



Rabbit Anti-GLUT1 antibody

SL20173R

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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=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 GLUT1:401-492/492
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
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](#)

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 is at Cell membrane; multi-pass membrane protein. 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.

Product Detail:

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: 6513](#)Human

[Entrez Gene: 20525](#)Mouse

[Entrez Gene: 24778](#)Rat

[Omin: 138140](#)Human

[SwissProt: P11166](#)Human

[SwissProt: P17809](#)Mouse

[SwissProt: P11167](#)Rat

[Unigene: 473721](#)Human

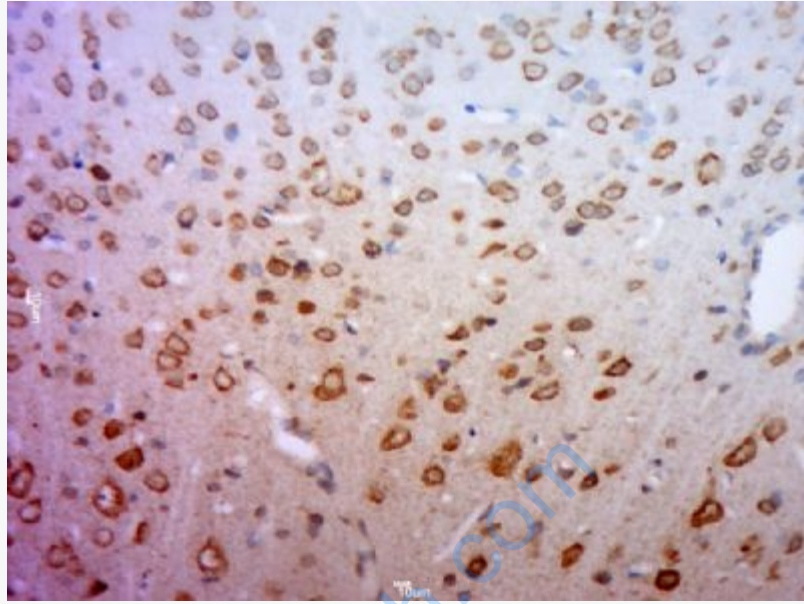
[Unigene: 721551](#)Human

[Unigene: 21002](#)Mouse

[Unigene: 3205](#)Rat

Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (Glucose transporter type 1; GLUT1) Polyclonal Antibody, Unconjugated (SL20173R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.