For Research Use Only

CoraLite® Plus 488-conjugated Glutamine Synthetase Monoclonal antibody



Catalog Number: CL488-66323-2

Featured Product

Basic Information

Catalog Number: CL488-66323-2 Concentration: 1000 ug/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 Observed MW: 42 kDa Purification Method:

Protein G purification

CloneNo.: 1B6G4

Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima wavelengths:

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

IF-P

Species Specificity: human, mouse, rat

Positive Controls:

IF-P: mouse brain tissue,

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). There are other bands with higher (66 kDa, 97 kDa) and lower (30 kDa)molecular weights also detected besides the 42 kDa band indicating the proteolysis of GLUL protein by the ubiquitin system(PMID:10091759).

Storage

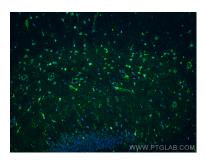
Storage:

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 paraffin-embedded mouse brain tissue using CoraLite® Plus 488 Glutamine Synthetase antibody (CL488-66323-2, Clone: 1B6G4) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).