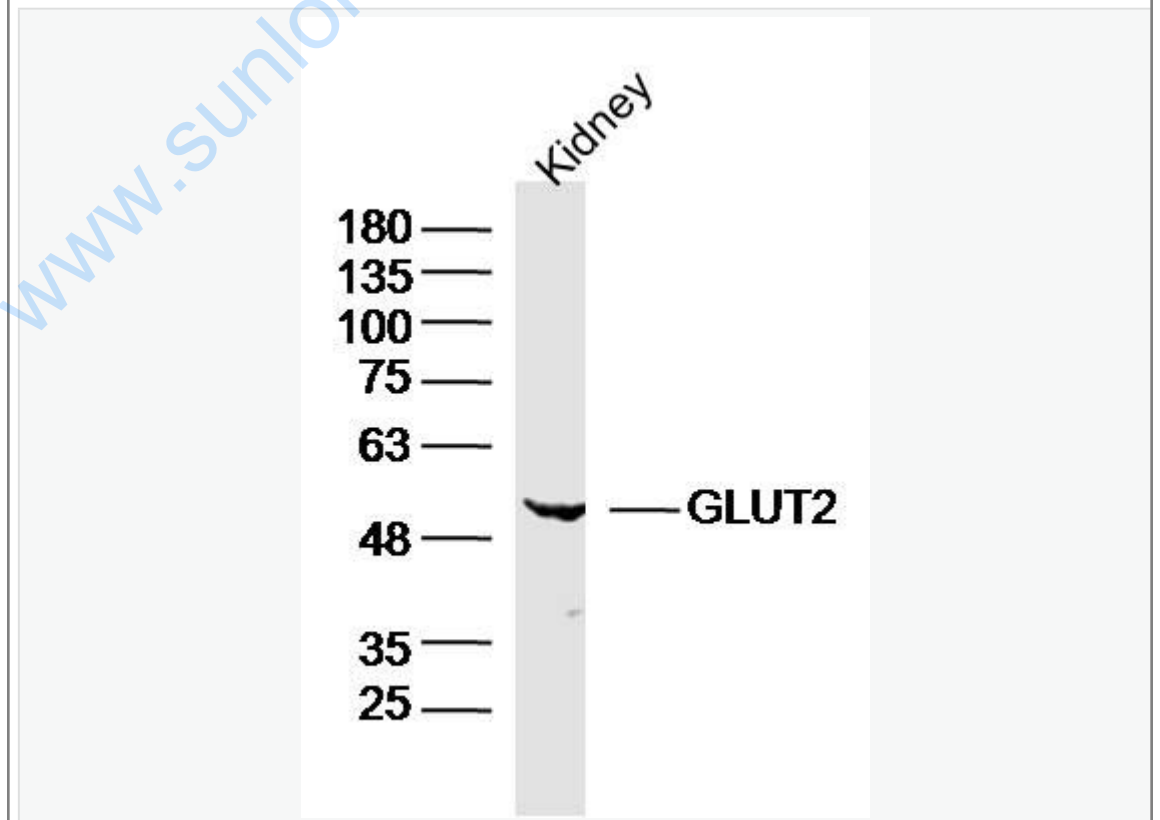
葡萄糖转运蛋白2 GLUT-2是胰岛B细胞的

膜上的Transporter, 在血糖浓度升高时, 促进GLUT2对葡萄糖的转运功能, 继而刺激胰岛素释放。GLUT2分子对葡萄糖亲和力极低, 似乎仅在血浆葡萄糖水平相对较高时才作为转运体发挥载体功能, GLUT2在胰岛B细胞的葡萄糖转运中起着重要作用

GLUT-2和GLUT-

4蛋白这两个葡萄糖运载体的研究对于Diabetes的胰岛素释放障碍和胰岛素抵抗有重要意义

Picture:



Sample:

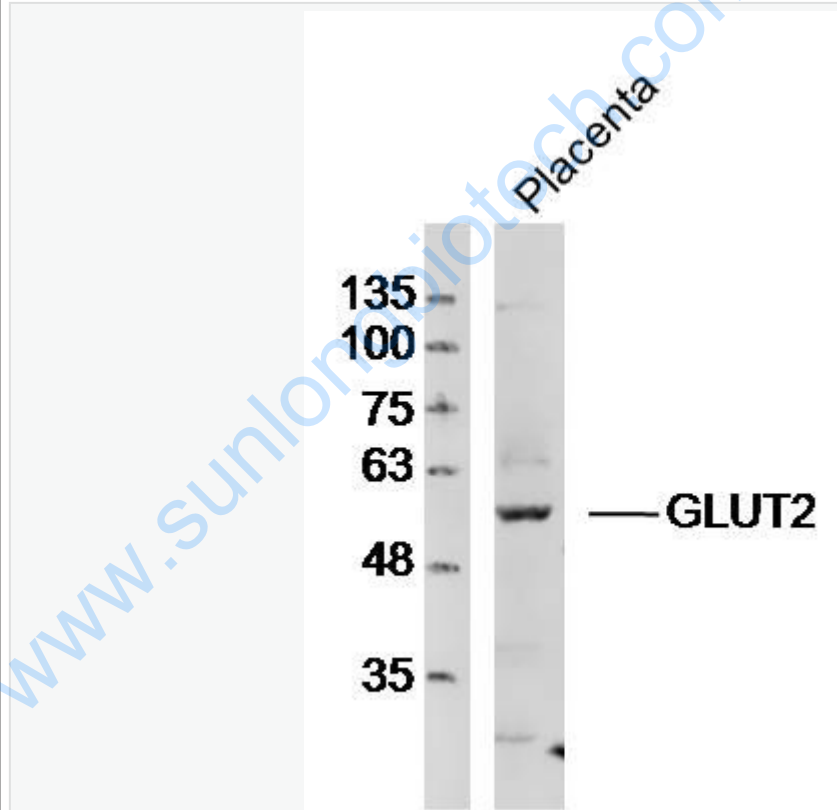
Kidney (Mouse) Lysate at 40 ug

Primary: Anti- GLUT2 (SL0351R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54kD

Observed band size: 54kD



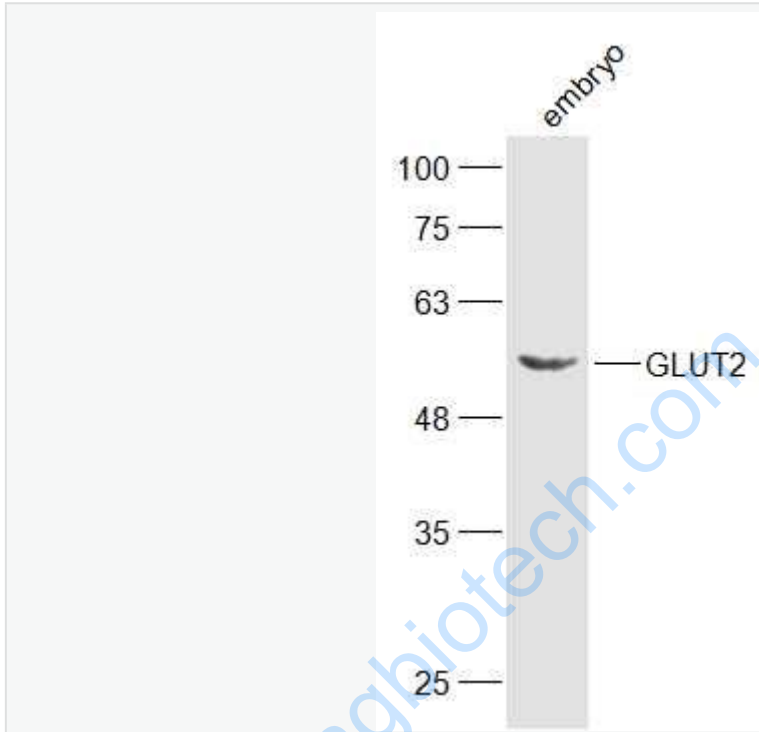
Sample:Placenta (Mouse)Lysate at 40 ug

Primary: Anti-GLUT2 (SL0351R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 54kD

Observed band size: 54kD



Sample:

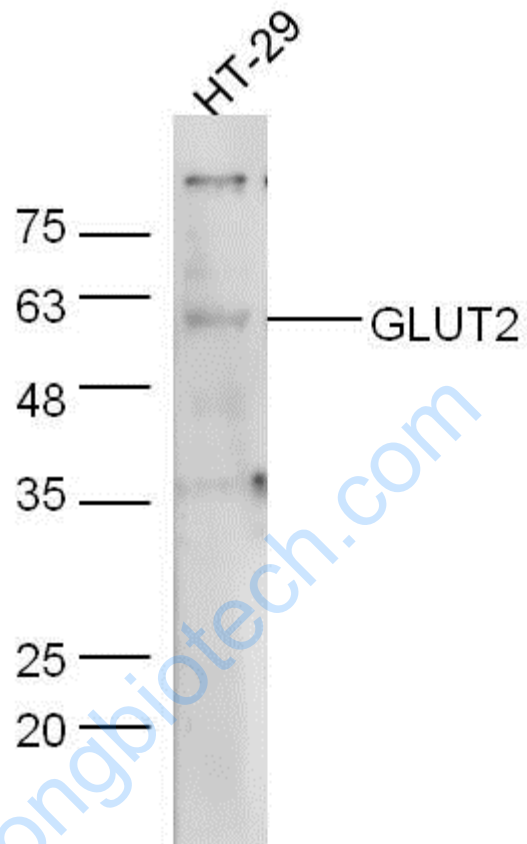
embryo (Mouse) Lysate at 40 ug

Primary: Anti-GLUT2 (SL0351R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54 kD

Observed band size: 54 kD



Sample:

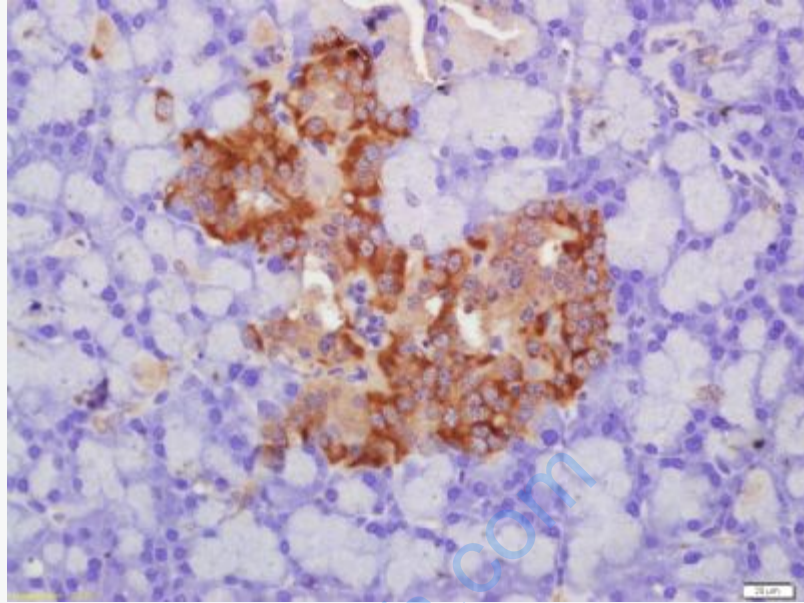
HT-29 Cell (Human) Lysate at 30 ug

Primary: Anti-GLUT2 (SL0351R) at 1/300 dilution

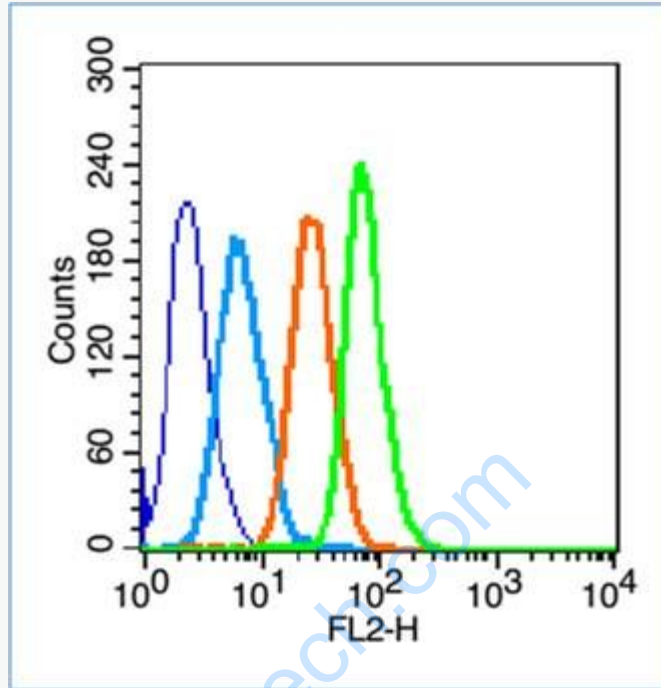
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54 kD

Observed band size: 59 kD



Paraformaldehyde-fixed, paraffin embedded (rat pancreas tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Glut2) Polyclonal Antibody, Unconjugated (SL0351R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control (blue line): Hep G2(blue).

Primary Antibody (green line): Rabbit Anti-GLUT2 antibody (SL0351R)

Dilution:  $1\mu\text{g}/10^6$  cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution:  $1\mu\text{g}/\text{test}$ .

#### Protocol

The cells were fixed with 70% ethanol Overnight at  $4^{\circ}\text{C}$ . Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.