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Anti-GLUT4 Antibody

Catalog # AP60050

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P14672
Reactivity	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54787

Additional Information

Gene ID	6517
Other Names	GLUT4; Solute carrier family 2, facilitated glucose transporter member 4; Glucose transporter type 4, insulin-responsive; GLUT-4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GLUT4. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

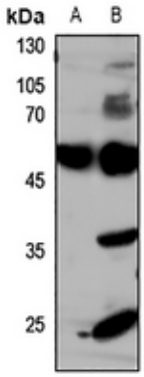
Protein Information

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

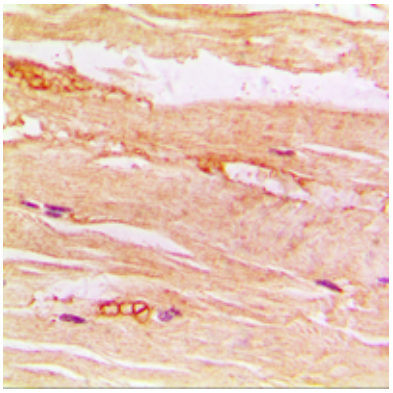
(PubMed:8300557). Insulin stimulation induces translocation to the cell membrane (By similarity) {ECO:0000250|UniProtKB:P14142, ECO:0000269|PubMed:8300557}

Tissue Location Skeletal and cardiac muscles; brown and white fat.

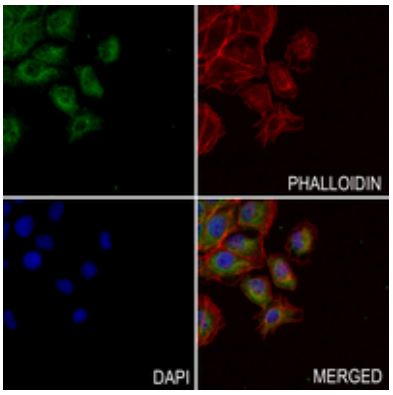
Images



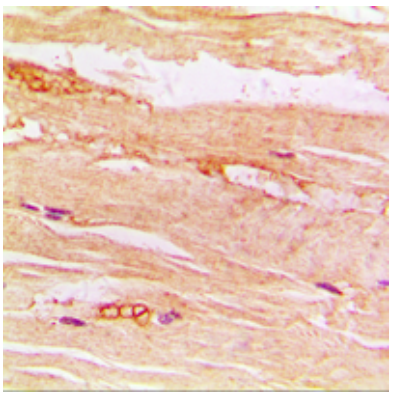
Western blot analysis of GLUT4 expression in Hela (A), H460 (B) whole cell lysates. (Predicted band size: 43; 54 kD; Observed band size: 50 kD)



Immunohistochemical analysis of GLUT4 staining in human muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GLUT4 staining in HuH7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



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