



# GI Syn Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-12846
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	GLUL
<b>Protein Name</b>	Glutamine synthetase
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GI Syn. AA range:295-344
<b>Specificity</b>	GI Syn Monoclonal Antibody detects endogenous levels of GI Syn protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GLUL; GLNS; Glutamine synthetase; GS; Glutamate decarboxylase; Glutamate--ammonia ligase
<b>Observed Band</b>	42kD
<b>Cell Pathway</b>	Cytoplasm, cytosol . Microsome . Mitochondrion . Cell membrane ; Lipid-anchor . Mainly localizes in the cytosol, with a fraction associated with the cell membrane. .
<b>Tissue Specificity</b>	Expressed in endothelial cells.
<b>Function</b>	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.;
<b>Background</b>	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],

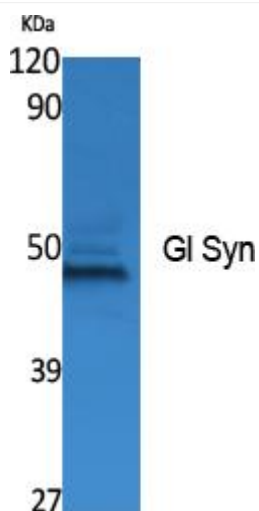
**matters needing attention**

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 various cells using GI Syn Monoclonal Antibody