

For Research Use Only

# CoraLite® Plus 488-conjugated SLC7A5 Recombinant monoclonal antibody

Catalog Number: CL488-84178-5



## Basic Information

Catalog Number:

CL488-84178-5

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG29164

GenBank Accession Number:

BC039692

GeneID (NCBI):

8140

UNIPROT ID:

Q01650

Full Name:

solute carrier family 7 (cationic amino acid transporter, y+ system), member 5

Calculated MW:

507 aa, 55 kDa

Observed MW:

35-40 kDa

Purification Method:

Protein A purification

CloneNo.:

241476D5

Recommended Dilutions:

IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

## Applications

Tested Applications:

IF/ICC

Species Specificity:

human

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 blood-brain barrier (BBB), where it facilitates the transport of thyroid hormones, drugs (e.g., L-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 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:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

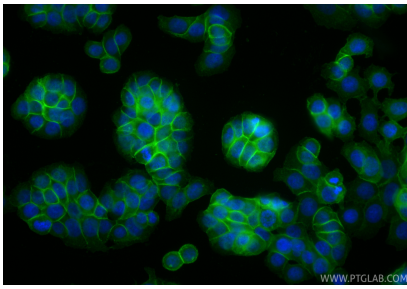
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

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

## 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.