### For Research Use Only

# **GLUT4** Monoclonal antibody

Catalog Number:66846-1-lg 104 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 66846-1-19 BC 069615

66846-1-Ig BC069615 Protein A purification
Size: GeneID (NCBI): CloneNo.:

150ul , Concentration: 1000 ug/ml by 6517 3G7C9

Nanodrop; UNIPROT ID:
Source: P14672
Mouse Full Name:

 Isotype:
 solute carrier family 2 (facilitated

 IgG2b
 glucose transporter), member 4

Immunogen Catalog Number: Calculated MW: AG15390 509 aa, 55 kDa

Observed MW: 48-50 kDa

**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

Purification Method:

Recommended Dilutions:

WB 1:1000-1:3000

IHC 1:50-1:500

IF-P 1:200-1:800

IF/ICC 1:200-1:800

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

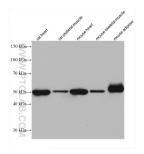
\*\*\* 20ul sizes contain 0.1% BSA

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.

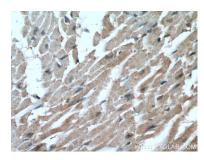
### Selected Validation Data



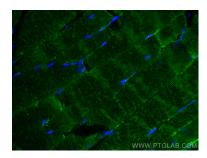
Various lysates were subjected to SDS PAGE followed by western blot with 66846-1-1g (GLUT4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



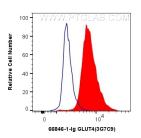
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



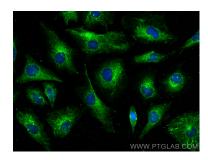
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66846-1-Ig (GLUT4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).