

For Research Use Only

SLC1A5/ASCT2 Monoclonal antibody



Catalog Number: 68540-1-Ig

Basic Information

Catalog Number: 68540-1-Ig	GenBank Accession Number: BC000062	Purification Method: Protein G purification
Size: 150ul , Concentration: 1000 µg/ml by Nanodrop and 346 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6510	CloneNo.: 1C4E1
Source: Mouse	UNIPROT ID: Q15758	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000
Isotype: IgG1	Full Name: solute carrier family 1 (neutral amino acid transporter), member 5	
Immunogen Catalog Number: AG16837	Calculated MW: 541 aa, 57 kDa	
	Observed MW: 55-70 kDa	

Applications

Tested Applications:

WB, IHC, 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,

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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

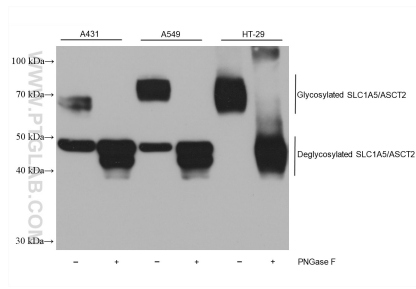
For technical support and original validation data for this product please contact:

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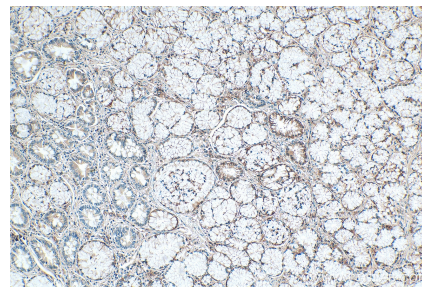
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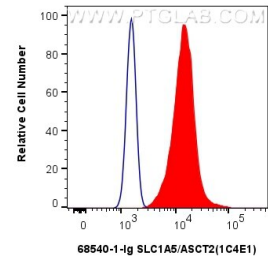
Selected Validation Data



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).



1×10^6 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).