



Mouse anti-Human GCLC monoclonal antibody, clone 4I2 (CABT-B10312)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	GCLC (NP_001489, 528 a.a. ~ 638 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	4I2
Conjugate	Unconjugated
Applications	WB, IF, sELISA, ELISA
Sequence Similarities	EGVFPGLIPILNSYLENMEVDVDTRCSILNYLKLICKRASGELMTVARWMREFIANHPDY KQDSVITDEMNYSLILKCNCQIANLCECPELLGSAFRKVKYSGSKTDSSN*
Format	Liquid
Size	100 µg
Buffer	In 1x PBS, pH 7.2
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

BACKGROUND

Introduction	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
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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 2010]

Keywords	GCLC; glutamate-cysteine ligase, catalytic subunit; GCL; GCS; GLCL; GLCLC; glutamate-cysteine ligase catalytic subunit; gamma-ECS; GCS heavy chain; gamma-glutamylcysteine synthetase;
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GENE INFORMATION

Entrez Gene ID	2729
UniProt ID	Q14TF0
Pathway	Biological oxidations, organism-specific biosystem; Glutathione conjugation, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Glutathione synthesis and recycling, organism-specific biosystem
Function	ADP binding; ATP binding; coenzyme binding; glutamate binding; glutamate-cysteine ligase activity; glutamate-cysteine ligase activity; glutamate-cysteine ligase activity; ligase activity; magnesium ion binding; nucleotide binding; protein heterodimerization activity
