

### SLC2A1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21407b

## **Specification**

# SLC2A1 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P11166
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 54084

## SLC2A1 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 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.

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

## SLC2A1 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**

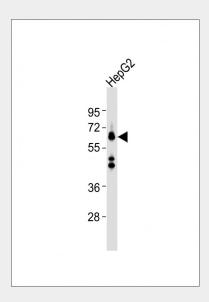
Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues

## SLC2A1 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 Antibody (C-term) - Images



Anti-SLC2A1 Antibody (C-term)at 1:1000 dilution + HepG2 whole cell lysates Lysates/proteins at 20  $\mu$ 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 Antibody (C-term) - Background



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 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 Antibody (C-term) - Citations

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