

Datasheet for ABIN265442

anti-GLUT1 antibody**2** Images[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	GLUT1 (SLC2A1)
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GLUT1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Specificity:	This antibody detects endogenous levels of GLUT1 protein.
Cross-Reactivity (Details):	Species reactivity (expected):Mouse and Rat. Species reactivity (tested):Human.
Purification:	Affinity Chromatography using epitope-specific immunogen.

Target Details

Target:	GLUT1 (SLC2A1)
Alternative Name:	GLUT1 / SLC2A1 (SLC2A1 Products)
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,

Target Details

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, Glucose transporter type 1 erythrocyte/brain, HepG2 glucose transporter, Solute carrier family 2 facilitated glucose transporter member 1

Molecular Weight: approx. 55 kDa

Gene ID: 6513

NCBI Accession: [NP_006507](#)

UniProt: [P11166](#)

Pathways: [Sensory Perception of Sound](#), [Dicarboxylic Acid Transport](#), [Warburg Effect](#)

Application Details

Application Notes: ELISA: 1/5000approx. 1/40000. Western Blot: 1/500approx. 1/1000. Immunohistochemistry: 1/50approx. 1/200.
Other applications not tested.
Optimal dilutions are dependent on conditions and should be determined by the user.

Restrictions: For Research Use only

Handling

Concentration: 1.0 mg/mL

Buffer: Phosphate Buffered Saline (PBS), pH ~7.2, 0.05 % Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer.

Images

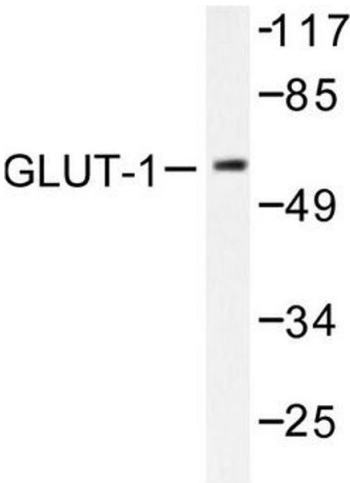


Image 1.

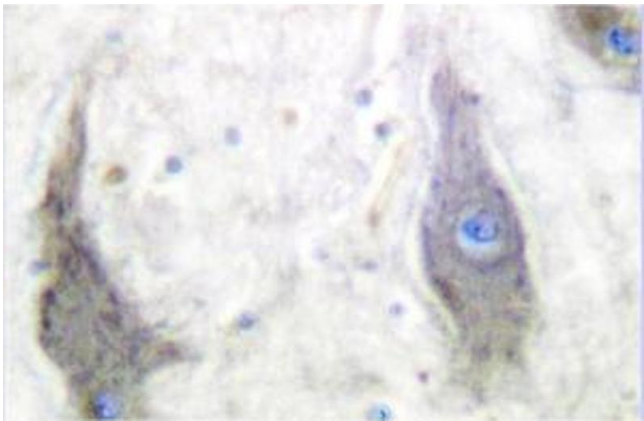


Image 2.