

Anti-GCLC Antibody

Catalog # ABO10811

Product Information

Application	WB, IHC-P
Primary Accession	P48506
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Glutamate--cysteine ligase catalytic subunit(GCLC) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2729
Other Names	Glutamate--cysteine ligase catalytic subunit, 6.3.2.2, GCS heavy chain, Gamma-ECS, Gamma-glutamylcysteine synthetase, GCLC, GLCL, GLCLC
Calculated MW	72766
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse
Source	Eukaryota
Protein Name	Glutamate--cysteine ligase catalytic subunit
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human GCLC(7-24aa GSPLSWEETKRHADHVR), different from the related rat and mouse sequences by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the glutamate--cysteine ligase type 3 family.

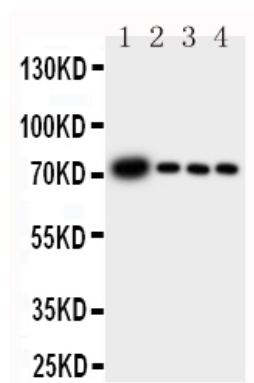
Protein Information

Name	GCLC (HGNC:4311)
Synonyms	GLCL, GLCLC
Function	Catalyzes the ATP-dependent ligation of L-glutamate and L- cysteine and participates in the first and rate-limiting step in glutathione biosynthesis.

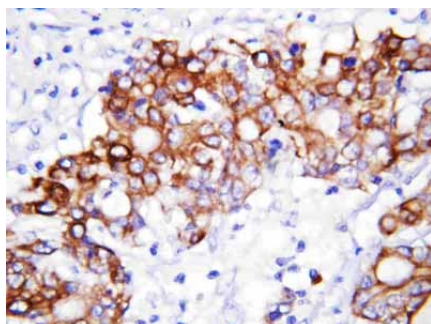
Background

GCLC, Glutamate--cysteine ligase catalytic subunit, is an enzyme that in humans is encoded by the GCLC gene. 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. The gene encoding the catalytic subunit encodes a protein of 367 amino acids with a calculated molecular weight of 72.773 kDa and maps to chromosome 6p12.1. Deficiency of gamma-glutamylcysteine synthetase in human is associated with enzymopathic hemolytic anemia.

Images



Anti-GCLC antibody, ABO10811, Western blotting
Lane 1: Rat Brain Tissue Lysate
Lane 2: Rat Kidney Tissue Lysate
Lane 3: Rat Heart Tissue Lysate
Lane 4: Rat Lung Tissue Lysate



Anti-GCLC antibody, ABO10811, IHC(P)
IHC(P): Human Rectal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.