For Research Use Only

CoraLite® Plus 647-conjugated Glutamine Synthetase Polyclonal antibody



Catalog Number: CL647-11037

Featured Product

Basic Information

Catalog Number: CL647-11037 Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG1510

Full Name: glutamate-ammonia ligase (glutamine synthetase)

GenBank Accession Number:

BC011700

GeneID (NCBI):

UNIPROT ID:

P15104

Calculated MW: 374 aa, 42 kDa Observed MW: 40-42 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

FC (Intra): 0.20 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

Applications

Tested Applications: FC (Intra)

Species Specificity: human, mouse, rat

Positive Controls:

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). 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

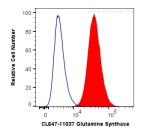
Storage:

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

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

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human Glutamine Synthetase (CL647-11037) (red), or 0.2 ug CL647-30000 Rabbit IgG (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.