

For Research Use Only

GLUT1 Monoclonal antibody

Catalog Number: 66290-1-Ig

Featured Product

69 Publications



Basic Information

Catalog Number:

66290-1-Ig

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG17108

GenBank Accession Number:

BC121804

GeneID (NCBI):

6513

UNIPROT ID:

P11166

Full Name:

solute carrier family 2 (facilitated glucose transporter), member 1

Calculated MW:

492 aa, 54 kDa

Observed MW:

45-55 kDa

Purification Method:

Protein G purification

CloneNo.:

2A5A2

Recommended Dilutions:

WB: 1:500-1:3000

IHC: 1:1000-1:4000

IF-P: 1:200-1:800

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

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 : HEK-293 cells, NIH/3T3 cells

IHC : human lung cancer tissue, human rectal cancer tissue

IF-P : human lung cancer tissue,

IF/ICC : HeLa cells,

FC (Intra) : Jurkat cells,

Background Information

GLUT1, also known as SLC2A1, is an ubiquitously expressed glucose transporter and responsible for the basal level of glucose uptake in most cell types. Human erythrocytes express the highest level of the GLUT1. Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 1 and type 2. High expression of GLUT1 has been reported to be a reliable immunohistochemical marker for juvenile hemangiomas. GLUT1 protein may appear as two or more distinct forms among 43 kDa to 55 kDa due to the different glycosylation state. And the conversion of highly glycosylated form of GLUT1 to less glycosylated form has been reported to correlate to differentiation (PMID: 8263524, 23302780). 66290-1-Ig antibody can also detect the 130 kDa dimer protein in SDS-PAGE (PMID: 11681785).

Notable Publications

Author	Pubmed ID	Journal	Application
Bin Zhang	32987196	Int J Biochem Cell Biol	WB
Hongshuo Zhang	33101047	Front Physiol	WB, IHC
Scott P Allen	31647549	Brain	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

For technical support and original validation data for this product please contact:

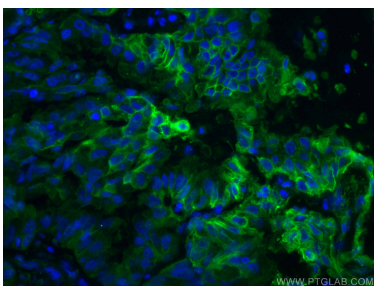
T: 4006900926

E: Proteintech-CN@ptglab.com

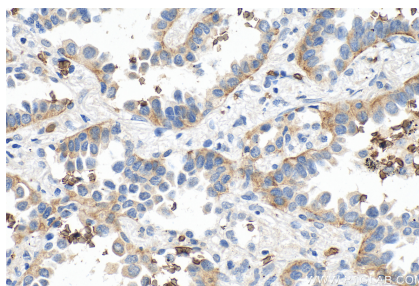
W: ptgcn.com

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

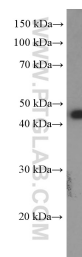
Selected Validation Data



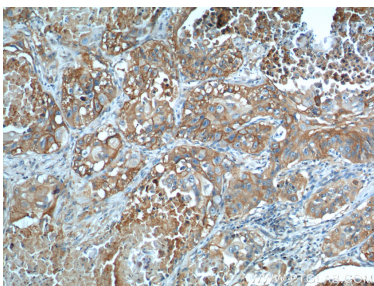
Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using GLUT1 antibody (66290-1-Ig, Clone: 2A5A2) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



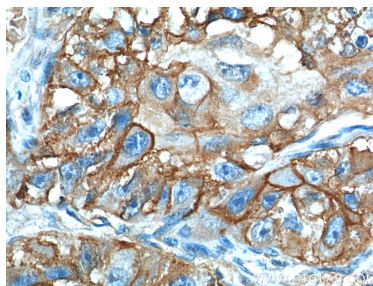
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66290-1-Ig (GLUT1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



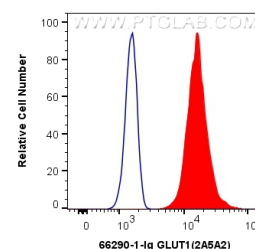
HEK-293 cells were subjected to SDS PAGE followed by western blot with 66290-1-Ig (SLC2A1, GLUT1 Antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



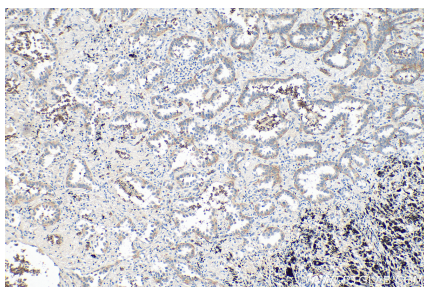
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66290-1-Ig (GLUT1 antibody) at dilution of 1:300 (under 10x lens).



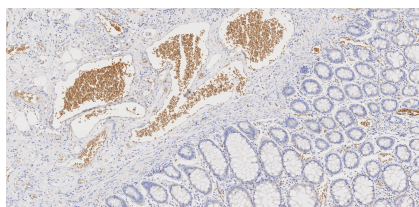
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66290-1-Ig (GLUT1 antibody) at dilution of 1:300 (under 40x lens).



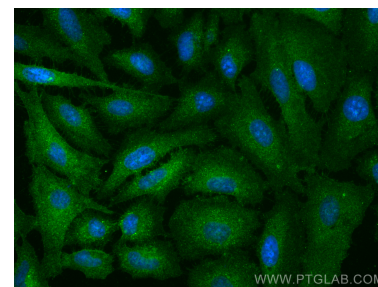
1X10⁶ Jurkat cells were intracellularly stained with 0.4 ug Anti-Human GLUT1 (66290-1-Ig, Clone:2A5A2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66290-1-Ig (GLUT1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human rectal cancer tissue slide using 66290-1-Ig (GLUT1 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GLUT1 antibody (66290-1-Ig, Clone: 2A5A2) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002).