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GLUT1 Antibody
Rabbit mAb
Catalog # AP90399

Specification

GLUT1 Antibody - Product Information

Application	**WB, IHC, FC, ICC**
Primary Accession	P11166
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
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

Dilution	**WB~~1:1000** **IHC~~1:100~500** **FC~~1:10~50** **ICC~~N/A**
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,

PubMed:10954735, PubMed:18245775, PubMed:19449892, PubMed:25982116, PubMed:27078104, PubMed:32860739). Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses (PubMed:18245775, PubMed:19449892). 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:10227690). 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 Cytomety
- Cell Culture

GLUT1 Antibody - Images

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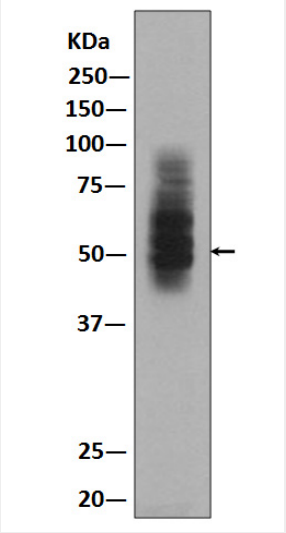

Western blot analysis of GLUT1 expression in HepG2 lysate.