Anti-Glutamine Synthetase Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014807

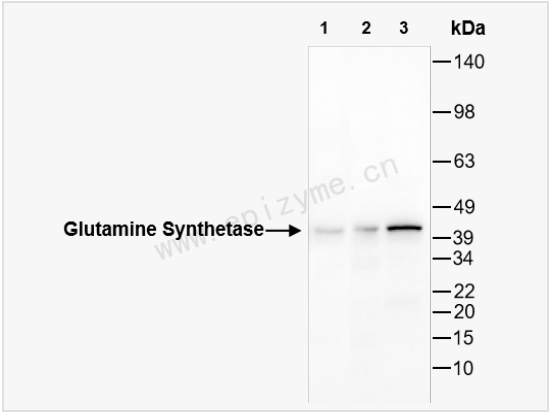
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; IHC-P 1:1,000~1:4,000; IF 1:200~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	63T53F67
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Glutamine Synthetase
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Glutamine Synthetase Rabbit mAb [63T53F67] is for research use only and not for use in diagnostic or therapeutic procedures.

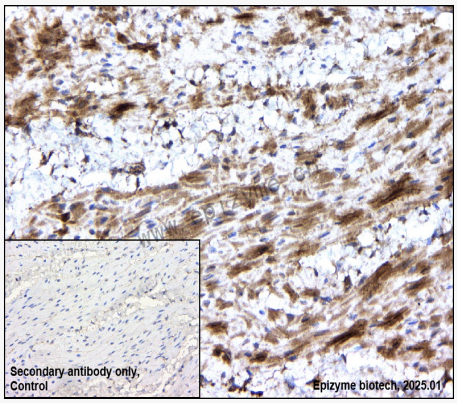
Protein Information

Synonyms	cell proliferation-inducing protein 59, Cgl2214, GLNA, GLNA_HUMAN, GLNS, GLUL, Glutamate ammonia ligase, Glutamate decarboxylase, Glutamate--ammonia ligase, glutamine synthase, Glutamine synthetase, glutamine synthetase I, GS, PIG 43, PIG 59, PIG43, PIG59, Proliferation inducing protein 43.
Calculated MW	Calculated MW: 42 kDa; Observed MW: 42 kDa
Uniprot ID	P15104
Gene ID	2752
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]
Cellular Location	Cytoplasm. Mitochondrion.

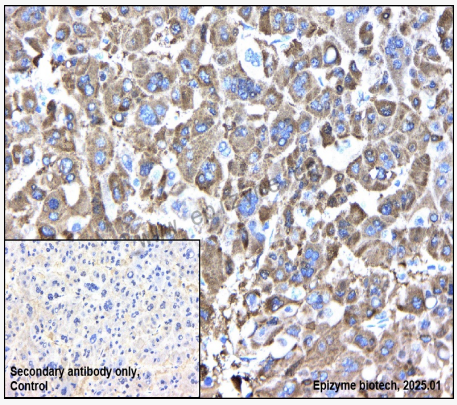
Validation Images



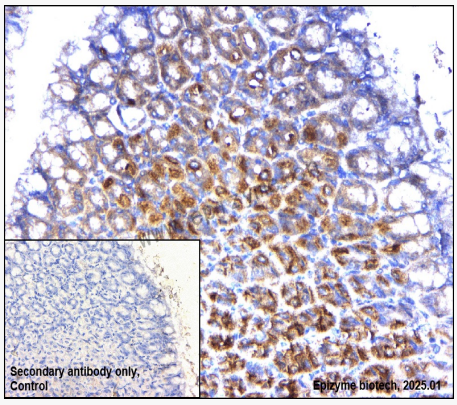
Western Blot - Anti-Glutamine Synthetase Rabbit mAb [63T53F67]
All lanes: R014807 at 1:3,000 dilution
Lane 1: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 2: Jurkat (Human T lymphocytic leukemia cell) whole cell lysates
Lane 3: 293T (Human embryonic kidney cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 42 kDa
Observed band size: 42 kDa
Developed using the ECL technique (Cat. No. SQ201).



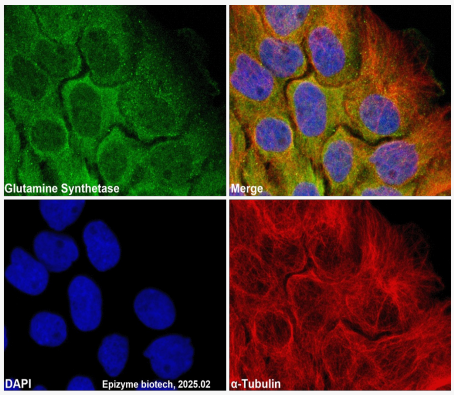
Immunohistochemistry - Anti-Glutamine Synthetase Rabbit mAb [63T53F67]
Sample: Paraformaldehyde-fixed, paraffin embedded rat bladder tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014807 at 1:2,500 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Glutamine Synthetase Rabbit mAb [63T53F67]
Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014807 at 1:2,500 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Glutamine Synthetase Rabbit mAb [63T53F67]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse stomach tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014807 at 1:2,500 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-Glutamine Synthetase Rabbit mAb [63T53F67]
Sample: A431 cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014807 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).