For Research Use Only

SLC1A5/ASCT2 Monoclonal antibody

Catalog Number: 68540-1-Ig



Basic Information

Catalog Number: GenBank Accession Number: **Purification Method:** 68540-1-lg BC000062 Protein G purification

GeneID (NCBI): Size: CloneNo.:

150ul , Concentration: 1000 $\mu g/ml$ by 6510 1C4E1 Nanodrop and 346 µg/ml by Bradford UNIPROT ID: Recommended Dilutions: method using BSA as the standard; Q15758 WB 1:5000-1:50000

Source: IHC 1:1000-1:4000 Full Name: solute carrier family 1 (neutral amino IF/ICC 1:200-1:800 Mouse

Isotype: acid transporter), member 5

lgG1 Calculated MW: Immunogen Catalog Number: 541 aa. 57 kDa AG16837 Observed MW:

55-70 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

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/ICC: HEK-293 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 glutaminedependent 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.

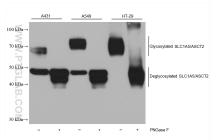
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

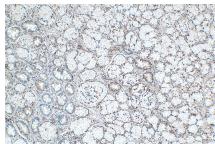
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

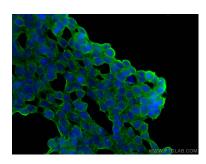
Selected Validation Data



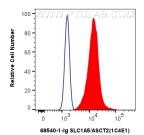
Various lysates were subjected to SDS PAGE followed by western blot with 68540-1-lg (SLC1A5/ASCT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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



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 Affini Pure Goat Anti-Mouse IgG(H+L) (SA00013-1).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human SLC 1A5/ASCT2 (68540-1-Ig, Clone:1C4E1) and CoraLite® 488-Conjugated Affini Pure 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).