For Research Use Only

CoraLite®594-conjugated Glutamine Synthetase Monoclonal antibody



Catalog Number: CL594-66323

Featured Product

1 Publications

Basic Information

Catalog Number: CL594-66323

Mouse Isotype: IgG1

Source:

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 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima wavelengths:

588 nm / 604 nm

Applications

Tested Applications: IF-P, FC (Intra) Cited Applications:

Species Specificity: human, mouse, rat Cited Species: mouse 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 CL594, Ex/Em 593 nm/614 nm.

Notable Publications

Author	Pubmed ID	Journal	Application
Rongfang Guo	40147680	Pharmacol Res	IF

Storage

Storage:

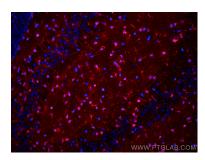
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

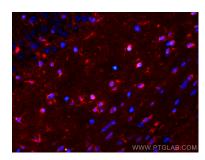
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

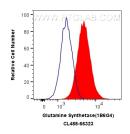
Selected Validation Data



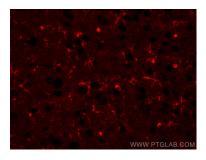
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using Coralite®594 Glutamine Synthetase antibody (CL594-66323, Clone: 1B6G4) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using Coralite®594 Glutamine Synthetase antibody (CL594-66323, Clone: 1B6G4) at dilution of 1:200.



1X10^6 HepG2 cells were intracellularly stained with 0.8 ug Coralite®594 Anti-Human Glutamine Synthetase (CL594-66323, Clone:1B6G4) (red), or 0.8 ug Coralite®594 Mouse IgG1 Isotype Control (MOPC-21) (CL594-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CoraLite®594 Glutamine Synthetase antibody (CL594-66323-2, Clone: 1B6G4) at dilution of 1:200.