

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 µg (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:

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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GLUT4 Blocking Peptide - Images