

## Basic Information

Product Name	Anti-GCLC Antibody	
Gene Name	GCLC	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human GCLC, different from the related rat and mouse sequences by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	73 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

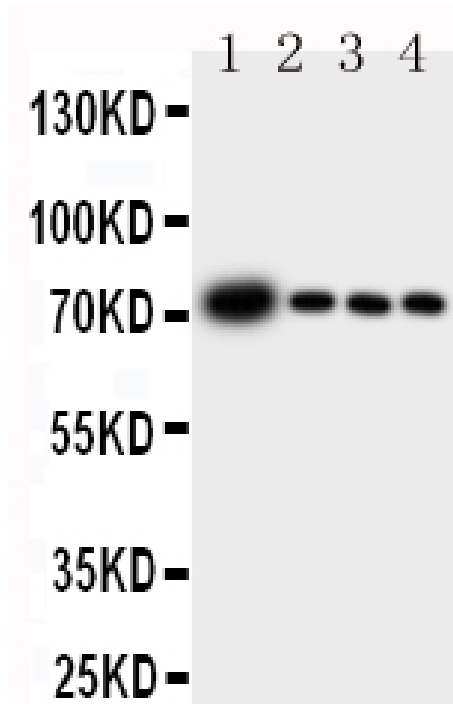
## Background Information

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.

## Reference

Anti-GCLC Antibody被引用在3文献中。

## Selected Validation Data



Western blot analysis of GCLC using anti-GCLC antibody (BA1627). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

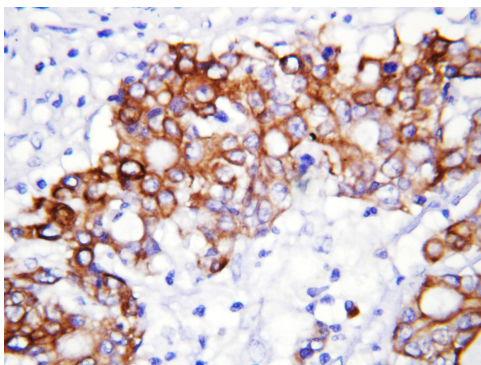
Lane 1: Rat Brain tissue lysates,

Lane 2: Rat Kidney tissue lysates,

Lane 3: Rat Heart tissue lysates,

Lane 4: Rat Lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GCLC antigen affinity purified polyclonal antibody (BA1627) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GCLC at approximately 73 kDa. The expected band size for GCLC is at 73 kDa.



IHC analysis of GCLC using anti-GCLC antibody (BA1627).

GCLC was detected in a paraffin-embedded section of human rectal cancer tissue. The tissue section was incubated with rabbit anti-GCLC Antibody (BA1627) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.