



GI Syn Polyclonal Antibody

Catalog No	YP-Ab-12846
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	GLUL
Immunogen	The antiserum was produced against synthesized peptide derived from human GI Syn. AA range:295-344
Specificity	GI Syn Polyclonal Antibody detects endogenous levels of GI Syn protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GLUL;EC:2.3.1.225;EC:6.3.1.2;GLNS;Glutamate--ammonia ligase;GI Syn; Glutamine synthetase;GS;Glutamate decarboxylase
Observed Band	42kD
Calculated Molecular Weight	42kD
Cell Pathway	Cytoplasm, cytosol . Microsome . Mitochondrion . Cell membrane ; Lipid-anchor . Mainly localizes in the cytosol, with a fraction associated with the cell membrane. .
Tissue Specificity	Expressed in endothelial cells.
Function	catalytic activity:ATP + L-glutamate + NH(3) = ADP + phosphate + L-glutamine., disease:Defects in GLUL are the cause of congenital systemic glutamine deficiency (CSGD) [MIM:610015]. CSGD is a rare developmental disorder with severe brain malformation resulting in multi-organ failure and neonatal death. Glutamine is largely absent from affected patients serum, urine and cerebrospinal fluid.,online information:Glutamine synthetase entry, similarity:Belongs to the glutamine synthetase family.,subunit:Homooctamer.,



Background

The protein encoded by this gene belongs to the glutamine synthetase family. It catalyzes the synthesis of glutamine from glutamate and ammonia in an ATP-dependent reaction. This protein plays a role in ammonia and glutamate detoxification, acid-base homeostasis, cell signaling, and cell proliferation. Glutamine is an abundant amino acid, and is important to the biosynthesis of several amino acids, pyrimidines, and purines. Mutations in this gene are associated with congenital glutamine deficiency, and overexpression of this gene was observed in some primary liver cancer samples. There are six pseudogenes of this gene found on chromosomes 2, 5, 9, 11, and 12. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014],

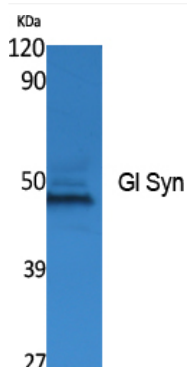
matters needing attention

Avoid repeated freezing and thawing!

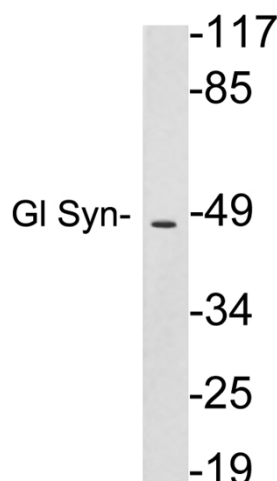
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of extracts from K562 cells, using Gl Syn Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from HepG2 cells, using Gl Syn antibody.