For Research Use Only

SLC7A5 Polyclonal antibody, PBS Only

Catalog Number: 28670-1-PBS Featured Product



Basic Information

Catalog Number:

28670-1-PBS

BC039692

Purification Method:

Antigen affinity purification

Size:

GeneID (NCBI): 8140

GenBank Accession Number:

1 mg/ml Source:

UNIPROT ID: Q01650

Rabbit Isotype:

Full Name:

Immunogen Catalog Number:

solute carrier family 7 (cationic amino acid transporter, y+ system),

member 5

AG29164

Calculated MW:

507 aa, 55 kDa

Observed MW:

35-40 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:

human

Background Information

Large neutral amino acid transporter 1 LAT1(also named as SLC7A5) is a sodium- and pH-independent transporter that supplies essential amino acids (e.g., leucine, phenylalanine) to cells. It plays an important role in the bloodbrain barrier (BBB), where it facilitates the transport of thyroid hormones, drugs (e.g., I-DOPA, gabapentin), and metabolites to the brain. In addition, its expression is highly upregulated in various types of human cancers, which are characterized by a high demand for amino acids for growth and proliferation. The LAT1 subunit in humans is a $507\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,mass\,of\,55\,kDa.\,The\,protein\,is\,hydrophobic\,and\,is\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,mass\,of\,55\,kDa.\,The\,protein\,is\,hydrophobic\,and\,is\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,mass\,of\,55\,kDa.\,The\,protein\,is\,hydrophobic\,and\,is\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,mass\,of\,55\,kDa.\,The\,protein\,is\,hydrophobic\,and\,is\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,mass\,of\,55\,kDa.\,The\,protein\,is\,hydrophobic\,and\,is\,amino\,acid-long\,polypeptide\,with\,a\,theoretical\,molecular\,molecula$ predicted to be constituted by 12 transmembrane segments. The apparent molecular mass of the proteins diminished to approximately 35 - 40 kDa.(PMID: 23912240;PMID: 26256001)

Storage

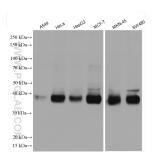
Storage:

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

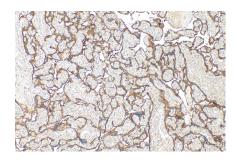
Storage Buffer:

PBS Only

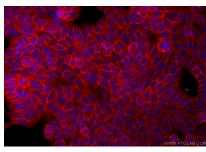
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 28670-1-AP (SLC7A5 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 28670-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 28670-1-AP (SLC7A5 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 28670-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HT-29 cells using SLC7A5 antibody (28670-1-AP) at dilution of 1:400 and Coralite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). This data was developed using the same antibody clone with 28670-1-PBS in a different storage buffer formulation