

Anti-GLUT12 Antibody

Catalog # ABO11479

Specification

Anti-GLUT12 Antibody - Product Information

Application WB
Primary Accession Q8TD20
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Solute carrier family 2, facilitated glucose transporter member 12(SLC2A12) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

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

Anti-GLUT12 Antibody - Additional Information

Gene ID 154091

Other Names

Solute carrier family 2, facilitated glucose transporter member 12, Glucose transporter type 12, GLUT-12, SLC2A12, GLUT12, GLUT8

Calculated MW 66966 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Endomembrane system; Multi- pass membrane protein. Cytoplasm, perinuclear region. Localizes primarily perinuclear region in the absence of insulin.

Tissue Specificity

Predominantly expressed in skeletal muscle, heart and prostate, with lower levels in brain, placenta and kidney. .

Protein Name

Solute carrier family 2, facilitated glucose transporter member 12

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 in the middle region of human GLUT12(256-272aa SLKDEYQYSFWDLFRSK), identical to the related mouse and rat sequences.



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.

Sequence Similarities

Belongs to the major facilitator superfamily. Sugar transporter (TC 2.A.1.1) family. Glucose transporter subfamily.

Anti-GLUT12 Antibody - Protein Information

Name SLC2A12 (<u>HGNC:18067</u>)

Function

Insulin-independent facilitative glucose transporter.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8BFW9}; Multi-pass membrane protein. Endomembrane system {ECO:0000250|UniProtKB:Q5J316}; Multi-pass membrane protein. Cytoplasm, perinuclear region. Note=Localizes primarily perinuclear region in the absence of insulin.

Tissue Location

Predominantly expressed in skeletal muscle, heart and prostate, with lower levels in brain, placenta and kidney

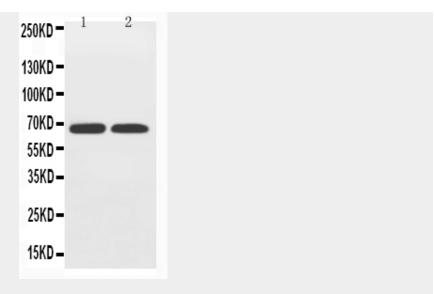
Anti-GLUT12 Antibody - Protocols

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-GLUT12 Antibody - Images





Anti-GLUT12 antibody, ABO11479, Western blottingLane 1: PC-12 Cell LysateLane 2: A549 Cell Lysate

Anti-GLUT12 Antibody - Background

Solute carrier family 2, facilitated glucose transporter member 12, also known as SLC2A12, is a protein that in humans is encoded by the SLC2A12 gene. SLC2A12 belongs to a family of transporters that catalyze the uptake of sugars through facilitated diffusion. This family of transporters shows conservation of 12 transmembrane helices as well as functionally significant amino acid residues. By genomic sequence analysis, this gene is mapped to chromosome 6q23.2. SLC2A12 was detected in a perinuclear location in MCF7 cells in the absence of insulin; however, SLC2A12 redistributed to the plasma membrane of MCF7 cells grown continuously in the presence of insulin. This gene acts as facilitative glucose transporter.