

SLC2A4 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16319c

Specification

SLC2A4 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [P14672](#)

SLC2A4 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 6517

Other Names

Solute carrier family 2, facilitated glucose transporter member 4, Glucose transporter type 4, insulin-responsive, GLUT-4, SLC2A4, GLUT4

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC2A4 Antibody (Center) Blocking Peptide - Protein Information

Name SLC2A4 ([HGNC:11009](#))

Function

Insulin-regulated facilitative glucose transporter, which plays a key role in removal of glucose from circulation. 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. Upon insulin stimulation, translocates from these compartments to the cell surface where it transports glucose from the extracellular milieu into the cell.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P14142}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P14142} Endomembrane system; Multi-pass membrane protein. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P14142}. Note=Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized (PubMed:8300557). The dileucine internalization motif is critical for intracellular sequestration (PubMed:8300557). Insulin stimulation induces translocation to the cell membrane (By similarity) {ECO:0000250|UniProtKB:P14142, ECO:0000269|PubMed:8300557}

Tissue Location

Skeletal and cardiac muscles; brown and white fat.

SLC2A4 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC2A4 Antibody (Center) Blocking Peptide - Images

SLC2A4 Antibody (Center) Blocking Peptide - Background

SLC2A4 is a member of the solute carrier family 2(facilitated glucose transporter) family and encodes a protein that functions as an insulin-regulated facilitative glucose transporter. In the absence of insulin, this integral membrane protein is sequestered within the cells of muscle and adipose tissue. Within minutes of insulin stimulation, the protein moves to the cell surface and begins to transport glucose across the cell membrane.

SLC2A4 Antibody (Center) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Lauritzen, H.P., et al. Am. J. Physiol. Endocrinol. Metab. 299 (2), E169-E179 (2010) : Bogan, J.S., et al. Curr. Opin. Cell Biol. 22(4):506-512(2010) Kohan, K., et al. Reproduction 140(1):123-131(2010) Nair, A.K., et al. PLoS ONE 5 (7), E11444 (2010) :