

CoraLite® Plus 488-conjugated Glutamine Synthetase Monoclonal antibody

Catalog Number: ~~CL488-66323~~

Basic Information

Catalog Number: CL488-66323	GenBank Accession Number: BC011700	Purification Method: Protein G purification
Size: 1000 µg/ml	GeneID (NCBI): 2752	CloneNo.: 1B6G4
Source: Mouse	UNIPROT ID: P15104	Recommended Dilutions: IF 1:50-1:500
Isotype: IgG1	Full Name: glutamate-ammonia ligase (glutamine synthetase)	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Immunogen Catalog Number: AG6309	Calculated MW: 374 aa, 42 kDa	

Applications

Tested Applications: IF/ICC, IF-P	Positive Controls: IF : mouse brain tissue,
Species Specificity: Human, Mouse, Rat	

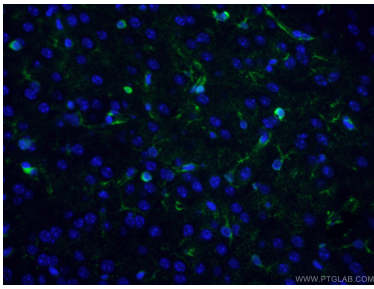
Background Information

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.

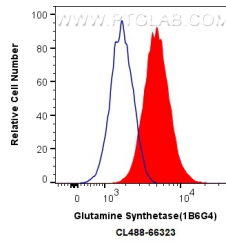
Storage

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, pH 7.3.
Aliquoting is unnecessary for -20°C storage

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).