

## **GI Syn Polyclonal Antibody**

Catalog No: YT5035

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: GI Syn

**Fields:** >>Arginine biosynthesis;>>Alanine, aspartate and glutamate

metabolism;>>Glyoxylate and dicarboxylate metabolism;>>Nitrogen

metabolism;>>Metabolic pathways;>>Biosynthesis of amino

acids;>>Necroptosis;>>Glutamatergic synapse;>>GABAergic synapse

Gene Name: GLUL

**Protein Name:** Glutamine synthetase

P15104

P15105

**Human Gene Id:** 2752

**Human Swiss Prot** 

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No:

Mouse Gene Id: 14645

**Mouse Swiss Prot** 

No:

Rat Gene ld: 24957

Rat Swiss Prot No: P09606

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

GI Syn. AA range:295-344

**Specificity:** Gl Syn Polyclonal Antibody detects endogenous levels of Gl Syn protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/3



Dilution: WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 42kD

**Cell Pathway:** Alanine; aspartate and glutamate metabolism; Arginine and proline

metabolism; Nitrogen metabolism;

**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],

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.,

Subcellular Location:

Cytoplasm, cytosol . Microsome . Mitochondrion . Cell membrane ; Lipid-anchor . Mainly localizes in the cytosol, with a fraction associated with the cell membrane . .

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**Expression :** Expressed in endothelial cells.

**Sort**: 6598

No4: 1

Host: Rabbit

Modifications: Unmodified

