For Research Use Only

## GLUT1 Monoclonal antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

2A5A2

Catalog Number: 66290-1-PBS

**Featured Product** 

**Basic Information** 

Catalog Number:

66290-1-PBS

100ug, Concentration: 1 mg/ml by

Nanodrop:

Mouse

Isotype:

lgG1

Immunogen Catalog Number:

AG17108

45-55 kDa

BC121804

GeneID (NCBI):

**UNIPROT ID:** P11166

Full Name:

Calculated MW:

492 aa. 54 kDa Observed MW:

GenBank Accession Number:

solute carrier family 2 (facilitated

glucose transporter), member 1

**Applications** 

**Tested Applications:** 

WB, IF, FC, IHC, ELISA

Species Specificity: human, mouse

**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).

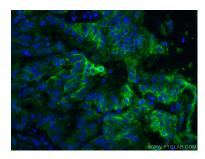
Storage

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

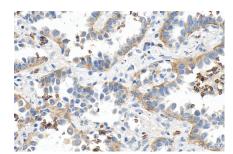
Storage Buffer:

Aliquoting is unnecessary for -20°C storage

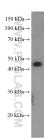
## Selected Validation Data



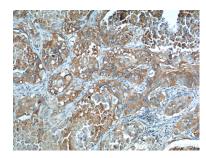
Immunofluorescent analysis of (4% PFA) fixed human lung cancer tissue using GLUT1 antibody (66290-1-1g, Clone: 2A5A2) at dilution of 1:400 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer formulation.



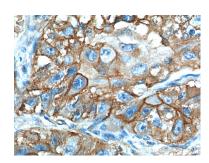
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66290-1-lg (GLUT1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer formulation.



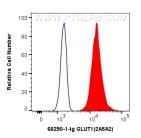
HEK-293 cells were subjected to SDS PAGE followed by western blot with 66290-1-1g (SLC2A1,GLUT1 Antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer formulation



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66290-1-lg (GLUT1 antibody) at dilution of 1:300 (under 10x lens). This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66290-1-lg (GLUT1 antibody) at dilution of 1:300 (under 40x lens). This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer formulation.



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human GLUT1 (66290-1-lg, 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-lg, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 66290-1-PBS in a



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 66290-1-PBS in a different storage buffer