

Anti-GLUT4 Picoband Antibody

Catalog # ABO11815

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	P14672
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Solute carrier family 2, facilitated glucose transporter member 4(SLC2A4) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	54787
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse, Rat, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Rat, Human
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Endomembrane system ; Multi-pass membrane protein . Cytoplasm, perinuclear region . Localizes primarily to the perinuclear region, undergoing continued recycling to the plasma membrane where it is rapidly reinternalized. The dileucine internalization motif is critical for intracellular sequestration.
Tissue Specificity	Skeletal and cardiac muscles; brown and white fat.
Source	Eukaryota
Protein Name	Solute carrier family 2, facilitated glucose transporter member 4
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human GLUT4 recombinant protein (Position: N333-D509). Human GLUT4 shares 97% amino acid (aa) sequence identity with mouse GLUT4.

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.

Protein Information

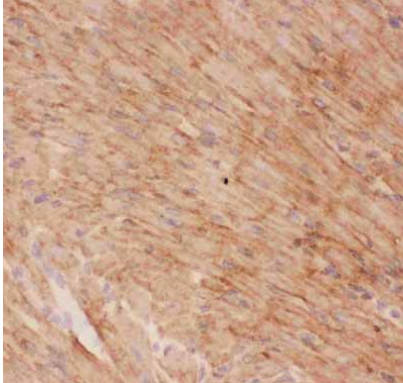
Name	SLC2A4 (HGNC:11009)
Function	Insulin-regulated facilitative glucose transporter, which plays a key role in removal of glucose from circulation. Response to insulin is regulated by its intracellular localization: in the absence of insulin, it is efficiently retained intracellularly within storage 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.

Background

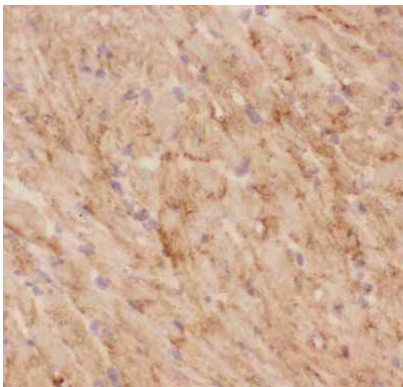
GLUT4, also known as SLC2A4 or solute carrier family 2 (facilitated glucose transporter) member 4, is a protein that in humans is encoded by the GLUT4 gene. It is mapped to 17p13.1. This gene is a member of the solute carrier family 2 (facilitated glucose transporter) family and encodes a protein that 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. Mutations in this gene have been associated with noninsulin-dependent diabetes mellitus (NIDDM).

Images

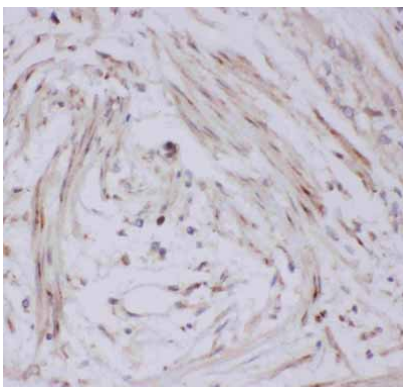
Anti-GLUT4 Picoband antibody, ABO11815-1.jpgAll lanes:
Anti GLUT4 (ABO11815) at 0.5ug/mlLane 1: Rat Cardiac
MuscleTissue Lysate at 50ugLane 2: Rat Skeletal
MuscleTissue Lysate at 50ugPredicted bind size:
55KDObserved bind size: 55KD



Anti-GLUT4 Picoband antibody, ABO11815-2.JPGIHC(F):
Rat Cardiac Muscle Tissue

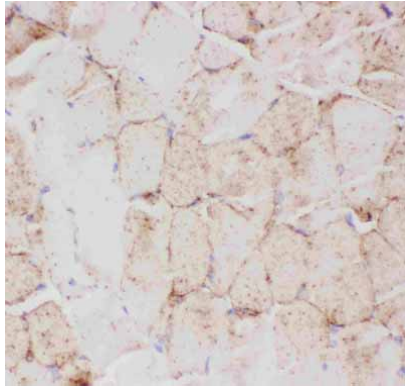
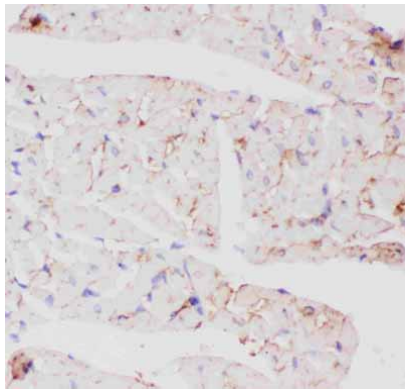


Anti-GLUT4 Picoband antibody, ABO11815-3.JPGIHC(F):
Mouse Cardiac Muscle Tissue



Anti-GLUT4 Picoband antibody, ABO11815-4.JPGIHC(P):
Human Intestinal Cancer Tissue

Anti-GLUT4 Picoband antibody, ABO11815-5.JPGIHC(P):
Rat Cardiac Muscle Tissue



Anti-GLUT4 Picoband antibody, ABO11815-6.JPGIHC(P):
Mouse Skeletal Muscle Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.