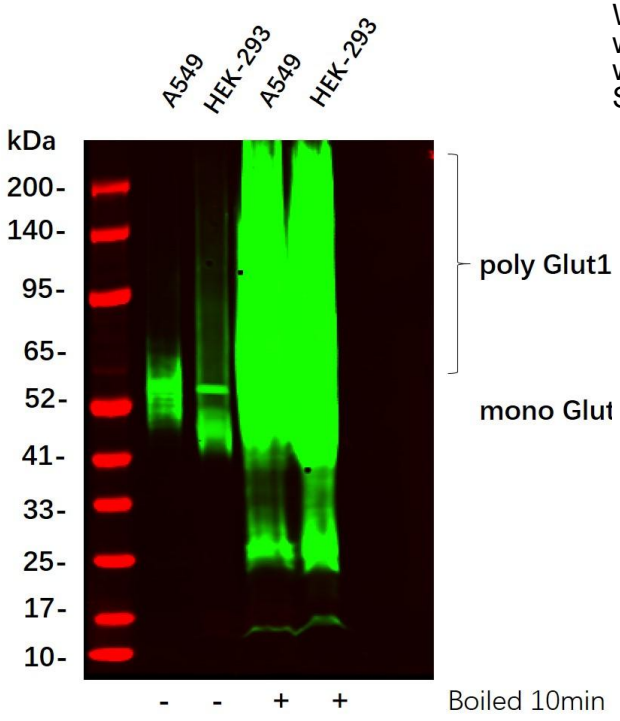
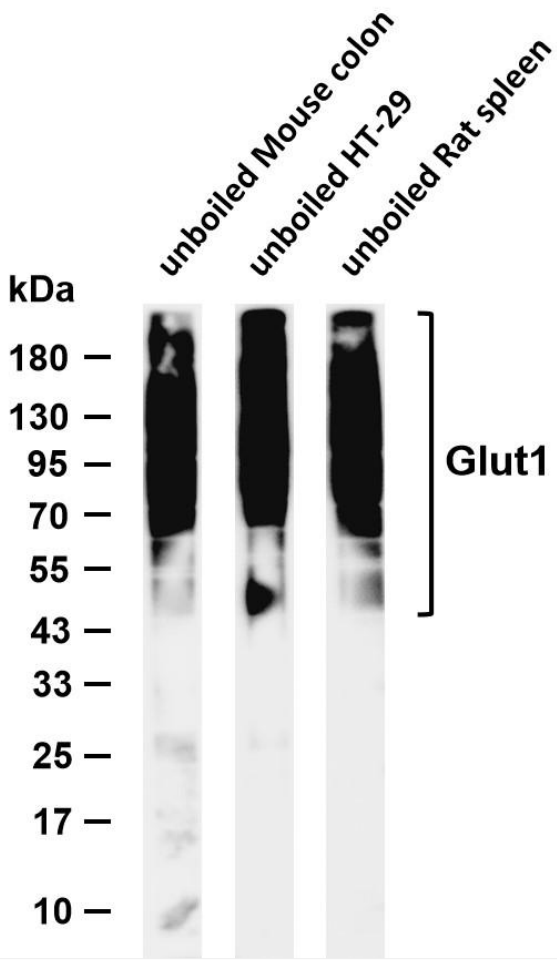
Glut-1 Rabbit mAb

Catalog No	YP-rAb-17466
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	SLC2A1
Protein Name	Solute carrier family 2 facilitated glucose transporter member 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:5000; WB 1:10000-1:50000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	SLC2A1 ; GLUT1 ; Solute carrier family 2 ; facilitated glucose transporter member 1 ; Glucose transporter type 1, erythrocyte/brain ; GLUT-1 ; HepG2 glucose transporter
Observed Band	50-300kD
Calculated Molecular Weight	54kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Melanosome . Photoreceptor inner segment . Localizes primarily at the cell surface (PubMed:18245775, PubMed:19449892, PubMed:23219802, PubMed:25982116, PubMed:24847886). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). .
Tissue Specificity	Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues.
Function	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

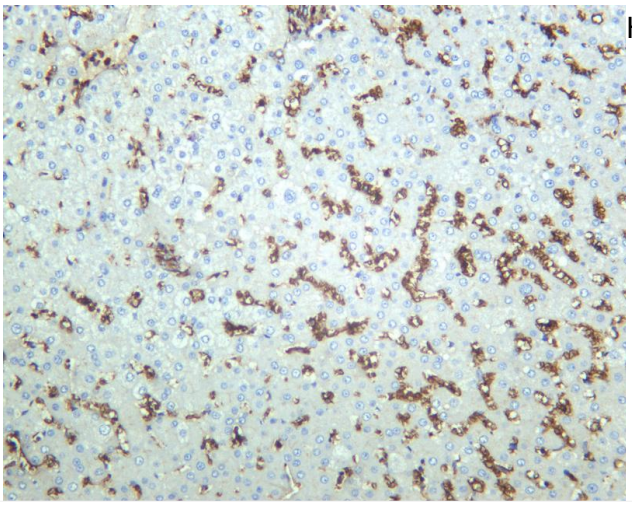
	paroxysmal dystonia/dyskinesia. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYT18 is characterized by attacks of involuntary movements triggered by certain stimuli such as sudden movement or prolonged exercise. In some patients 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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



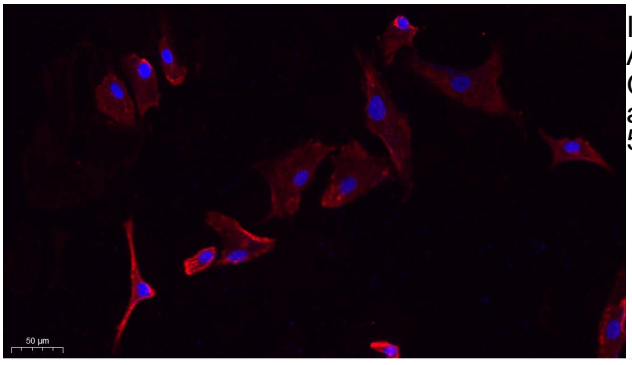
Western Blot analysis using various cell lysate, Proteins were separated by 4-20% SDS-PAGE, and the membrane was blotted with Glut1 Rabbit mAb diluted at 1:2000. Secondary :Dylight 800, Goat Anti Rabbit IgG(



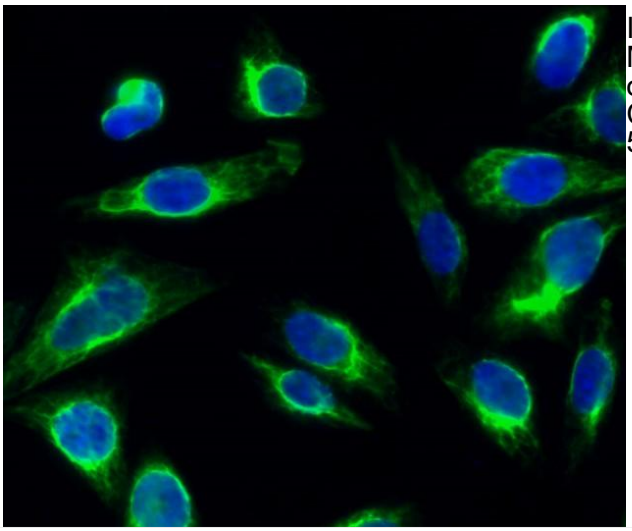
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Glut1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: unboiled Mouse colon Lane 2: unboiled HT-29 Lane 3: unboiled Rat spleen Predicted band size: 54kDa Observed band size: 50-300kDa



Human tonsil was stained with anti-Glut1 rabbit antibody



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4℃ overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.



Immunofluorescence analysis of Hela cell. 1,Glut1 Monoclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.