

Summary

Production Name	Glut1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, IHC, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SLC2A1
Alternative Names	SLC2A1; GLUT1; Solute carrier family 2; facilitated glucose transporter member 1; Glucose transporter type 1, erythrocyte/brain; GLUT-1; HepG2 glucose transporter
Gene ID	6513.0
SwissProt ID	P11166. The antiserum was produced against synthesized peptide derived from human GLUT1. AA range: 441-490

Application

Dilution Ratio	IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	55kD

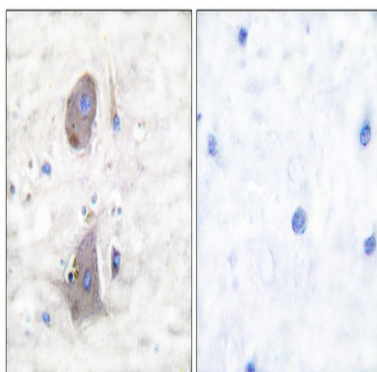
Background

This gene encodes a major glucose transporter in the mammalian blood-brain barrier. The encoded protein is found primarily in the cell membrane and on the cell surface, where it can also function as a receptor for human T-cell leukemia virus (HTLV) I and II. Mutations in this gene have been found in a family with paroxysmal exertion-induced dyskinesia. [provided by RefSeq, Apr 2013],disease:Defects in SLC2A1 are the cause of autosomal dominant GLUT1 deficiency syndrome [MIM:606777]; also called blood-brain barrier glucose transport defect. This disease causes a defect in glucose transport across the blood-brain barrier. It is characterized by infantile seizures, delayed development, and acquired microcephaly.,disease:Defects in SLC2A1 are the cause of dystonia type 18 (DYT18) [MIM:612126]. DYT18 is an exercise-induced paroxysmal dystonia/dyskinesia. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYT18 is characterized by attacks of involuntary movements triggered by certain stimuli such as sudden movement or prolonged exercise. In some patients involuntary exertion-induced dystonic, choreoathetotic, and ballistic movements may be associated with macrocytic hemolytic anemia.,function: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.,online information:GLUT1 entry,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.,subcellular location:Localizes primarily at the cell surface (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,tissue specificity:Expressed at variable levels in many human tissues.,

Research Area

Adipocytokine;Pathways in cancer;Renal cell carcinoma;

Image Data

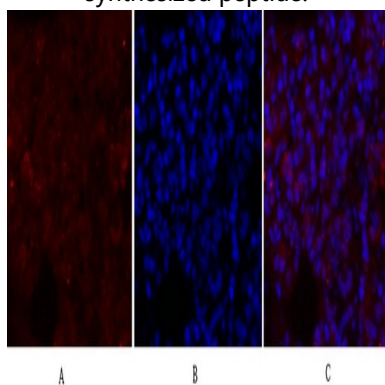


Immunohistochemistry analysis of paraffin-embedded human brain tissue, using GLUT1 Antibody. The picture on the right is blocked with the synthesized peptide.

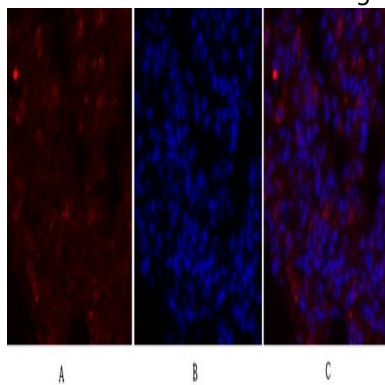
Product Name: Glut1 Rabbit Polyclonal Antibody
Catalog #: APRab11500



Western blot analysis of lysates from Jurkat cells, using GLUT1 Antibody. The lane on the right is blocked with the synthesized peptide.

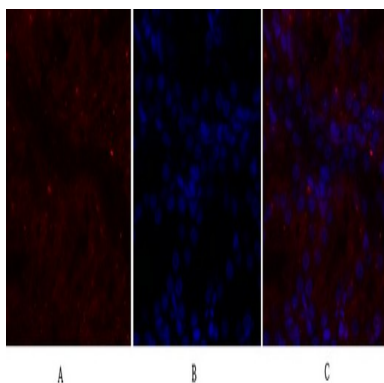


Immunofluorescence analysis of rat-lung tissue. 1,Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



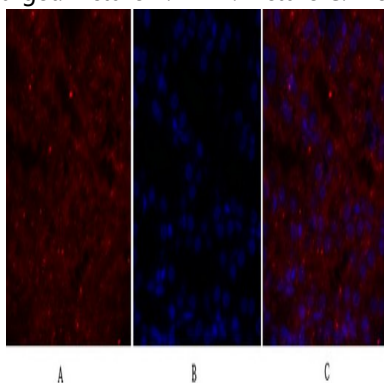
Immunofluorescence analysis of rat-lung tissue. 1,Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Product Name: Glut1 Rabbit Polyclonal Antibody
Catalog #: APRab11500



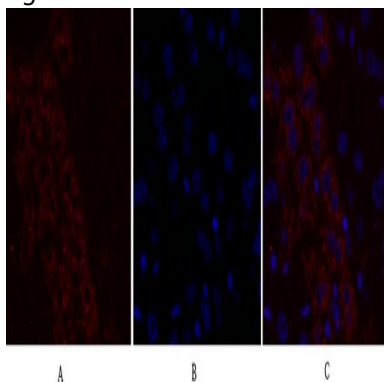
Immunofluorescence analysis of rat-kidney tissue. 1, Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight) .
2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min.

Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



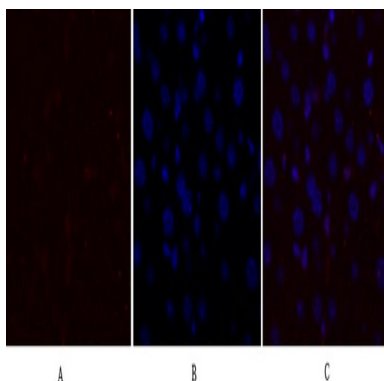
Immunofluorescence analysis of rat-kidney tissue. 1, Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight) .
2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min.

Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

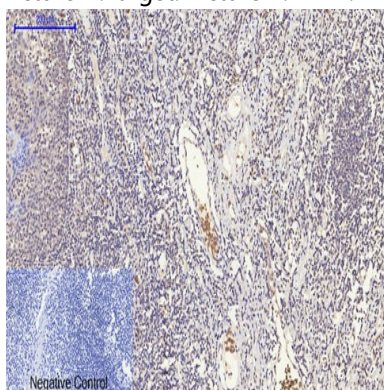


Immunofluorescence analysis of mouse-liver tissue. 1, Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

Product Name: Glut1 Rabbit Polyclonal Antibody
Catalog #: APRab11500



Immunofluorescence analysis of mouse-liver tissue. 1, Glut1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1, Glut1 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

Note

For research use only.