

GLUT4 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10733**Specification**

GLUT4 Antibody - Product Information

Application	WB
Primary Accession	P14142
Other Accession	EDL12495.1
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54755

GLUT4 Antibody - Additional Information**Gene ID** 20528

Positive Control
Application & Usage

3T3 cell lysate, rat kidney tissue lysate
Western blot analysis (1-4 µg/ml).
However, the optimal conditions should be
determined individually. 3T3 cell lysate can
be used as a positive control.

Other Names

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

Target/Specificity

GLUT4

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

200 µg (0.5 mg/ml) affinity purified rabbit anti-GLUT4 polyclonal antibody in phosphate buffered
saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

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

GLUT4 Antibody - 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: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 Antibody - 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 Antibody - Images

GLUT4 Antibody - Background

Insulin stimulates glucose uptake in the muscles and adipose tissues by activating GLUT4 (Glucose Transporter Type 4). GLUT 4 is a transmembrane protein that facilitates glucose transport from storage sites to cell surface. Human insulin resistance involves a defect in GLUT4 that leads to accumulation in a dense membrane compartment from which insulin is unable to recruit GLUT4 to

the cell surface.