

Anti-GLUT9 Antibody

Catalog # ABO11478

Specification

Anti-GLUT9 Antibody - Product Information

ApplicationWBPrimary AccessionO9NRMOHostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Solute carrier family 2, facilitated glucose transporter member9(SLC2A9) detection. Tested with WB in Human;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GLUT9 Antibody - Additional Information

Gene ID 56606

Other Names Solute carrier family 2, facilitated glucose transporter member 9, Glucose transporter type 9, GLUT-9, SLC2A9, GLUT9

Calculated MW 58702 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization Isoform 1: Basolateral cell membrane ; Multi- pass membrane protein .

Tissue Specificity

Most strongly expressed in basolateral membranes of proximal renal tubular cells, liver and placenta. Also detected in lung, blood leukocytes, heart skeletal muscle and chondrocytes from articular cartilage. Isoform 2 is only detected in the apical membranes of polarized renal tubular cells and placenta. Isoform 1 and isoform 2 are detected in kidney membrane (at protein level).

Protein Name Solute carrier family 2, facilitated glucose transporter member 9

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human GLUT9(503-521aa



KNRTYAEISQAFSKRNKAY), different from the related mouse and rat sequences by three amino acids.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-GLUT9 Antibody - Protein Information

Name SLC2A9 {ECO:0000303|PubMed:10860667, ECO:0000312|HGNC:HGNC:13446}

Function

High-capacity urate transporter, which may play a role in the urate reabsorption by proximal tubules (PubMed:18327257, PubMed:<a href="http://www.uniprot.org/citations/18701466"

target="_blank">18327257, PubMed:22647630, PubMed:28083649, PubMed:28083649, PubMed:36749388). May have a residual high-affinity, low-capacity glucose and fructose transporter activity (PubMed:18327257, PubMed:18327257, PubMed:18701466, PubMed:18701466, PubMed:18701466, PubMed:18842065). Transports urate at rates 45- to 60-fold faster than glucose (PubMed:18842065). Does not transport galactose (PubMed:28083649). May mediate small uptake of adenine but not of other nucleobases (PubMed:22647630).

Cellular Location

[Isoform 1]: Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

Tissue Location

[Isoform 1]: Most strongly expressed in basolateral membranes of proximal renal tubular cells, liver and placenta. Also detected in lung, blood leukocytes, heart skeletal muscle and chondrocytes from articular cartilage. Detected in kidney membrane (at protein level).

Anti-GLUT9 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-GLUT9 Antibody - Images

116KD - ^{1 2 3} 97KD -58KD -40KD -29KD -20KD -14KD -

Anti- GLUT9 antibody, ABO11478, Western blottingAll lanes: Anti GLUT9 (ABO11478) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 59KDObserved bind size: 59KD

Anti-GLUT9 Antibody - Background

Solute carrier family 2, facilitated glucose transporter member 9, also known as SLC2A9, is a protein that in humans is encoded by the SLC2A9 gene. This gene encodes a member of the SLC2A facilitative glucose transporter family. Members of this family play a significant role in maintaining glucose homeostasis. This gene is mapped to 4p16.1. The encoded protein may play a role in the development and survival of chondrocytes in cartilage matrices. This gene transports urate and fructose. It may have a role in the urate reabsorption by proximal tubules. This gene also transports glucose at low rate.