

Recombinant Anti-GLUT1 Rabbit mAb

Catalog # AP94847

Specification

Recombinant Anti-GLUT1 Rabbit mAb - Product Information

Application WB, IHC
Primary Accession P11166
Reactivity Human, Mouse, Rat
Host Rabbit

Host Rabbit Clonality Monoclonal

Antigen Region Recombinant fusion protein of human

GLUT1.

Recombinant Anti-GLUT1 Rabbit mAb - Additional Information

Gene ID 6513

Other Names

GLUT1; Solute carrier family 2, facilitated glucose transporter member 1; Glucose transporter type 1, erythrocyte/brain; GLUT-1; HepG2 glucose transporter

Dilution

WB~~1:500 - 1:1000 IHC~~1:100~500

Format

The antibody was purified by immunogen affinity chromatography. iquid in PBS, pH 7.3, 50% glycerol, and 0.05% Proclin300.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Recombinant Anti-GLUT1 Rabbit mAb - Protein Information

Name SLC2A1 (HGNC:11005)

Function

Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake (PubMed:10227690, PubMed:10954735, PubMed:18245775, PubMed:19449892, PubMed:25982116, PubMed:27078104, PubMed:32860739). Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses (PubMed:18245775, PubMed:18245775



target="_blank">19449892). Most important energy carrier of the brain: present at the blood-brain barrier and assures the energy- independent, facilitative transport of glucose into the brain (PubMed:10227690). In association with BSG and NXNL1, promotes retinal cone survival by increasing glucose uptake into photoreceptors (By similarity). Required for mesendoderm differentiation (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Melanosome. Photoreceptor inner segment {ECO:0000250|UniProtKB:P17809}. Note=Localizes primarily at the cell surface (PubMed:18245775, PubMed:19449892, PubMed:23219802, PubMed:24847886, PubMed:25982116). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065)

Tissue Location

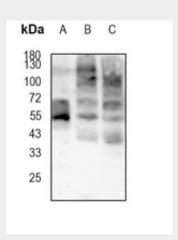
Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues

Recombinant Anti-GLUT1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Recombinant Anti-GLUT1 Rabbit mAb - Images



Western blot analysis of GLUT1 expression in Hela (A), mouse brain (B), rat brain (C) whole cell lysates. (Predicted band size: 54 kD; Observed band size: 54 kD)





Immunohistochemical analysis of GLUT1 staining in human lung formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.