

OriGene Technologies, Inc.

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Product datasheet for TA500700

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

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1F4

Applications: FC, IF, IHC, WB

Recommend Dilution: WB 1:1000~2000, IHC 1:50, IF 1:50~100, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human GLUL (NP_002056) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 41.9 kDa

Gene Name: glutamate-ammonia ligase

Database Link: NP 002056 Entrez Gene 2752 Human

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

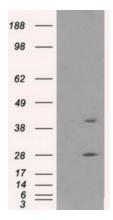
Protein Pathways: Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic

pathways, Nitrogen metabolism

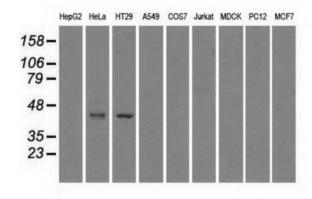




Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GLUL ([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. 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 usin g anti-GLUL monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



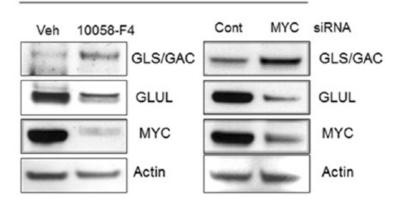
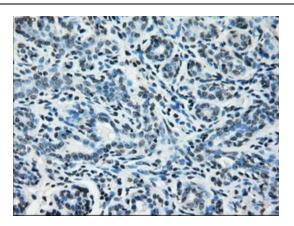
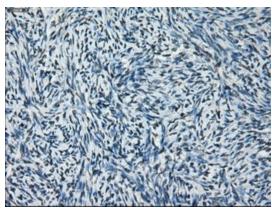


Figure from citation: Western blot analysis of GLUL protein level by using anti-GLUL antibody in LCC9 cells were treated with 10058-F4 (25 uM) or vehicle for 48 h or transfected with MYC or control siRNA for 48 h. Knockdown of MYC increased GLS/GAC levels and decreased GLUL levels. View Citation

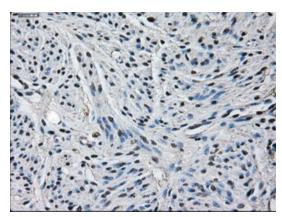




Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500700)

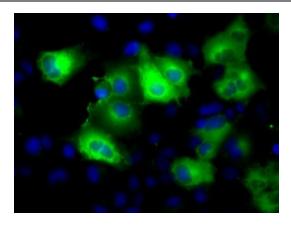


Immunohistochemical staining of paraffinembedded Human Ovary tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500700)

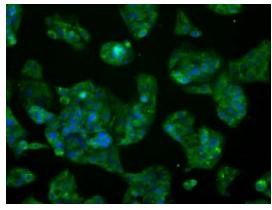


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-GLUL mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500700)

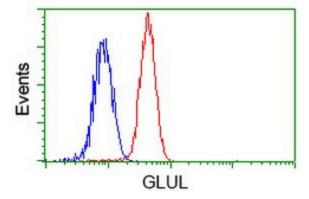




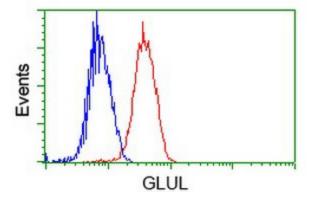
Anti-GLUL mouse monoclonal antibody (TA500700) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GLUL ([RC204161]).



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).