

For Research Use Only

GLUT1 Polyclonal antibody

Catalog Number: 21829-1-AP

Featured Product

239 Publications



Basic Information

Catalog Number:

21829-1-AP

Size:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16282

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:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:8000

IHC 1:2500-1:10000

IF 1:200-1:800

Applications

Tested Applications:

FC, IF/ICC, IHC, WB, ELISA

Cited Applications:

WB, IHC, IF, FC, ChIP

Species Specificity:

human, mouse, rat

Cited Species:

human, goat, rat, mouse, pig, Lasiopodomys brandtii

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

For optimal WB detection with 21829-1-AP, we recommend to avoid boiling the sample after lysis.

Positive Controls:

WB: HT-29 cells, 37°C incubated mouse colon tissue

IHC: rat brain tissue, human lung cancer tissue, human cervical cancer tissue, human breast cancer tissue

IF: HeLa cells,

Background Information

SLC2A1, also known as GLUT1, 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 SLC2A1. Defects in SLC2A1 are the cause of GLUT1 deficiency syndrome type 1 and type 2. High expression of SLC2A1 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). 21829-1-AP antibody can also detect the 25 kDa degradation protein in SDS-PAGE (PMID:18387950).

Notable Publications

Author	Pubmed ID	Journal	Application
Haoran Li	28990097	Mol Med Rep	
Krishna B Singh	31555797	Carcinogenesis	
Teresa W-M Fan	36150727	J Immunol	

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

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

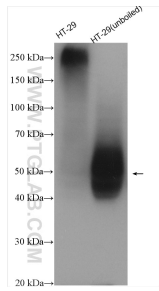
T: 4006900926

E: Proteintech-CN@ptglab.com

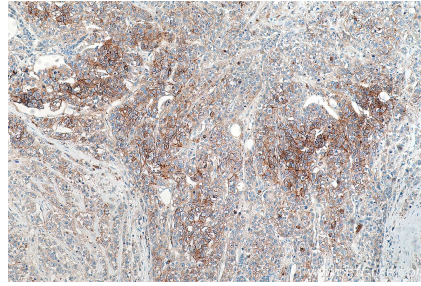
W: ptgcn.com

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

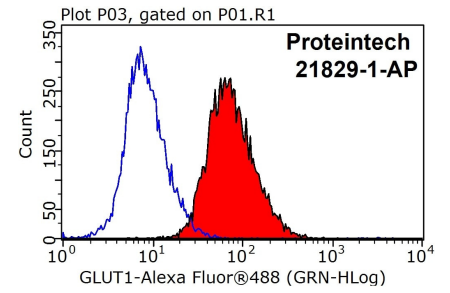
Selected Validation Data



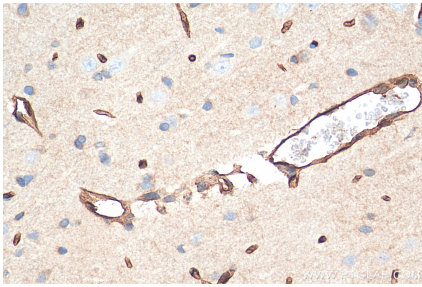
HT-29 cell lysates (boiled or unboiled) were subjected to SDS PAGE followed by western blot with 21829-1-AP (GLUT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



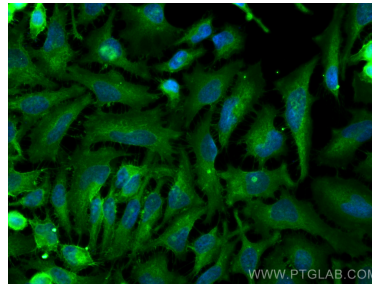
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 21829-1-AP (GLUT1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HeLa cells were stained with 0.2ug SLC2A1, GLUT1 antibody (21829-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 21829-1-AP (GLUT1 antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GLUT1 antibody (21829-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).