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Anti-GLUT4 Picoband Antibody

Catalog # ABO11815

Specification

Anti-GLUT4 Picoband Antibody - 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.

Anti-GLUT4 Picoband Antibody - 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 MW KDa

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.

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.

Anti-GLUT4 Picoband Antibody - 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.

Anti-GLUT4 Picoband 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 Cytomety

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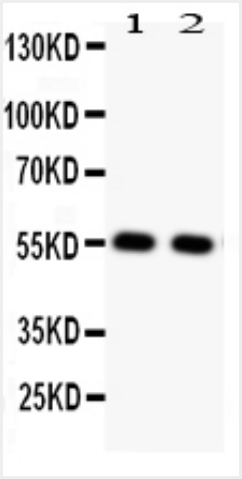
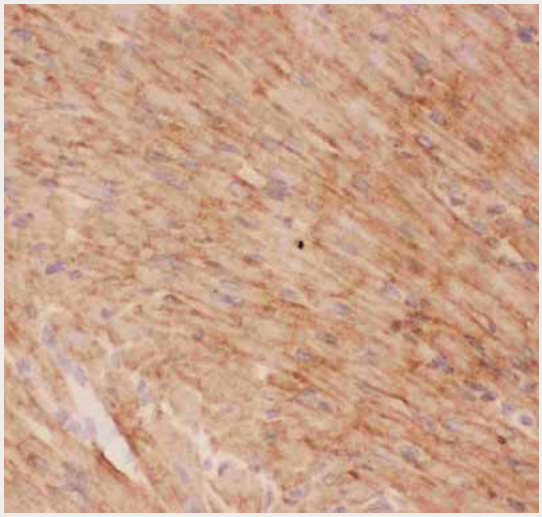
- Cell Culture

Anti-GLUT4 Picoband Antibody - 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

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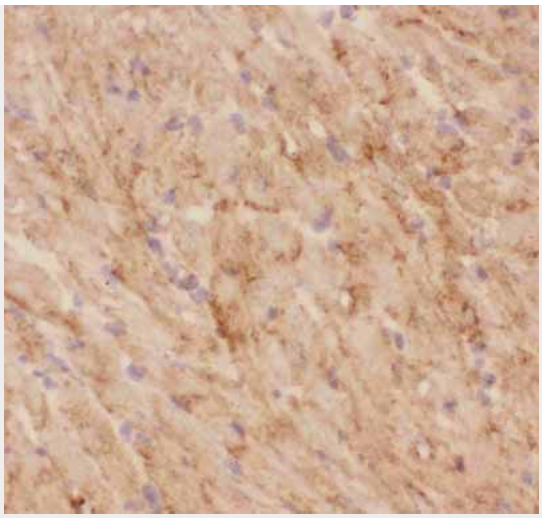
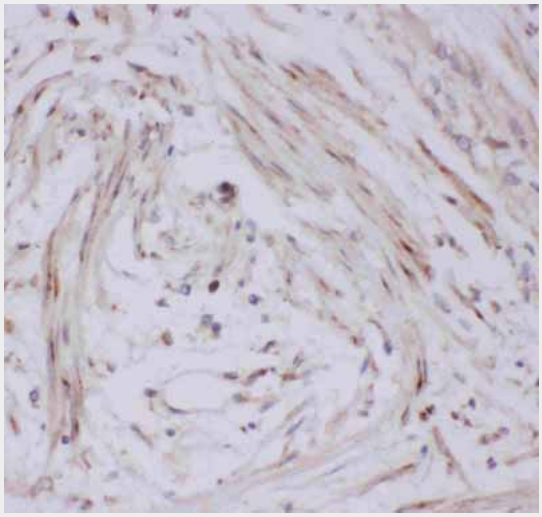
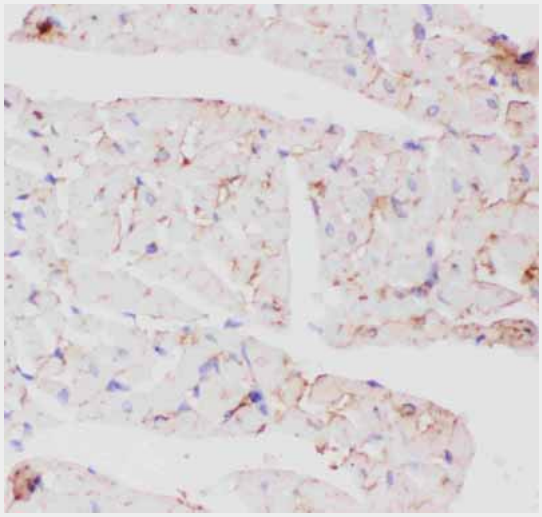


Anti-GLUT4 Picoband antibody, ABO11815-3.JPGIHC(F): Mouse Cardiac Muscle Tissue



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



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

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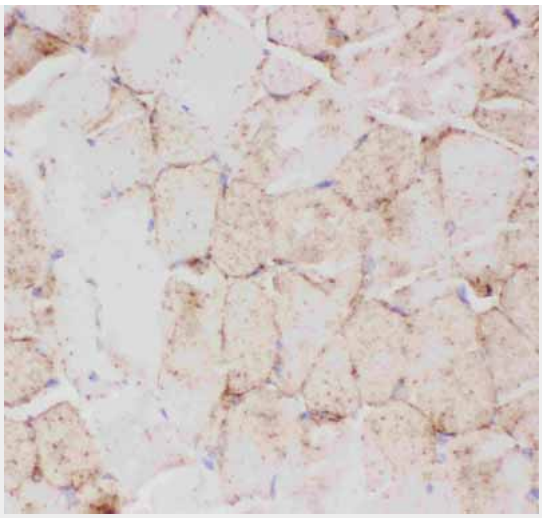

Anti-GLUT4 Picoband antibody, ABO11815-6.JPGIHC(P): Mouse Skeletal Muscle Tissue

Anti-GLUT4 Picoband Antibody - 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).