

Product datasheet for **CF507318**

GCLC Mouse Monoclonal Antibody [Clone ID: OTI1A3]

Product data:

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| Product Type: | Primary Antibodies |
| Clone Name: | OTI1A3 |
| Applications: | IHC, WB |
| Recommended Dilution: | WB 1:200~1000, IHC 1:150 |
| Reactivity: | Human, Rat, Monkey, Mouse |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human GCLC(NP_001489) 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: | 72.6 kDa |
| Gene Name: | glutamate-cysteine ligase catalytic subunit |
| Database Link: | NP_001489 Entrez Gene 14629 Mouse Entrez Gene 25283 Rat Entrez Gene 710508 Monkey Entrez Gene 2729 Human P48506 |



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Background:

Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase is the first rate-limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. This locus encodes the catalytic subunit, while the regulatory subunit is derived from a different gene located on chromosome 1p22-p21. Mutations at this locus have been associated with hemolytic anemia due to deficiency of gamma-glutamylcysteine synthetase and susceptibility to myocardial infarction. [provided by RefSeq, Oct

Synonyms:

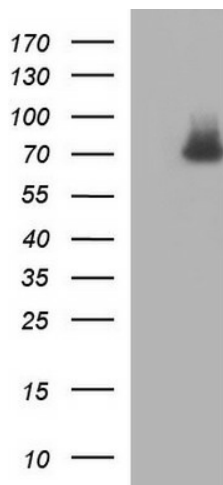
GCL; GCS; GLCL; GLCLC

Protein Families:

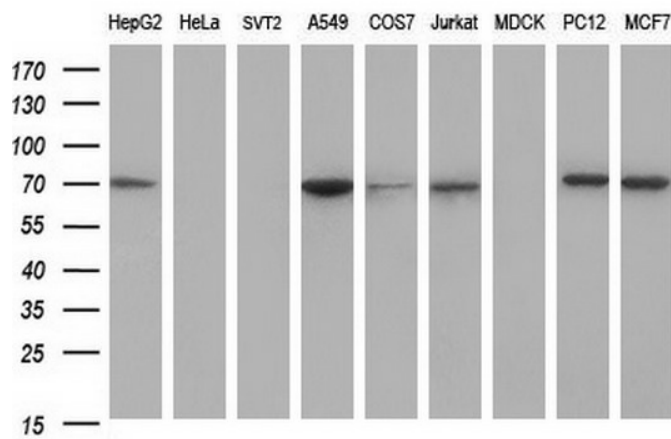
Druggable Genome

Protein Pathways:

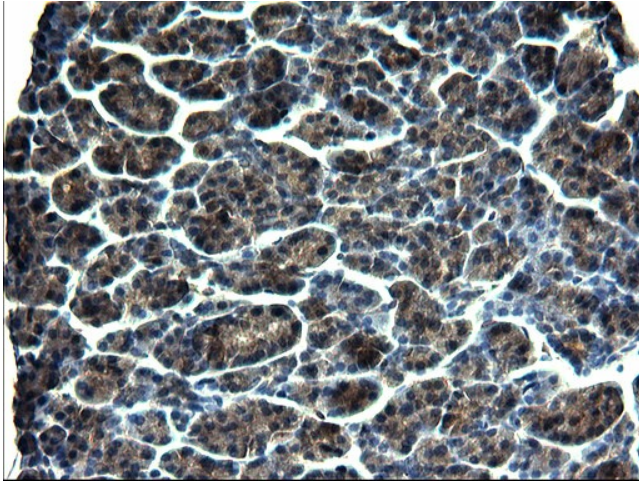
Glutathione metabolism, Metabolic pathways

Product images:


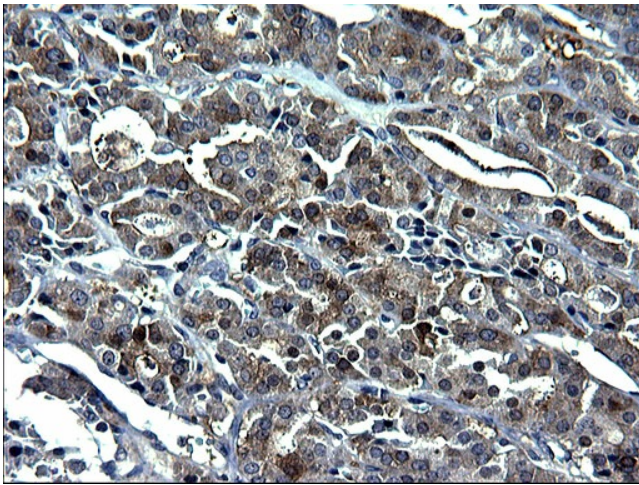
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GCLC (Cat# [RC207915], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GCLC (Cat# [TA507318]). Positive lysates [LY419901] (100ug) and [LC419901] (20ug) can be purchased separately from OriGene.



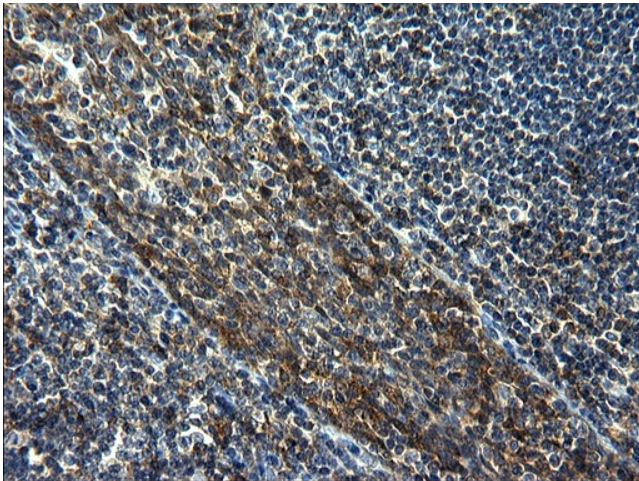
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GCLC monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-GCLC mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA507318])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-GCLC mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA507318])



Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-GCLC mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA507318])