

## SLC1A5/ASCT2 Monoclonal antibody

Catalog Number: 68540-1-Ig

## Basic Information

<b>Catalog Number:</b> 68540-1-Ig	<b>GenBank Accession Number:</b> BC000062	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop and 346 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6510	<b>CloneNo.:</b> 1C4E1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q15758	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:1000-1:4000 IF-Fro: 1:1000-1:4000 IF/ICC: 1:200-1:800 FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Isotype:</b> IgG1	<b>Full Name:</b> solute carrier family 1 (neutral amino acid transporter), member 5	
<b>Immunogen Catalog Number:</b> AG16837	<b>Calculated MW:</b> 541 aa, 57 kDa	
	<b>Observed MW:</b> 55-70 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-Fro, FC (Intra), ELISA

**Species Specificity:**  
human

**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:** A431 cells, PNGase F-treated A431 cells, A549 cells, PNGase F-treated A549 cells, HT-29 cells, PNGase F-treated HT-29 cells

**IHC:** human stomach cancer tissue,

**IF-Fro:** mouse small intestine tissue,

**IF/ICC:** HEK-293 cells,

**FC (Intra):** HeLa cells,

## 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

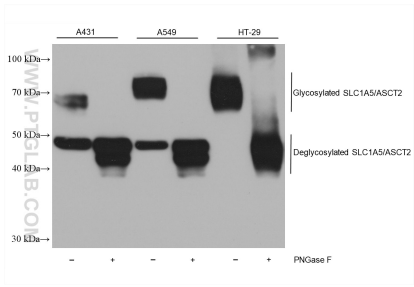
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

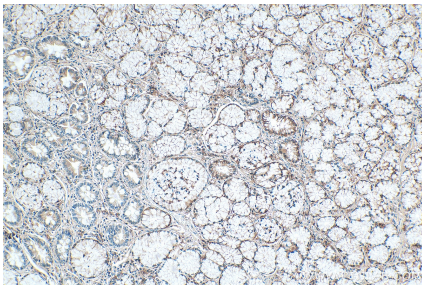
For technical support and original validation data for this product please contact:  
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
 E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
 W: [ptglab.com](http://ptglab.com)

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

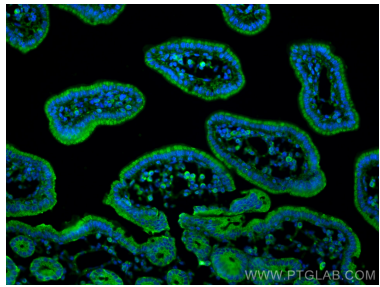
Selected Validation Data



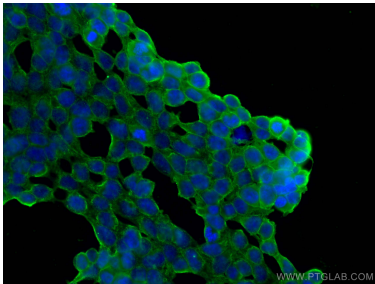
Various lysates were subjected to SDS PAGE followed by western blot with 68540-1-Ig (SLC1A5/ASCT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



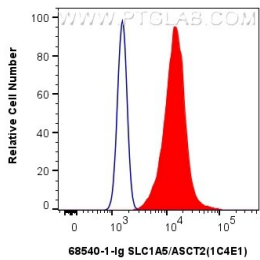
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 68540-1-Ig (RDRC antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using SLC1A5/ASCT2 antibody (68540-1-Ig, Clone: 1C4E1 ) at dilution of 1:2000 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunofluorescent analysis of (-20°C Methanol) fixed HEK-293 cells using SLC1A5/ASCT2 antibody (68540-1-Ig, Clone: 1C4E1 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human SLC1A5/ASCT2 (68540-1-Ig, 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-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).