

For Research Use Only

# GLUT4 Monoclonal antibody

Catalog Number: 66846-1-Ig **102 Publications**



## Basic Information

<b>Catalog Number:</b> 66846-1-Ig	<b>GenBank Accession Number:</b> BC069615	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1000 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6517	<b>CloneNo.:</b> 3G7C9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P14672	<b>Recommended Dilutions:</b> WB 1:1000-1:3000 IHC 1:50-1:500 IF-P 1:200-1:800
<b>Isotype:</b> IgG2b	<b>Full Name:</b> solute carrier family 2 (facilitated glucose transporter), member 4	
<b>Immunogen Catalog Number:</b> AG15390	<b>Calculated MW:</b> 509 aa, 55 kDa	
	<b>Observed MW:</b> 48-50 kDa	

## 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

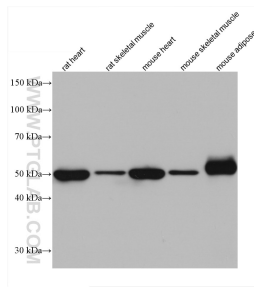
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

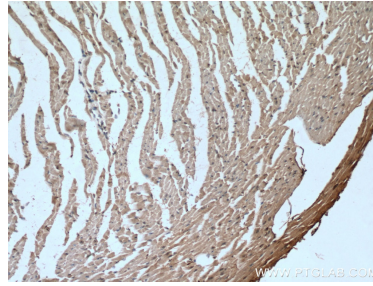
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

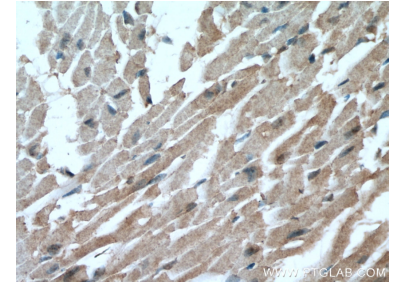
## Selected Validation Data



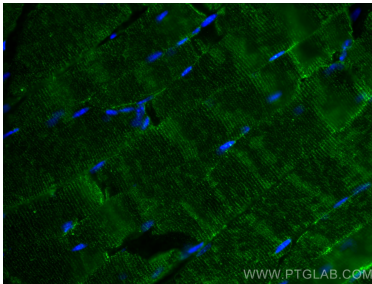
Various lysates were subjected to SDS PAGE followed by western blot with 66846-1-Ig (GLUT4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



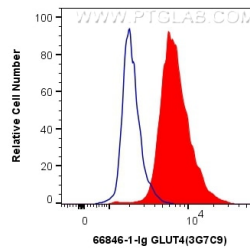
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure Goat Anti-Mouse IgG(H+L).



1X10<sup>6</sup> 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).