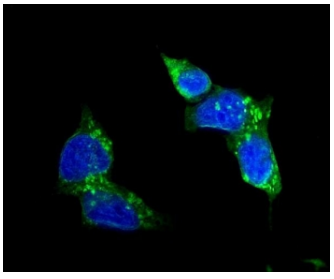
SLC2A1 Antibody / GLUT1 (R31941)

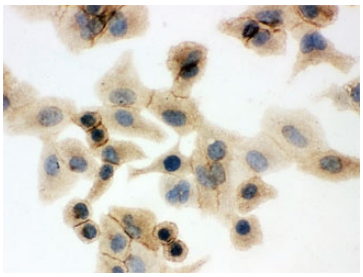
Catalog No.	Formulation	Size
R31941	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

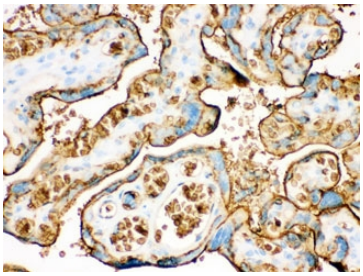
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P11166
Localization	Cytoplasmic, membrane
Applications	Western Blot : 0.1-0.5ug/ml Immunocytochemistry : 0.5-1ug/ml Immunohistochemistry (Frozen) : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SLC2A1 antibody is available for research use only.



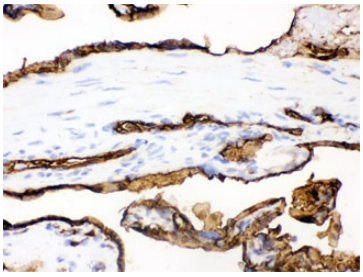
Immunofluorescent staining of FFPE human HepG2 cells with SLC2A1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



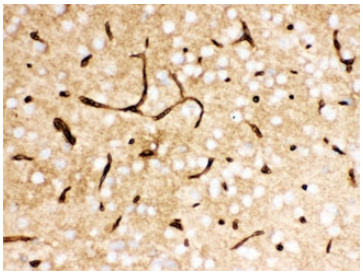
ICC testing of human A549 cells with SLC2A1 antibody.



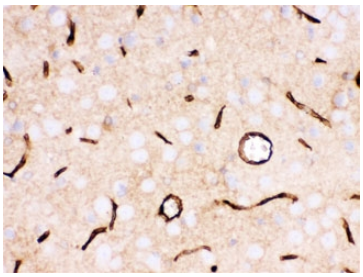
IHC testing of FFPE human placenta with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



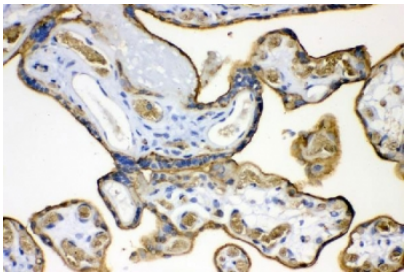
IHC testing of frozen human placenta with SLC2A1 antibody.



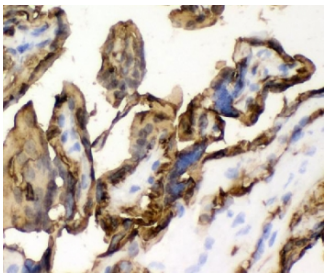
IHC testing of FFPE mouse brain with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



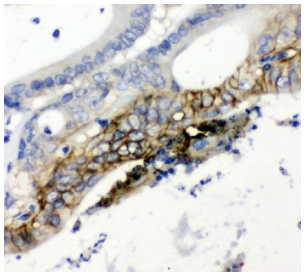
IHC testing of FFPE rat brain with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



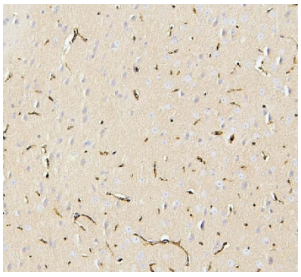
IHC testing of FFPE human placenta with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 8 EDTA for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE human placenta with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 8 EDTA for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE human breast cancer with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 8 EDTA for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE mouse brain with SLC2A1 antibody. HIER: Boil the paraffin sections in pH 8 EDTA for 20 minutes and allow to cool prior to staining.

Description

GLUT1, also known as SLC2A1, is a major glucose transporter in the mammalian blood-brain barrier whose gene is mapped to 1p35-p31.3 and contains 10 exons. It is present at high levels in primate erythrocytes and brain endothelial cells. Not only can transport dehydroascorbic acid (the oxidized form of vitamin C) into the brain, GLUT1 is also likely to contribute to HTLV-associated disorders through interacting with HTLV envelope glycoproteins. Functionally, GLUT1 deficiency causes a decrease in embryonic glucose uptake and apoptosis, which may be involved in diabetic embryopathy, by contrast, an increased expression of GLUT1 in some malignant tumors may suggest a role for glucose-derivative tracers to detect in vivo thyroid cancer metastases by positron-emission tomography scanning.

Application Notes

Optimal dilution of the SLC2A1 antibody should be determined by the researcher.

Immunogen

Amino acids 92-492 of human SLC2A1 were used as the immunogen for the SLC2A1 antibody.

Storage

After reconstitution, the SLC2A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.