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Rabbit Anti-GLUT1 antibody

SL0472R

Product Name:	GLUT1
Chinese Name:	葡萄糖Transporter1抗体
Alias:	Glucose Transporter GLUT1; GT-1; GLUT-1; GLUT 1; Solute carrier family 2; facilitated glucose transporter member 1; Glucose transporter type 1; erythrocyte/brain; DYT17; DYT18; Erythrocyte/brain HepG2 glucose transporter; Erythrocyte/hepatoma glucose transporter; Glucose transporter 1; Glucose transporter type 1; Glucose transporter type 1 erythrocyte/brain; Glucose transporter type 1, erythrocyte/brain; GLUT; GLUT1; GLUT1DS; GLUTB; GT1; GTG1; Gtg3; GTR1_HUMAN; HepG2 glucose transporter; MGC141895; MGC141896; PED; RATGTG1; SLC2A 1; SLC2A1; Solute carrier family 2 (facilitated glucose transporter), member 1; Solute carrier family 2 facilitated glucose transporter member 1.
文献引用 PubMed :	**Specific References(3)**|SL0472R has been referenced in 3 publications. **[IF=5.47]**Yan, Yu-E., et al. ?Significant Reduction of the GLUT3 Level, but not GLUT1 Level, Was Observed in the Brain Tissues of Several Scrapie Experimental Animals and Scrapie-Infected Cell Lines.? Molecular neurobiology (2013): 1-14.**WB;** PubMed:24243341 **[IF=0.00]**Klasvogt, Sonja, et al. "Air–liquid interface enhances oxidative phosphorylation in intestinal epithelial cell line IPEC-J2." Cell Death Discovery 3 (2017): 17001.**WB;Pig**. PubMed:28250970 **[IF=3.86]**Chu, Meiqiang, et al. "MicroRNA-126 participates in lipid metabolism in mammary epithelial cells." Molecular and Cellular Endocrinology (2017).**WB;Human**. PubMed:28599789
Organism Species:	Rabbit
Clonality:	Polyclonal

React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	54kDa
Cellular localization:	The cell membraneExtracellular matrix
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GLUT1:191-270/492
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	This gene encodes a major glucose transporter in the mammalian blood-brain barrier. Mutations in this gene have been found in a family with paroxysmal exertion-induced dyskinesia. [provided by RefSeq, Jul 2008]. **Function:** Facilitative glucose transporter. This isoform may be responsible for constitutive or basal glucose uptake. Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses. **Subcellular Location:** Cell membrane; Multi-pass membrane protein. Melanosome. Note=Localizes primarily at the cell surface. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. **Tissue Specificity:** Expressed at variable levels in many human tissues. **Post-translational modifications:** Phosphorylated upon DNA damage, probably by ATM or ATR. **DISEASE:** Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 1 (GLUT1DS1) [MIM:606777]; also known as blood-brain barrier glucose transport defect. A neurologic disorder showing wide phenotypic variability. The most severe 'classic' phenotype comprises infantile-onset epileptic encephalopathy associated with delayed development, acquired microcephaly, motor incoordination, and spasticity. Onset of seizures, usually characterized by apneic episodes, staring spells, and episodic eye movements, occurs within the first 4 months of life. Other paroxysmal findings include

intermittent ataxia, confusion, lethargy, sleep disturbance, and headache. Varying degrees of cognitive impairment can occur, ranging from learning disabilities to severe mental retardation.
Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 2 (GLUT1DS2) [MIM:612126]. A clinically variable disorder characterized primarily by onset in childhood of paroxysmal exercise-induced dyskinesia. The dyskinesia involves transient abnormal involuntary movements, such as dystonia and choreoathetosis, induced by exercise or exertion, and affecting the exercised limbs. Some patients may also have epilepsy, most commonly childhood absence epilepsy. Mild mental retardation may also occur. In some patients involuntary exertion-induced dystonic, choreoathetotic, and ballistic movements may be associated with macrocytic hemolytic anemia.

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

SWISS:
P11166

Gene ID:
6513

Database links:

Entrez Gene: 6513Human

Entrez Gene: 20525Mouse

Entrez Gene: 24778Rat

Omim: 138140Human

SwissProt: P11166Human

SwissProt: P17809Mouse

SwissProt: P11167Rat

Unigene: 473721Human

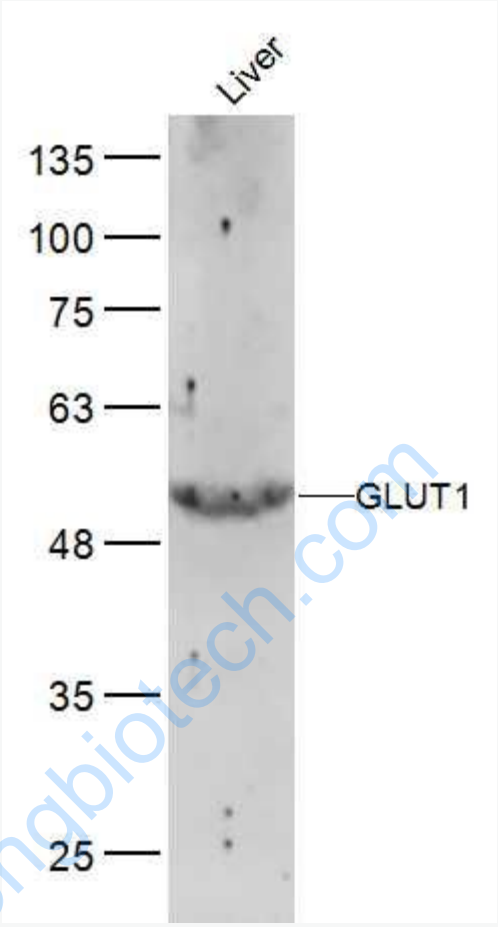
Unigene: 721551Human

Unigene: 21002Mouse

Unigene: 3205Rat

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

Picture:



Sample:

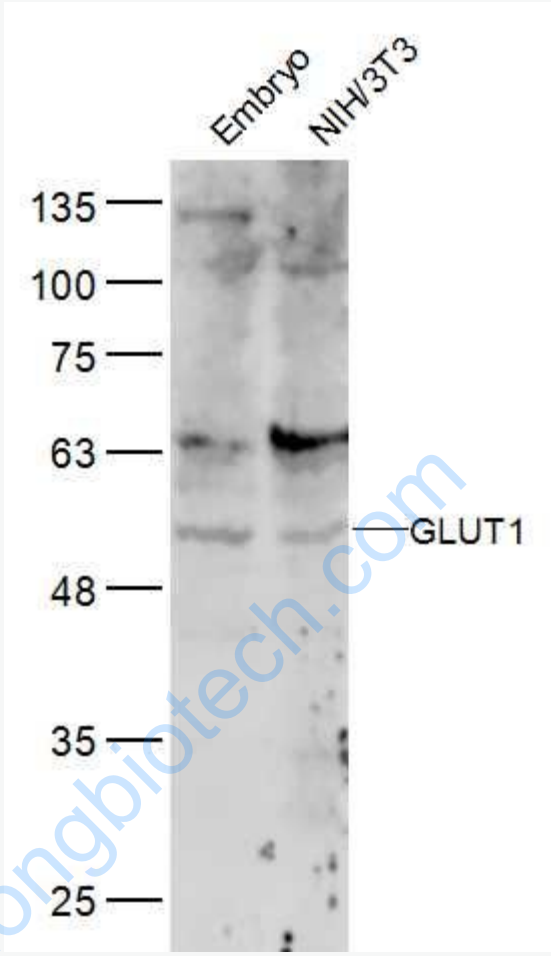
Liver (Rat) Lysate at 40 ug

Primary: Anti-GLUT1 (SL0472R) 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:

Embryo(Mouse) Lysate at 40 ug

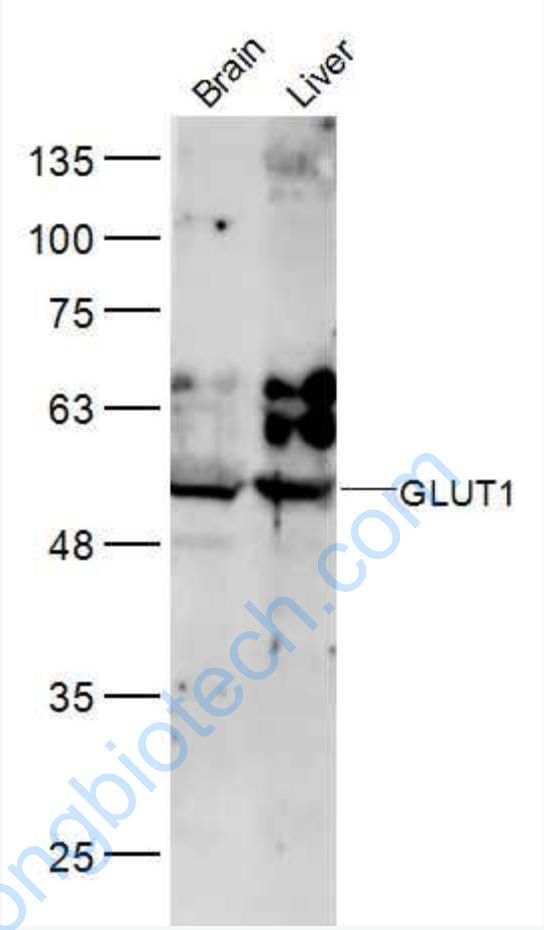
NIH/3T3(Mouse) CellLysate at 30 ug

Primary: Anti-GLUT1 (SL0472R) 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:

Brain(Mouse) Lysate at 40 ug

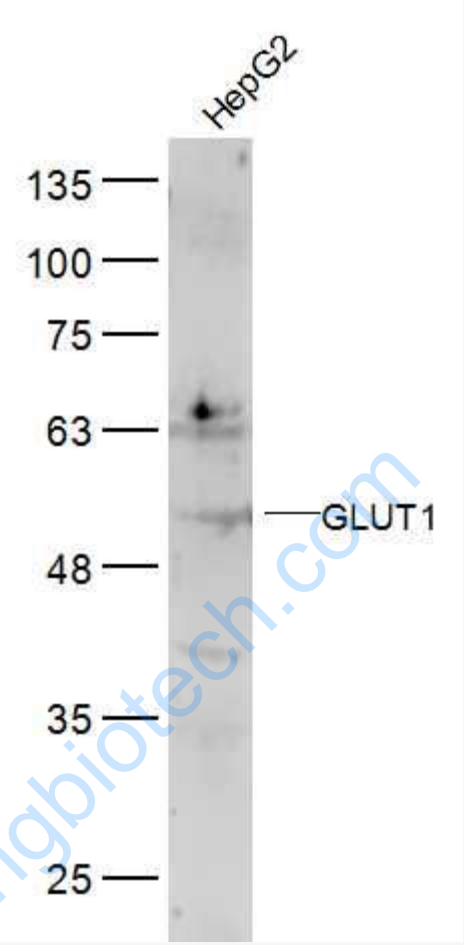
Liver(Mouse) Lysate at 40 ug

Primary: Anti-GLUT1 (SL0472R) 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:

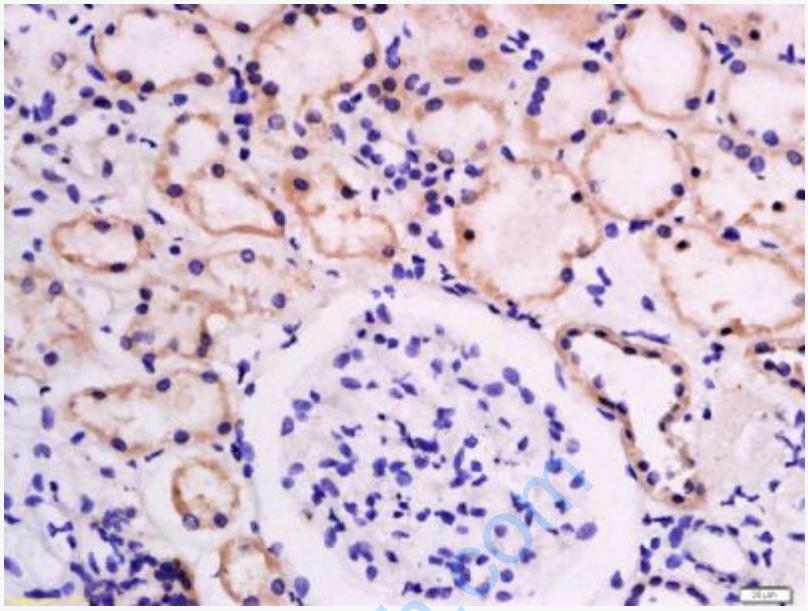
HepG2 (Human) CellLysate at 30 ug

Primary: Anti-GLUT1 (SL0472R) at 1/300 dilution

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

Predicted band size: 54 kD

Observed band size: 54 kD



Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-GLUT1 Polyclonal Antibody, Unconjugated(SL0472R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

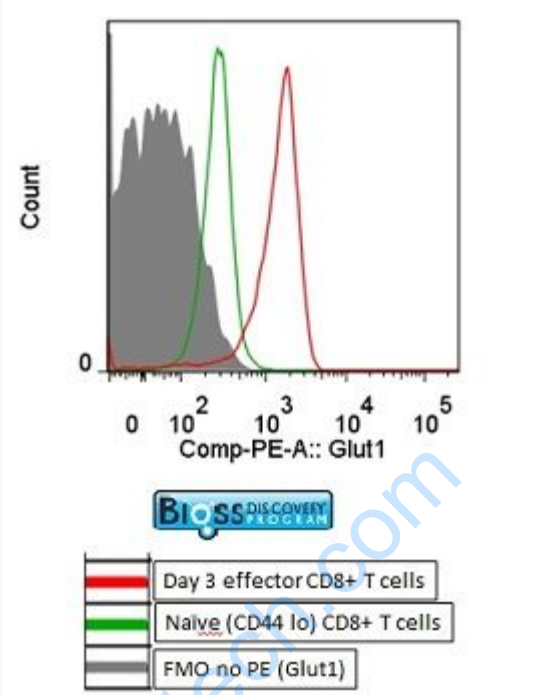


Image was kindly submitted by Dr. Lelisa Gemta from University of Virginia.

Mouse splenocytes stained with Rabbit Anti-GLUT1 Polyclonal Antibody, PE conjugated (SL0472R)at 1:50.