

Product datasheet for **TA507318M**

GCLC Mouse Monoclonal Antibody [Clone ID: OTI1A3]

Product data:

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:	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)
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


[View online »](#)

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:

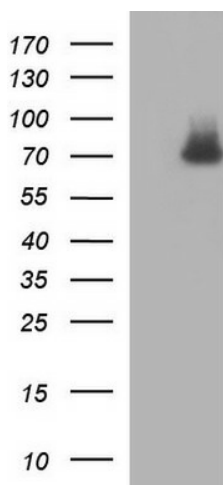
GCL; GCS; GLCL; GLCLC

Protein Families:

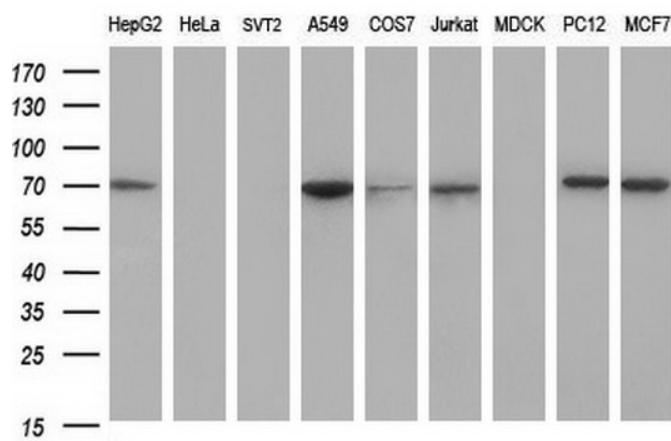
Druggable Genome

Protein Pathways:

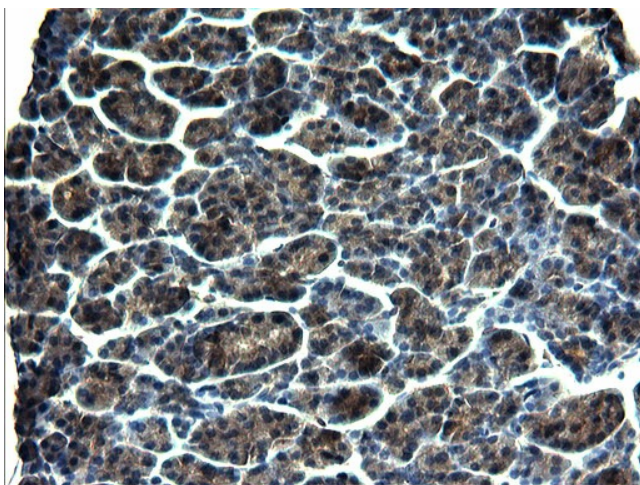
Glutathione metabolism, Metabolic pathways

Product images:


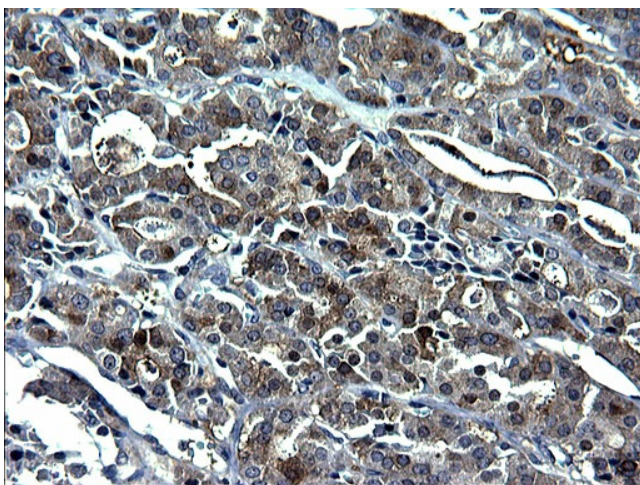
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GCLC (Cat# [RC207915], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GCLC (Cat# [TA507318]). Positive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



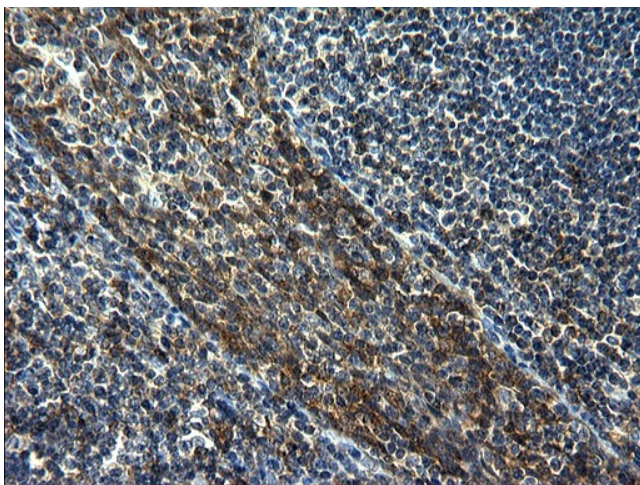
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GCLC monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-GCLC mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-GCLC mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-GCLC mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.