Product Name: **Gl Syn Rabbit Polyclonal Antibody**
Catalog #: **APRab11457**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight	42kDa

Antigen Information

Gene Name	GLUL
Alternative Names	GLUL; GLNS; Glutamine synthetase; GS; Glutamate decarboxylase; Glutamate--ammonia ligase
Gene ID	2752.0
SwissProt ID	P15104
Immunogen	The antiserum was produced against synthesized peptide derived from human Gl Syn. AA range:295-344

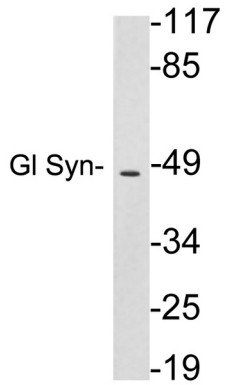
Background

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],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.,

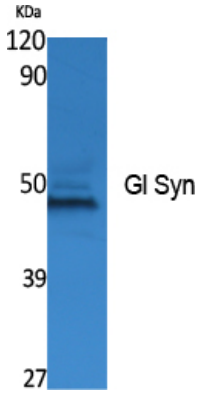
Research Area

Alanine; aspartate and glutamate metabolism;Arginine and proline metabolism;Nitrogen metabolism;

Image Data



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



Western Blot analysis of extracts from K562 cells, using Gl Syn Polyclonal Antibody.. Secondary antibody was diluted at 1:20000