For Research Use Only

## CoraLite® Plus 555-conjugated Glutamine Synthetase Polyclonal antibody



Catalog Number: CL555-11037

**Featured Product** 

**Basic Information** 

Catalog Number: CL555-11037

Size:
1 mg/mL
Source:
Rabbit
Isotype:
IgG

Immunogen Catalog Number:

AG1510

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: 40-42 kDa **Purification Method:** 

Antigen affinity purification

Excitation/Emission maxima

wavelengths: 554 nm / 570 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity: human, mouse, rat

## **Background Information**

GLUL(Glutamine synthetase) also named GS and GLNS, 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:

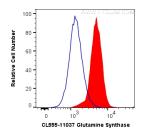
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug CoraLite® Plus 555 Anti-Human Glutamine Synthetase (CL555-11037) (red), or 0.4 ug Rabbit IgG Isotype Control (CL555-30000)(blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).