

Glutamine synthetase Polyclonal Antibody

Catalog number: 11037-2-AP

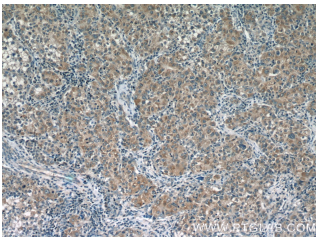
Size: 25 µg/150 µl

Source: Rabbit

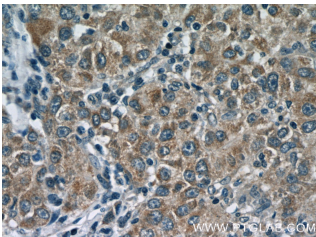
Isotype: IgG

Synonyms:

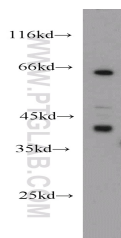
GLUL; GLNS, GLUL, Glutamate ammonia ligase, Glutamate decarboxylase, Glutamine synthetase, GS, PIG43, PIG59



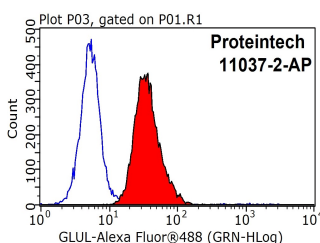
Immunohistochemistry of paraffin-embedded human liver cancer slide using 11037-2-AP (GLUL Antibody) at dilution of 1:50



Immunohistochemistry of paraffin-embedded human liver cancer slide using 11037-2-AP (GLUL Antibody) at dilution of 1:50



mouse brain tissue were subjected to SDS PAGE followed by western blot with 11037-2-AP (GLUL antibody) at dilution of 1:100



Background

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).

Applications

Tested applications:	ELISA, WB, IHC, FC
Cited applications:	ELISA, IHC, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human
Calculated Glutamine synthetase MW:	374aa, 42 kDa
Observed Glutamine synthetase MW:	44kd
Positive WB detected in	Mouse brain tissue, mouse liver tissue, rat liver tissue
Positive IHC detected in	Human liver cancer tissue
Positive FC detected in	HepG2 cells
Recommended dilution:	WB: 1:200-1:1000 IHC: 1:20-1:200 FC: N/A

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag1510
GenBank accession number:	BC011700
Gene ID (NCBI):	2752
Full name:	Glutamate-ammonia ligase (glutamine synthetase)

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.

1X10⁶ HepG2 cells were stained with 0.2ug Glutamine synthetase antibody (11037-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.