

OriGene Technologies, Inc.

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Product datasheet for TA507318

GCLC Mouse Monoclonal Antibody [Clone ID: OTI1A3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1A3
Applications: IHC, WB

Recommend Dilution: WB 1:200~1000, IHC 1:150

Reactivity: Human, Monkey, Rat

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)

Predicted Protein Size: 72.6 kDa

Gene Name: glutamate-cysteine ligase catalytic subunit

Database Link: NP 001489 Entrez Gene 25283 RatEntrez Gene 710508 MonkeyEntrez Gene 2729 Human

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

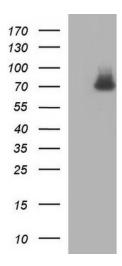
Protein Families: Druggable Genome

Protein Pathways: Glutathione metabolism, Metabolic pathways

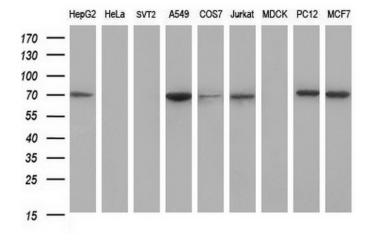




Product images:

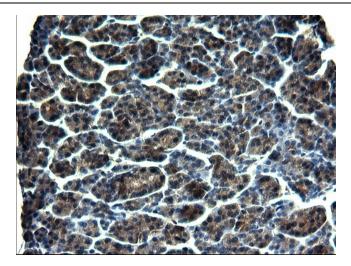


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GCLC ([RC207915], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GCLC. Positive lysates [LY419901] (100ug) and [LC419901]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

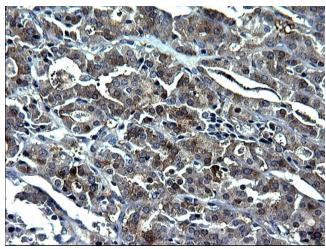


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GCLC monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

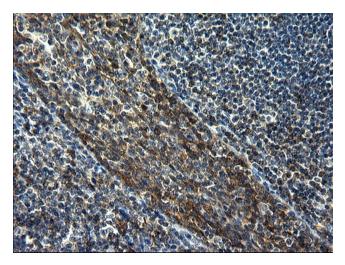




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-GCLC mouse monoclonal antibody. (Heat-induced epitope retrieval by 1 mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, TA507318)



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



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