

Product datasheet for **TA301678**

Glucose Transporter GLUT1 (SLC2A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, FC, ICC/IF, IHC, WB
Recommended Dilution:	Chromatin Immunoprecipitation, Flow Cytometry: 1 ug/ml, Immunohistochemistry-Frozen: 1:200, Western Blot: 1:500, Flow (Intracellular): 1 ug/ml, Immunohistochemistry: 1:200, In vitro assay, Immunocytochemistry/ Immunofluorescence: 1:1000, Immunohistochemistry-Paraffin: 1:200
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an N-terminal region of the human GLUT1 protein (between residues 1-100). [Swiss-Prot #P11166]
Formulation:	Tris-glycine, 150mM NaCl and 0.05% sodium azide
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	solute carrier family 2 member 1
Database Link:	NP_006507 Entrez Gene 6513 Human P11166



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Background:

Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are seven types of glucose transport carrier proteins, designated as Glut 1 to 7. Molecular cloning of glucose transporters have identified a family of closely related genes that encodes at least 7 proteins exhibiting high degree of amino acid homology (45% to 65%), all in the molecular weight range of 40 to 60 kDa. Some transporters exhibit dynamic trafficking between intracellular storage sites and plasma membranes in response to various stimuli. In some tissues Glut proteins are asymmetrically distributed between apical and basolateral membranes, as in blood brain barrier and blood testis barriers. GLUT1 is a major glucose transporter in the mammalian blood brain barrier. It is ubiquitous, and is present at high levels in primate erythrocytes and brain endothelial cells.

Synonyms:

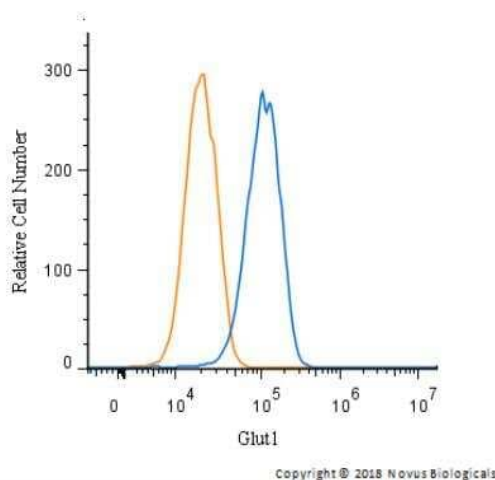
CSE; DYT9; DYT17; DYT18; EIG12; GLUT; GLUT-1; GLUT1; GLUT1DS; HTLVR; PED; SDCHCN

Protein Families:

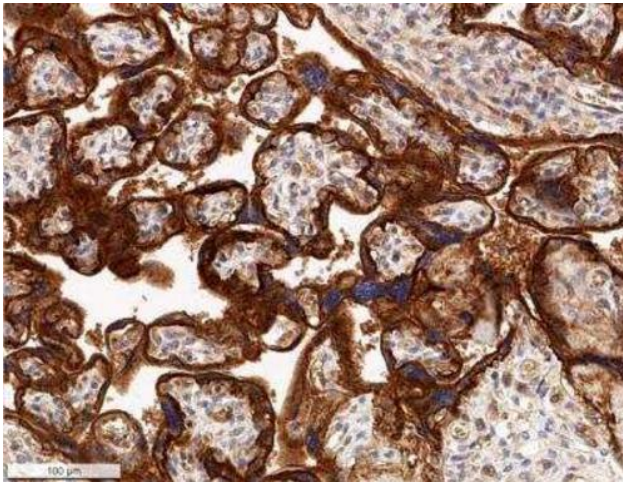
Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways:

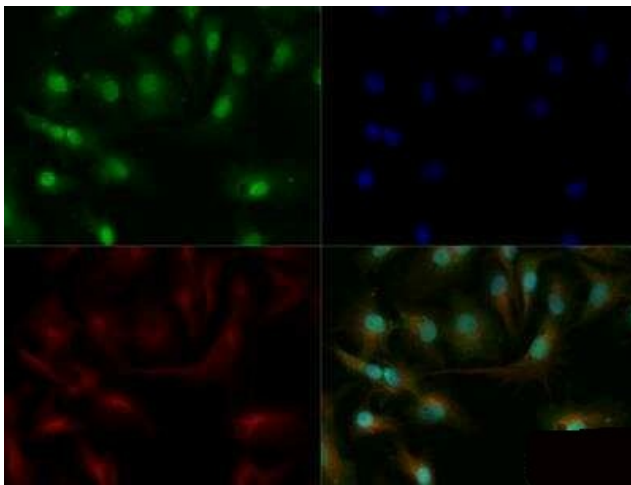
Adipocytokine signaling pathway, Pathways in cancer, Renal cell carcinoma

Product images:

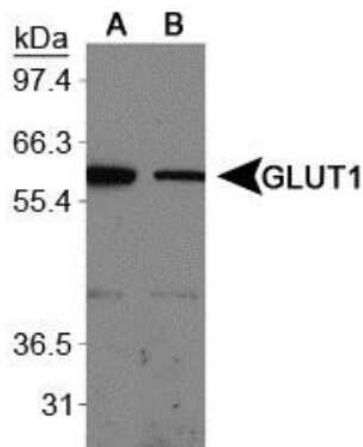
Flow Cytometry: Glut1 Antibody TA301678 - An intracellular stain was performed on HepG2 with TA301678 and a matched isotype control. Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody.



Immunohistochemistry-Paraffin: Glut1 Antibody TA301678 - Immunohistochemical analysis of FFPE tissue section of human placenta using 1:200 dilution of Glut1 antibody. The staining was developed using HRP-DAB detection method and the sections were further counterstained with hematoxylin. This antibody generated a specific strong membrane cytoplasmic staining of Glut1 primarily in the syncytiotrophoblast layers of various villi and in the red blood cells (RBCs). Cytotrophoblasts showed a very weak expression of this protein.



Immunocytochemistry/Immunofluorescence: Glut1 Antibody TA301678 - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-GLUT1 at a 1:200 dilution overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse DyLight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective



Western Blot: Glut1 Antibody TA301678 - Western blot of GLUT1 on mouse kidney membrane protein (lane A) and rat kidney membrane protein (lane B).