

## Product datasheet for CF500700

### Glutamine Synthetase (GLUL) Mouse Monoclonal Antibody [Clone ID: OTI1F4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1F4
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:1000~2000, IHC 1:50, IF 1:50~100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GLUL (NP_002056) produced in HEK293T cell.
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:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	41.9 kDa
Gene Name:	Homo sapiens glutamate-ammonia ligase (GLUL), transcript variant 1, mRNA.
Database Link:	<a href="#">NP_002056 Entrez Gene</a> <a href="#">14645 MouseEntrez Gene</a> <a href="#">24957 RatEntrez Gene</a> <a href="#">2752 Human</a>



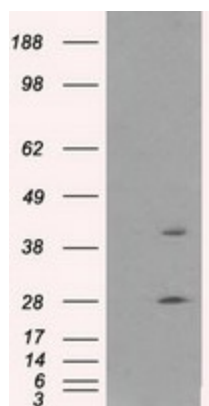
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**Background:** The protein encoded by this gene belongs to the glutamine synthetase family. It catalyzes the synthesis of glutamine from glutamate and ammonia. Glutamine is a main source of energy and is involved in cell proliferation, inhibition of apoptosis, and cell signaling. This gene is expressed during early fetal stages, and plays an important role in controlling body pH by removing ammonia from circulation. Mutations in this gene are associated with congenital glutamine deficiency. Several alternatively spliced transcript variants have been found for this gene.

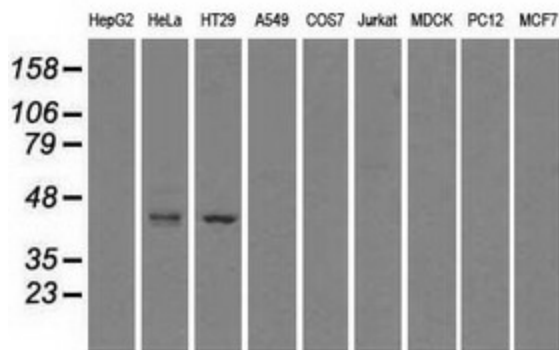
**Synonyms:** GLNS; GS; PIG43; PIG59

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways, Nitrogen metabolism

**Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GLUL (Cat# [RC204161], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GLUL (Cat# [TA500700]). Positive lysates [LY400756] (100ug) and [LC400756] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GLUL monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

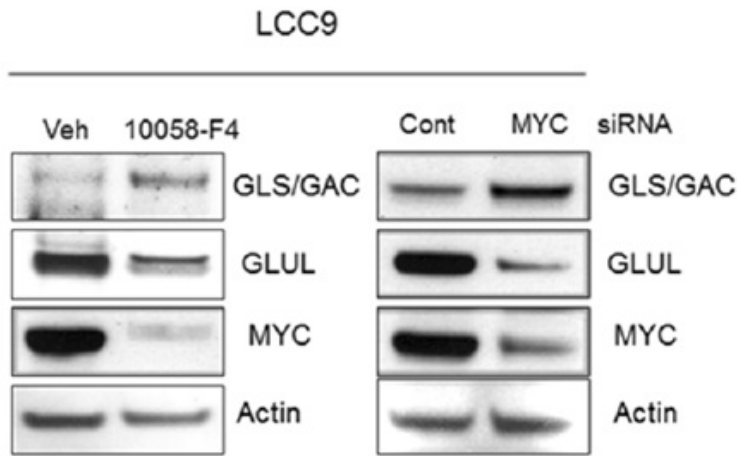
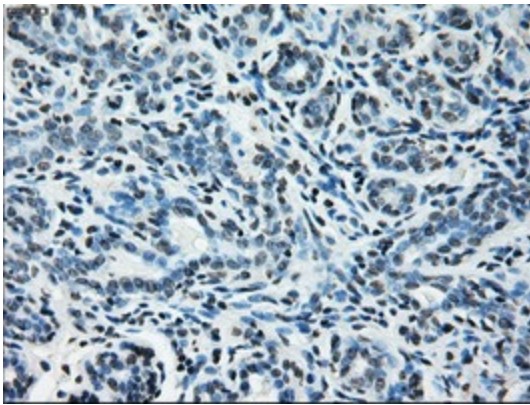
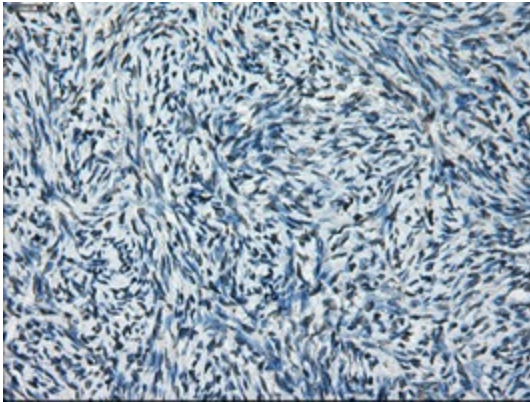


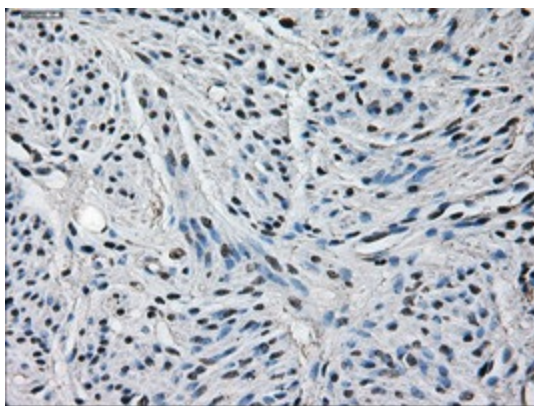
Figure from citation: Western blot analysis of GLUL protein level by using anti-GLUL antibody in LCC9 cells were treated with 10058-F4 (25 uM) or vehicle for 48 h or transfected with MYC or control siRNA for 48 h. Knockdown of MYC increased GLS/GAC levels and decreased GLUL levels. [View Citation](#)



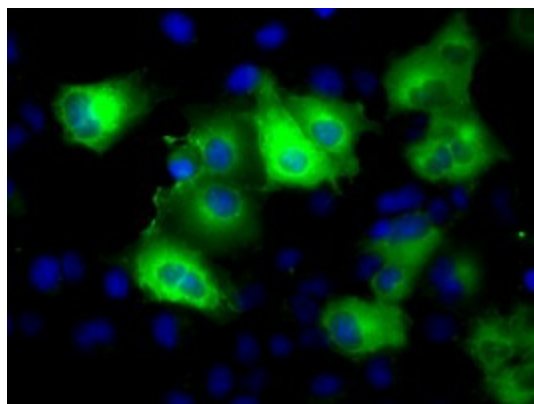
Immunohistochemical staining of paraffin-embedded Human breast tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500700])



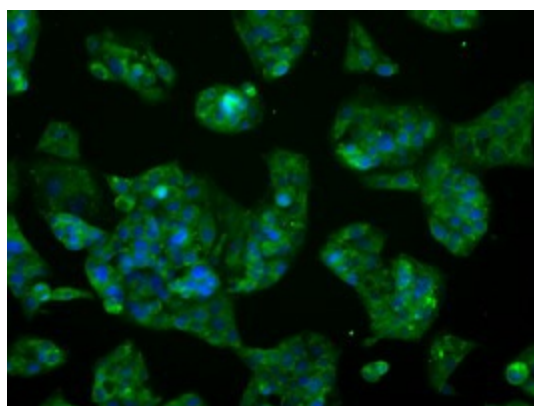
Immunohistochemical staining of paraffin-embedded Human Ovary tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500700])



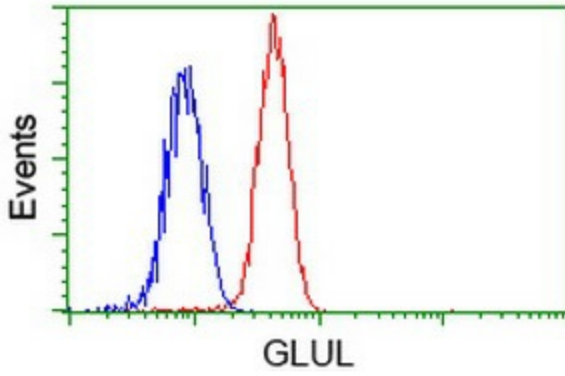
Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500700])



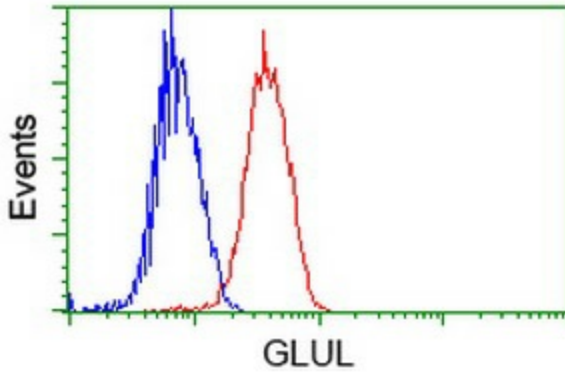
Anti-GLUL mouse monoclonal antibody ([TA500700]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GLUL ([RC204161]).



Immunofluorescent staining of HepG2 cells using anti-GLUL mouse monoclonal antibody ([TA500700]).



Flow cytometric Analysis of HeLa cells, using anti-GLUL antibody ([TA500700]), (Red), compared to a nonspecific negative control antibody, (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-GLUL antibody ([TA500700]), (Red), compared to a nonspecific negative control antibody, (Blue).