

For Research Use Only

CoraLite® Plus 488-conjugated Glutamine Synthetase Monoclonal antibody



Catalog Number: **CL488-66323**

Featured Product

2 Publications

Basic Information

Catalog Number:

CL488-66323

Concentration:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG6309

GenBank Accession Number:

BC011700

GeneID (NCBI):

2752

UNIPROT ID:

P15104

Full Name:

glutamate-ammonia ligase
(glutamine synthetase)

Calculated MW:

374 aa, 42 kDa

Purification Method:

Protein G purification

CloneNo.:

1B6G4

Recommended Dilutions:

IF-P: 1:50-1:500

FC (Intra): 0.80 µg per 10⁶ cells in a
100 µl suspension

Excitation/Emission maxima
wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF-P, FC (Intra)

Cited Applications:

IF

Species Specificity:

human, mouse, rat

Cited Species:

zebrafish

Positive Controls:

IF-P: mouse brain tissue,

FC (Intra): HepG2 cells,

Background Information

GLUL (Glutamine synthetase) is also named as GS, GLNS and belongs to the glutamine synthetase family. This enzyme has 2 functions: it catalyzes the production of glutamine and 4-aminobutanoate (gamma-aminobutyric acid, GABA), the latter in a pyridoxal phosphate-independent manner. By similarity. Essential for proliferation of fetal skin fibroblasts (PMID:18662667). Defects in GLUL are the cause of congenital systemic glutamine deficiency (CSGD). Organismal glutamine production is augmented secondary to an increase in the activity of glutamine synthetase in the lung and skeletal muscle (PMID:7630137). The antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

Notable Publications

Author	Pubmed ID	Journal	Application
Aanandita A Kothurkar	39540305	J Cell Sci	IF
Yuxuan Meng	38709478	Methods Mol Biol	

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:

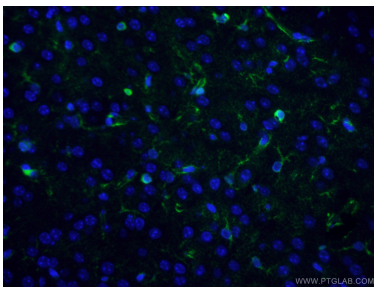
T: 4006900926

E: Proteintech-CN@ptglab.com

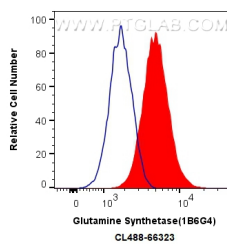
W: ptgcn.com

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

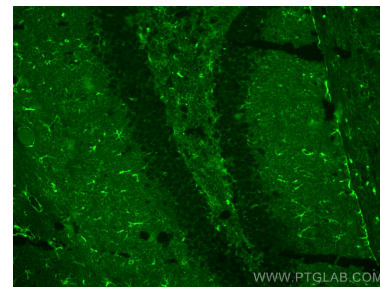
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CL488-66323 (Glutamine synthetase antibody) at dilution of 1:50.



1X10⁶ HepG2 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human Glutamine Synthetase (CL488-66323, Clone:1B6G4) (red), or 0.8 ug CoraLite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CoraLite® Plus 488 Glutamine Synthetase antibody (CL488-66323-2, Clone: 1B6G4) at dilution of 1:200.