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Product datasheet for AP06144PU-M

Glucose Transporter GLUT1 (SLC2A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	**Western blot:** 1/500-1/1000. **Immunohistochemistry on paraffin sections:** 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 441-490 of Human Glut 1.
Specificity:	This antibody detects endogenous levels of GLUT1 protein.
Formulation:	Phosphate Buffered Saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (>95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Predicted Protein Size:	~55 kDa
Gene Name:	solute carrier family 2 member 1
Database Link:	Entrez Gene 6513 Human P11166

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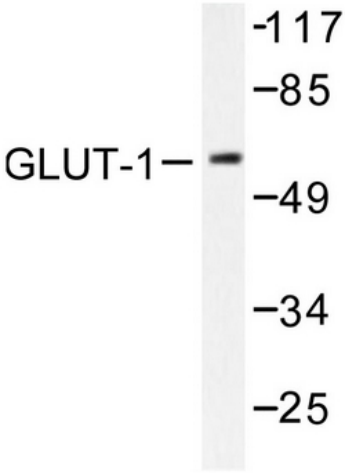
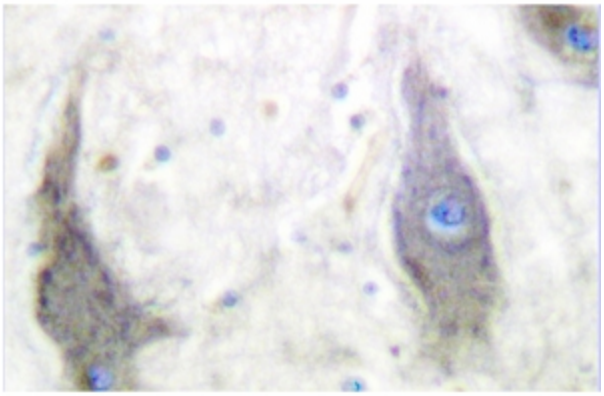
Background: Glucose is fundamental to the metabolism of mammalian cells. Its passage across cell membranes is mediated by a family of transporters termed glucose transporters or Gluts. In adipose and muscle tissue, insulin stimulates a rapid and dramatic increase in glucose uptake, which is largely due 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.

Synonyms: GLUT-1, Glucose Transporter 1, Glucose transporter type 1, HepG2 glucose transporter

Product images:



Western blot (WB) analysis of GLUT1 antibody in extracts from Jurkat cells.



Immunohistochemistry (IHC) analysis of GLUT1 antibody in paraffin-embedded human brain tissue.