

Product datasheet for **CF814202**

Glutamine Synthetase (GLUL) Mouse Monoclonal Antibody [Clone ID: OTI2C12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2C12
Applications:	IHC
Recommended Dilution:	IHC 1:700
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GS (NP_001028228) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	42.1 kDa
Gene Name:	glutamate-ammonia ligase
Database Link:	NP_001028228 Entrez Gene 14645 Mouse Entrez Gene 24957 Rat Entrez Gene 2752 Human P15104



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Background:

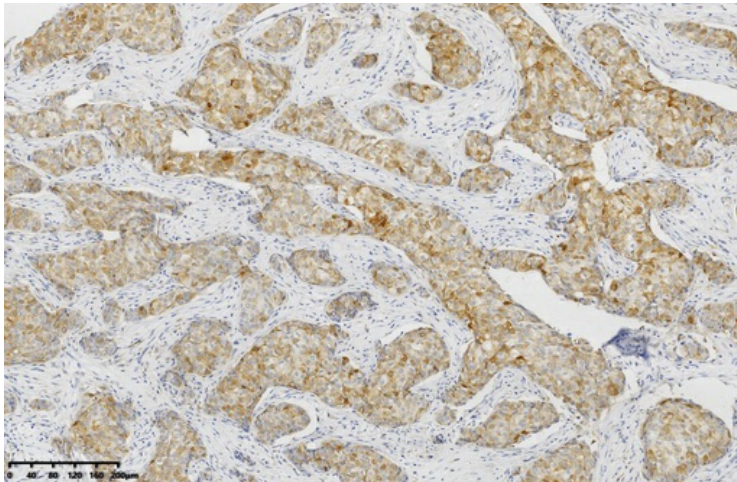
The protein encoded by this gene belongs to the glutamine synthetase family. It catalyzes the synthesis of glutamine from glutamate and ammonia in an ATP-dependent reaction. This protein plays a role in ammonia and glutamate detoxification, acid-base homeostasis, cell signaling, and cell proliferation. 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]

Synonyms:

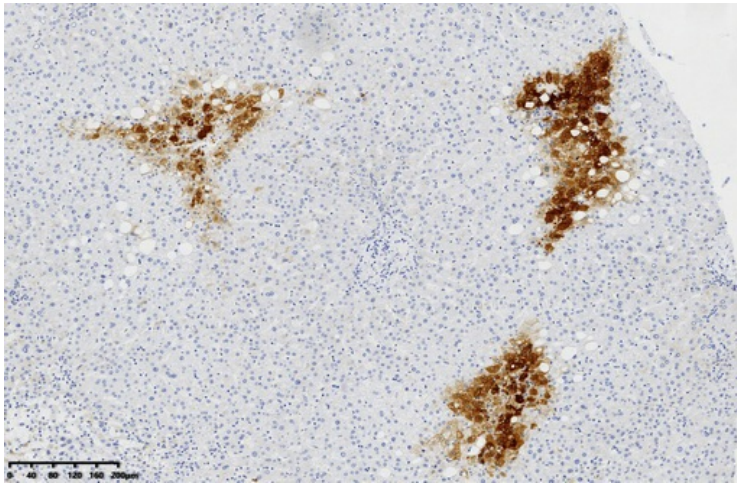
GLNS; GS; PIG43; PIG59

Protein Pathways:

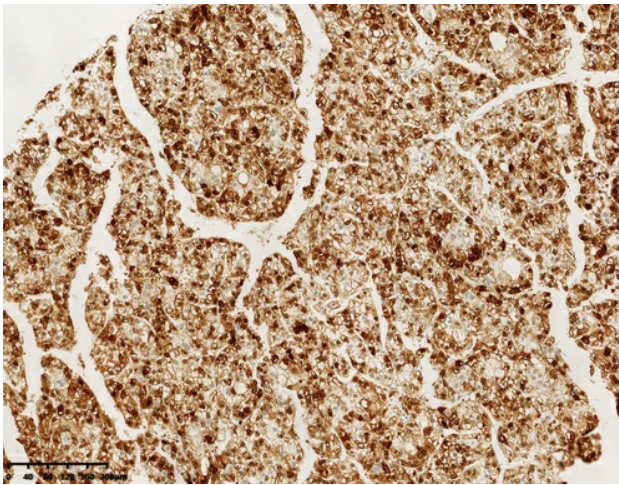
Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways, Nitrogen metabolism

Product images:

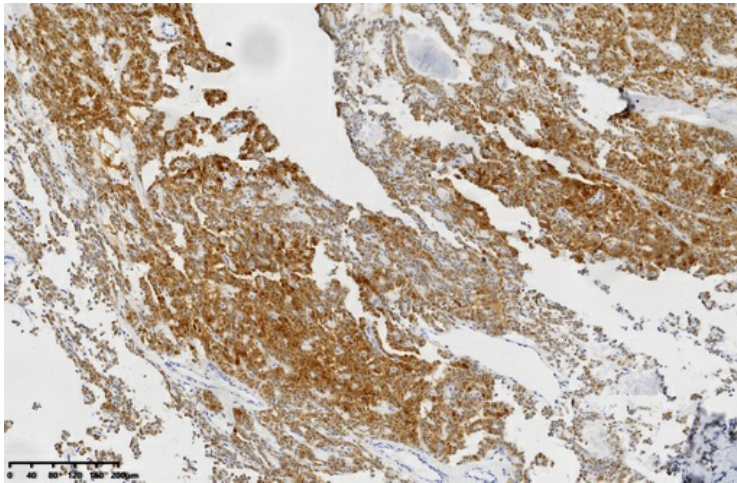
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



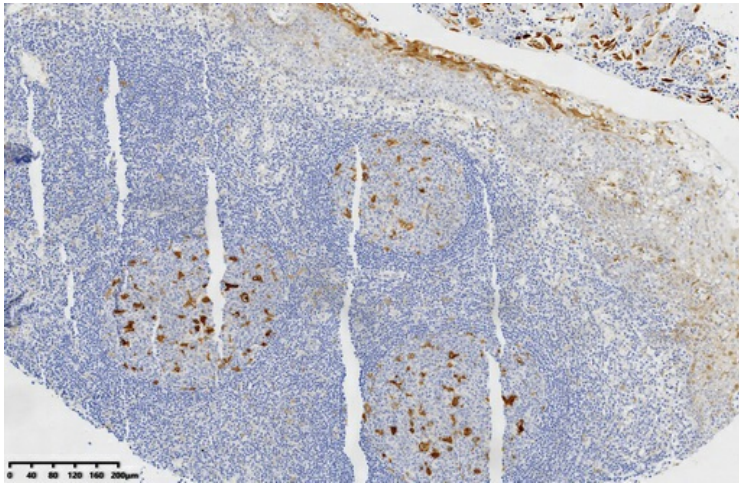
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



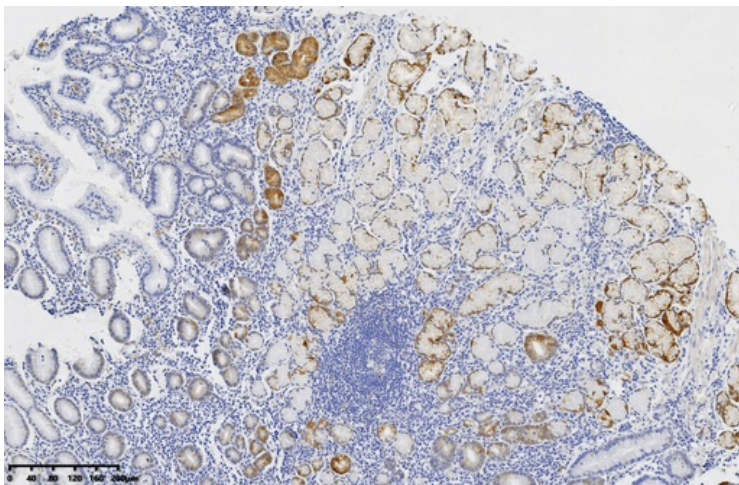
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



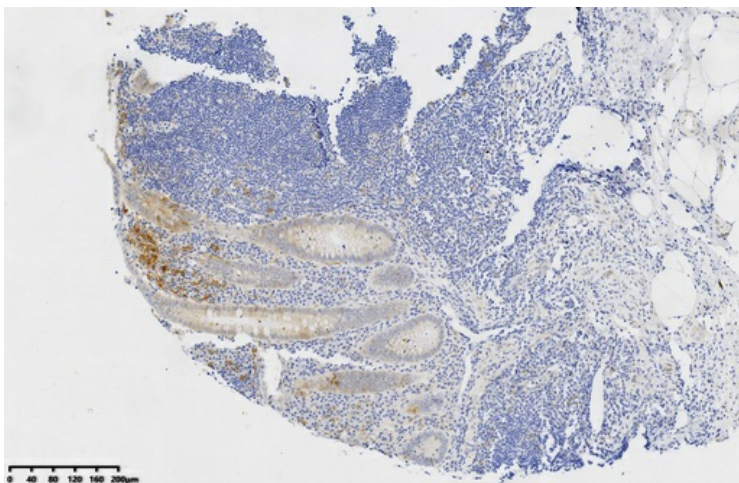
Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



Immunohistochemical staining of paraffin-embedded Human gastric tissue within the normal limits using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])



Immunohistochemical staining of paraffin-embedded Human appendix tissue within the normal limits using anti-GS mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, [TA814202])