

**AP06144PU-N****Polyclonal Antibody to GLUT1 / SLC2A1 - Aff - Purified**

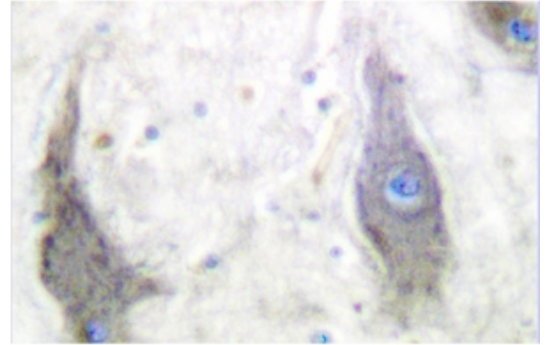
<b>Alternate names:</b>	GLUT-1, Glucose Transporter 1, Glucose transporter type 1, Glucose transporter type 1 erythrocyte/brain, HepG2 glucose transporter, Solute carrier family 2 facilitated glucose transporter member 1
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Glucose is fundamental to the metabolism of mammalian cells. Its passage across cell membranes is mediated by a family of transporters termed glucose transporters or Gluts. In adipose and muscle tissue, insulin stimulates a rapid and dramatic increase in glucose uptake, which is largely due to the redistribution of the insulin-inducible glucose transporter, Glut4. In response to insulin, Glut4 is quickly shuttled from an intracellular storage site to the plasma membrane where it binds glucose. In contrast, the ubiquitously expressed glucose transporter Glut1 is constitutively targeted to the plasma membrane, and shows a much less dramatic translocation in response to insulin. Glut1 and Glut4 are twelve pass transmembrane proteins (12TM) whose carboxytermini may dictate their cellular localization. Aberrant Glut4 expression has been suggested to contribute to such maladies as obesity and diabetes. Glut4 null mice have shown that while functional Glut4 protein is not required for maintaining normal glucose levels, it is necessary for sustained growth, normal cellular glucose, fat metabolism and prolonged longevity.
<b>Uniprot ID:</b>	<a href="#">P11166</a>
<b>NCBI:</b>	<a href="#">NP_006507.2</a>
<b>GeneID:</b>	<a href="#">6513</a>
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	Synthetic peptide, corresponding to amino acids 441-490 of Human Glut 1.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction (>95% pure by SDS-PAGE). <b>Purification:</b> Affinity Chromatography using epitope-specific immunogen. <b>Buffer System:</b> Phosphate Buffered Saline (PBS), pH~7.2 <b>Preservatives:</b> 0.05% Sodium Azide
<b>Applications:</b>	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	~55 kDa
<b>Specificity:</b>	This antibody detects endogenous levels of GLUT1 protein.
<b>Species Reactivity:</b>	<b>Tested:</b> Human. <b>Expected from sequence similarity:</b> Mouse and Rat.

**Storage:**

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
 Avoid repeated freezing and thawing.  
 Shelf life: One year from despatch.

**Pictures:**

**Immunohistochemistry (IHC)** analysis of GLUT1 antibody (Cat.-No.: AP06144PU-N) in paraffin-embedded human brain tissue.



**Western blot (WB)** analysis of GLUT1 antibody (Cat.-No.: AP06144PU-N) in extracts from Jurkat cells.

