For Research Use Only

## SLC1A5/ASCT2 Monoclonal antibody, PBS Only

proteintech Antibodies | ELISA kits | Proteins www.ptglab.com

**Purification Method:** 

Protein G purification

CloneNo.:

1C4E1

Catalog Number: 68540-1-PBS

**Basic Information** 

Catalog Number: GenBank Accession Number:

 68540-1-PBS
 BC000062

 Concentration:
 GeneID (NCBI):

 1mg/ml
 6510

Source: UNIPROT ID: Mouse Q15758
Isotype: Full Name:

IgG1 solute carrier family 1 (neutral amino

Immunogen Catalog Number: acid transporter), member 5

AG16837 Calculated MW:

541 aa, 57 kDa Observed MW: 55-70 kDa

**Applications** 

**Tested Applications:** 

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

Species Specificity:

human

## **Background Information**

SLC1A5 (Solute Carrier Family 1, member 5), also named as ASCT2, a major glutamine transporter belonging to the SLC1 family and localized in the plasma membrane of several body districts. Consistent with the functions exerted by glutamine, SLC1A5 is involved in uptake of essential amino acids, activation of mTORC1 and glutamine-dependent tumor cell survival and growth. SLC1A5 is highly expressed in various malignancies and plays a critical role in the transformation, growth and survival of cancer cells (PMID: 30234109). High SLC1A5 expression is associated with poor prognosis in clear-cell renal cell carcinoma (PMID: 26599282).

Storage

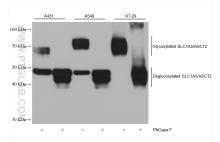
Storage:

Store at -80°C.

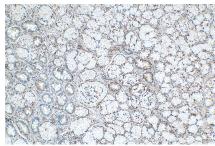
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer: PBS only, pH7.3

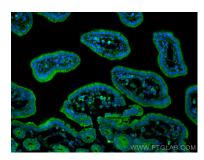
## Selected Validation Data



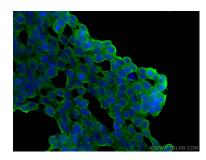
Various lysates were subjected to SDS PAGE followed by western blot with 68540-1-1g (SLC1A5/ASCT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68540-1-PBS in a different storage buffer formulation.



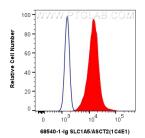
Immunohistochemical analysis of paraffinembedded human stomach cancer tissue slide using 68540-1-Ig (RDRC antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68540-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using SLC1A5/ASCT2 antibody (68540-1-lg, Clone: 1C4E1) at dilution of 1:2000 and Coralite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 68540-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HEK-293 cells using SLC1A5/ASCT2 antibody (68540-1-lg, Clone: 1C4E1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 68540-1-PBS in a different storage buffer formulation.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human SLC1A5/ASCT2 (68540-1-lg, Clone:1C4E1) 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 68540-1-

