For Research Use Only

GLUT4 Monoclonal antibody

Catalog Number:66846-1-lg 103 Publications



Basic Information

Catalog Number: GenBank Accession Number: 66846-1-lg BC069615

Concentration: GeneID (NCBI): 6517

Source: UNIPROT ID:

Mouse P14672

Isotype: Full Name:
IgG2b solute carrier family 2 (facilitated

Immunogen Catalog Number: glucose transporter), member 4
AG15390 Calculated MW:

509 aa, 55 kDa

Observed MW: 48-50 kDa

3G7C9
Recommended Dilutions:

Purification Method:

Protein A purification

CloneNo.:

WB 1:1000-1:3000 IHC 1:50-1:500 IF-P 1:200-1:800 IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, 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,

IF/ICC: HeLa cells,

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:

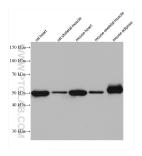
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

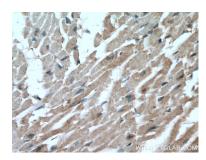
Selected Validation Data



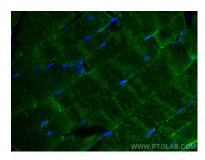
Various lysates were subjected to SDS PAGE followed by western blot with 66846-1-1g (GLUT4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



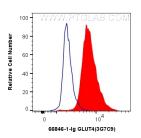
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



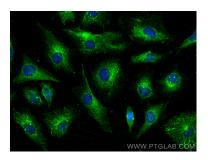
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse skeletal muscle tissue using GLUT4 antibody (66846-1-lg, Clone: 3G7C9) at dilution of 1:400 and CoraLite® 488-Conjugated Affini Pure 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 AffiniPure 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).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GLUT4 antibody (66846-1-lg, Clone: 3G7C9) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Mouse lgG(H+L) (SA00013-1).