For Research Use Only

## CoraLite®555-conjugated Glutamine proteintech Synthetase Monoclonal antibody



**Purification Method:** 

Protein G purification

Recommended Dilutions:

Excitation/Emission maxima

CloneNo.:

IF 1:50-1:500

wavelengths: 557 nm / 570 nm

1B6G4

Catalog Number: CL555-66323

**Featured Product** 

**Basic Information** 

Catalog Number: CL555-66323

Size: 1000 µg/ml Source: Mouse Isotype:

Immunogen Catalog Number:

AG6309

lgG1

**Tested Applications:** Species Specificity:

Human, mouse, rat

GenBank Accession Number:

BC011700 GeneID (NCBI): **UNIPROT ID:** P15104 Full Name:

glutamate-ammonia ligase (glutamine synthetase)

Calculated MW: 374 aa. 42 kDa

Observed MW: 42 kDa

Positive Controls:

IF: mouse brain tissue,

## **Background Information**

GLUL(Glutamine synthetase) is also named as GS, GLNS, which 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 the 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

**Applications** 

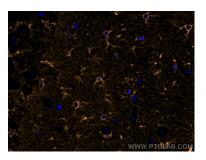
Storage:

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

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 CoraLite®555 Glutamine Synthetase antibody (CL555-66323, Clone: 1B6G4) at dilution of 1:200.