For Research Use Only

GLUT4 Monoclonal antibody

Catalog Number:66846-1-Ig 87 Publications

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Basic Information

Catalog Number:
66846-1-Ig

Size:
2000 μg/ml

Source:
Mouse

Isotype:
IgG2b

Immunogen Catalog Number:
AG15390

GenBank Accession Number:
BC069615

GeneID (NCBI):
6517

UNIPROT ID:
P14672

Full Name:
solute carrier family 2 (facilitated glucose transporter), member 4

Calculated MW:
509 aa, 55 kDa

Observed MW:
48-50 kDa

Purification Method:
Protein A purification

CloneNo.:
3G7C9

Recommended Dilutions:
WB 1:1000-1:3000
IHC 1:50-1:500
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, FC (Intra), ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat, pig

Cited Species:
human, mouse, rat, pig, hamster

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : rat heart tissue, human heart tissue, C2C12 cells, human skeletal muscle tissue, rat skeletal muscle tissue, mouse heart tissue, mouse skeletal muscle tissue, mouse adipose tissue, pig heart tissue

IHC : mouse heart tissue,

IF-P : mouse skeletal muscle tissue,

Background Information

GLUT4 is a member of GLUT family of transmembrane hexose transporters. It is an INS receptor that mediates INS-stimulated glucose transport in fat and muscle where it is predominantly expressed. In response to INS stimulation, GLUT4 experienced translocation from trans-Golgi network to plasma membrane. The impairment of GLUT4 translocation is associated with diabetes.

Notable Publications

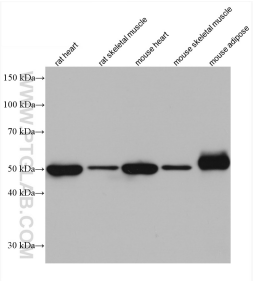
Author	Pubmed ID	Journal	Application
Kosmas Kosmas	36142826	Int J Mol Sci	WB
Miao Chen	32880392	Clin Sci (Lond)	WB
Jie Yao	36048765	Autophagy	WB

Storage

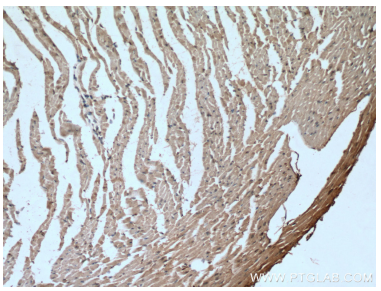
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

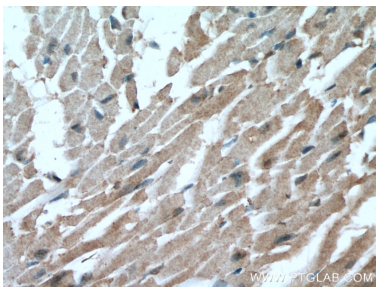
Selected Validation Data



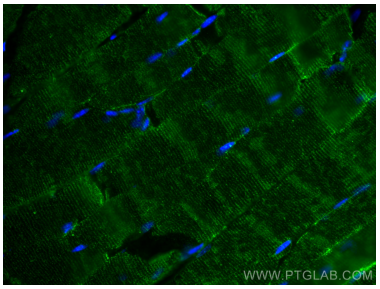
Various lysates were subjected to SDS PAGE followed by western blot with 66846-1-Ig (GLUT4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



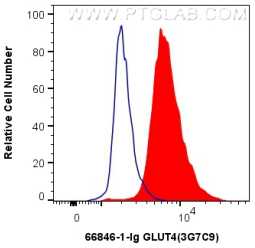
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse skeletal muscle tissue using GLUT4 antibody (66846-1-Ig, Clone: 3G7C9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



1X10^6 HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human GLUT4 (66846-1-Ig, Clone:3G7C9) and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (66360-3-Ig, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).