

## **Anti-Glucose Transporter 8 Antibody**

**Catalog # ABO11477** 

## **Specification**

# **Anti-Glucose Transporter 8 Antibody - Product Information**

Application WB, IHC
Primary Accession O9JIF3
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Solute carrier family 2, facilitated glucose transporter member 8(SLC2A8) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

#### Reconstitution

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

## **Anti-Glucose Transporter 8 Antibody - Additional Information**

**Gene ID** 56017

#### **Other Names**

Solute carrier family 2, facilitated glucose transporter member 8, Glucose transporter type 8, GLUT-8, Glucose transporter type X1, Slc2a8, Glut8, GlutX1

# Calculated MW 51508 MW KDa

## **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat<br/>br>Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse<br/>cbr>

#### **Subcellular Localization**

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Principally intracellular. May move between intracellular vesicles and the plasma membrane. The dileucine internalization motif is critical for intracellular sequestration (By similarity). Insulin induces a change in the intracellular localization and gives rise to insertion in the plasma membrane.

## **Tissue Specificity**

Highest level of expression in placenta and testis. Highly expressed in adult and pubertal testis, but not prepubertal testis. Lower levels of expression in brain, liver, heart, kidney, fat and skeletal muscle.

## **Protein Name**

Solute carrier family 2, facilitated glucose transporter member 8

## **Contents**



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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 mouse Glucose Transporter 8(461-477aa ETKGRTLEQVTAHFEGR), different from the related rat sequence by one amino acid, and from the related human sequence by two 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-Glucose Transporter 8 Antibody - Protein Information**

Name Slc2a8 {ECO:0000312|MGI:MGI:1860103}

#### **Function**

Insulin-regulated facilitative hexose transporter that mediates the transport of glucose and fructose (PubMed:<a href="http://www.uniprot.org/citations/10821868" target="\_blank">10821868</a>, PubMed:<a href="http://www.uniprot.org/citations/10860996" target="\_blank">10860996</a>, PubMed:<a href="http://www.uniprot.org/citations/23396969" target="\_blank">23396969</a>). Facilitates hepatic influx of dietary trehalose, which in turn inhibits glucose and fructose influx triggering a starvation signal and hepatic autophagy through activation of AMPK and ULK1 (PubMed:<a href="http://www.uniprot.org/citations/27922102" target="\_blank">27922102</a>). Also able to mediate the transport of dehydroascorbate (PubMed:<a href="http://www.uniprot.org/citations/23396969" target=" blank">23396969</a>).

## **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9JJZ1}; Multi-pass membrane protein. Note=Principally intracellular. May move between intracellular vesicles and the plasma membrane. The dileucine internalization motif is critical for intracellular sequestration {ECO:0000250|UniProtKB:Q9JJZ1}

## **Tissue Location**

Highest level of expression in placenta and testis. Highly expressed in adult and pubertal testis, but not prepubertal testis. Lower levels of expression in brain, liver, heart, kidney, fat and skeletal muscle.

# **Anti-Glucose Transporter 8 Antibody - Protocols**

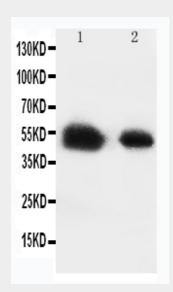
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

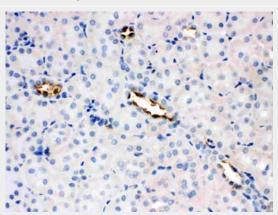


- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

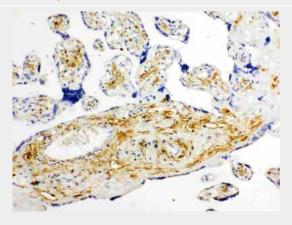
# **Anti-Glucose Transporter 8 Antibody - Images**



Anti-Glucose Transporter 8 antibody, ABO11477, Western blottingLane 1: Rat Testis Tissue LysateLane 2: Human Placenta Tissue Lysate



Anti-Glucose Transporter 8 antibody, ABO11477, IHC(P)IHC(P): Rat Kidney Tissue



Anti-Glucose Transporter 8 antibody, ABO11477, IHC(P)IHC(P): Human Placenta Tissue





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# **Anti-Glucose Transporter 8 Antibody - Background**

Solute carrier family 2, facilitated glucose transporter member 8, also known as SLC2A8, is the eighth member of glucose transporter superfamily. It is characterized by the presence of two leucine residues in its N-terminal intracellular domain, which influences intracellular trafficking. This gene is mapped to 9q33.3. Based on sequence comparison, the glucose transporters are grouped into three classes and this gene is a member of class II. It may act as the insulin-regulated facilitative glucose transporter. This gene binds cytochalasin B in a glucose-inhibitable manner. The binds seems to be a dual-specific sugar transporter as it is inhibitable by fructose.