

SLC2A1 (GLUT1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21407b

Specification

SLC2A1 (GLUT1) Antibody (C-term) - Product Information

Application WB,E
Primary Accession P11166
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG

SLC2A1 (GLUT1) Antibody (C-term) - Additional Information

Gene ID 6513

Other Names

Solute carrier family 2, facilitated glucose transporter member 1, Glucose transporter type 1, erythrocyte/brain, GLUT-1, HepG2 glucose transporter, SLC2A1, GLUT1

Target/Specificity

This SLC2A1 (GLUT1) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 464-497 amino acids from the C-terminal region of human SLC2A1 (GLUT1).

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC2A1 (GLUT1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC2A1 (GLUT1) Antibody (C-term) - Protein Information

Name SLC2A1 (<u>HGNC:11005</u>)

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

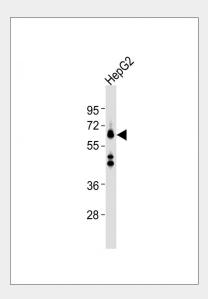
Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues

SLC2A1 (GLUT1) Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC2A1 (GLUT1) Antibody (C-term) - Images



Anti-SLC2A1 (GLUT1) Antibody (C-term) at 1:1000 dilution + HepG2 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SLC2A1 (GLUT1) Antibody (C-term) - Background



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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.

SLC2A1 (GLUT1) Antibody (C-term) - References

Mueckler M., et al. Science 229:941-945(1985). Ota T., et al. Nat. Genet. 36:40-45(2004). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Fukumoto H., et al. Diabetes 37:657-661(1988). Yu W., et al. Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.

SLC2A1 (GLUT1) Antibody (C-term) - Citations

• Hyperglycemia in Pregnancy-Associated Oxidative Stress Augments Altered Placental Glucose Transporter 1 Trafficking via AMPKα/p38MAPK Signaling Cascade