

**GLUT1 Antibody**  
Rabbit mAb  
Catalog # AP90399

## Specification

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### GLUT1 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	<a href="#">P11166</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
DYT17; DYT18; Glucose transporter type 1, erythrocyte/brain; GLUT; GLUT-1; GLUT1; GTR1; HepG2 glucose transporter;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	54084 Da

### GLUT1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Glucose Transporter GLUT1
Description	GLUT1 an integral membrane protein that plays an important role in the glycolytic pathway by serving as a uniporter for glucose. One of 13 members of the human equilibrative glucose transport protein family. Transports a wide range of aldoses, including both pentoses and hexoses, and dehydroascorbic acid. Shown to transport water against an osmotic gradient.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### GLUT1 Antibody - Protein Information

Name SLC2A1 ([HGNC:11005](#))

#### Function

Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake (PubMed: [10227690](http://www.uniprot.org/citations/10227690)), (PubMed: [10954735](http://www.uniprot.org/citations/10954735)), (PubMed: [18245775](http://www.uniprot.org/citations/18245775)), (PubMed: [19449892](http://www.uniprot.org/citations/19449892)), (PubMed: [25982116](http://www.uniprot.org/citations/25982116)),

PubMed: <a href="http://www.uniprot.org/citations/27078104" target="\_blank">27078104</a>, PubMed: <a href="http://www.uniprot.org/citations/32860739" target="\_blank">32860739</a>). Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses (PubMed: <a href="http://www.uniprot.org/citations/18245775" target="\_blank">18245775</a>, PubMed: <a href="http://www.uniprot.org/citations/19449892" target="\_blank">19449892</a>). Most important energy carrier of the brain: present at the blood-brain barrier and assures the energy- independent, facilitative transport of glucose into the brain (PubMed: <a href="http://www.uniprot.org/citations/10227690" target="\_blank">10227690</a>). In association with BSG and NXNL1, promotes retinal cone survival by increasing glucose uptake into photoreceptors (By similarity). Required for mesendoderm differentiation (By similarity).

### Cellular Location

Cell membrane; Multi-pass membrane protein. Melanosome. Photoreceptor inner segment {ECO:0000250|UniProtKB:P17809}. Note=Localizes primarily at the cell surface (PubMed:18245775, PubMed:19449892, PubMed:23219802, PubMed:24847886, PubMed:25982116). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065)

### Tissue Location

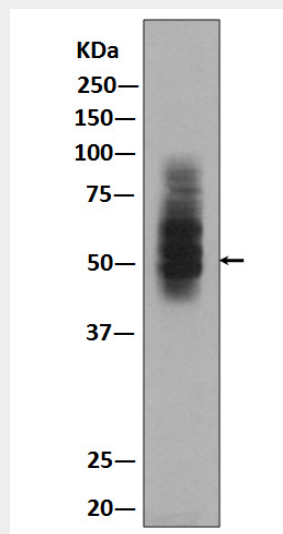
Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues

## GLUT1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## GLUT1 Antibody - Images



Western blot analysis of GLUT1 expression in HepG2 lysate.