For Research Use Only

CoraLite® Plus 488-conjugated SLC7A5 Recombinant monoclonal antibody

www.ptglab.com

Catalog Number: CL488-84178-5

Basic Information

Catalog Number: GenBank Accession Number:

CL488-84178-5 BC039692 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 8140 Nanodrop: **UNIPROT ID:** Q01650 IF/ICC: 1:50-1:500

Rabbit Full Name:

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

member 5 Immunogen Catalog Number:

Calculated MW: AG29164

> 507 aa, 55 kDa Observed MW: 35-40 kDa

human

Purification Method:

Protein A purification

CloneNo.: 241476D5

Recommended Dilutions:

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

IF/ICC

Species Specificity:

Positive Controls:

IF/ICC: HT-29 cells,

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

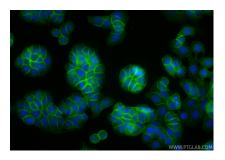
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HT-29 cells using Coralite® Plus 488 SLC7A5 antibody (CL488-84178-5, Clone: 241476D5) at dilution of 1:200.