

GLUT4 Blocking Peptide

Catalog # PBV10457b

Specification

GLUT4 Blocking Peptide - Product Information

Primary Accession P14142
Other Accession EDL12495.1
Gene ID 20528
Calculated MW 54755

GLUT4 Blocking Peptide - Additional Information

Gene ID 20528

Application & Usage The peptide is used for blocking the

antibody activity of GLUT4. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for

30-60 minutes at 37°C.

Other Names

Solute carrier family 2, facilitated glucose transporter member 4, GT2, Glucose transporter type 4, insulin-responsive, GLUT-4, Slc2a4, Glut-4, Glut4

Target/Specificity

GLUT4

Formulation

 $50 \mu g$ (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

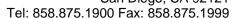
GLUT4 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

GLUT4 Blocking Peptide - Protein Information

Name Slc2a4 {ECO:0000312|MGI:MGI:95758}

Function

Insulin-regulated facilitative glucose transporter, which plays a key role in removal of glucose from circulation (PubMed:http://www.uniprot.org/citations/26240143"





target=" blank">26240143, PubMed:26629404). Response to insulin is regulated by its intracellular localization: in the absence of insulin, it is efficiently retained intracellularly within storage compartments in muscle and fat cells (PubMed: 26240143, PubMed:26629404). Upon insulin stimulation, translocates from these compartments to the cell surface where it transports glucose from the extracellular milieu into the cell (PubMed:26240143, PubMed:26629404).

Cellular Location

Cell membrane; Multi-pass membrane protein. Endomembrane system; Multi-pass membrane protein. Cytoplasm, perinuclear region. Note=Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized (PubMed:26629404, PubMed:26240143, PubMed:27354378). The dileucine internalization motif is critical for intracellular sequestration (PubMed:26240143, PubMed:26629404). Insulin stimulation induces translocation to the cell membrane (PubMed:27739494).

Tissue Location

Expressed in skeletal and cardiac muscles (PubMed:2654938, PubMed:26240143). Expressed in brown and white adipose tissues (PubMed:2654938, PubMed:26240143)

GLUT4 Blocking Peptide - Protocols

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

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

GLUT4 Blocking Peptide - Images