10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-GCLC Picoband Antibody

**Catalog # ABO11892**

## Specification

### Anti-GCLC Picoband Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC** |
| Primary Accession | P48506 |
| Host | **Rabbit** |
| Reactivity | **Human, 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;Rat.

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

### Anti-GCLC Picoband Antibody - 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 MW KDa

**Application Details**
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Protein Name**
Glutamate--cysteine ligase catalytic subunit

**Contents**
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**
E.coli-derived human GCLC recombinant protein (Position: E437-N637). Human GCLC shares 94% amino acid (aa) sequence identity with both mouse and rat GCLC.

**Purification**
Immunogen affinity purified.

**Cross Reactivity**
No cross reactivity with other proteins

| | |
|---|---|
| Storage | **At -20˚C for one year. After r˚Constitution, 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.

## Anti-GCLC Picoband Antibody - Protein Information

**Name** GCLC (HGNC:4311)

**Synonyms** GLCL, GLCLC

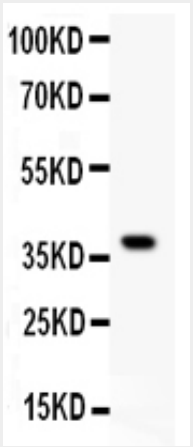
**Function**
Catalyzes the ATP-dependent ligation of L-glutamate and L- cysteine and participates in the first and rate-limiting step in glutathione biosynthesis.

## Anti-GCLC Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

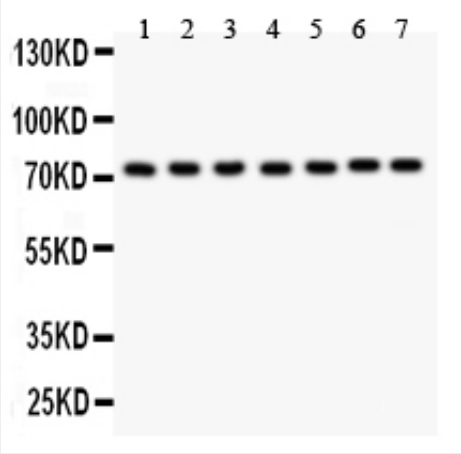
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-GCLC Picoband Antibody - Images

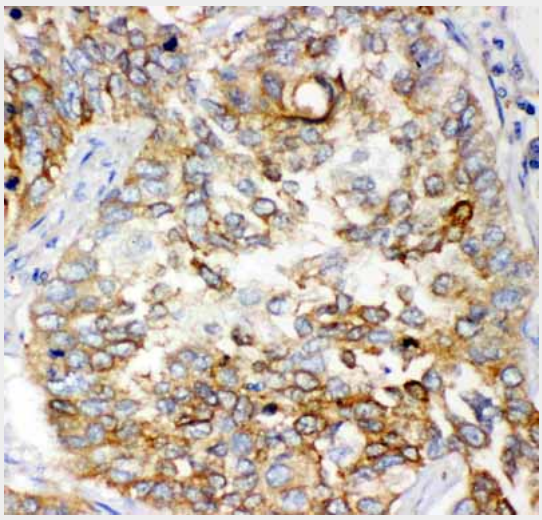



Anti- GCLC antibody, ABO11892, Western blottingAll lanes: Anti GCLC (ABO11892) at 0.5ug/mlWB: Recombinant Human GCLC Protein 0.5ngPredicted bind size: 40KDObserved bind size: 40KD

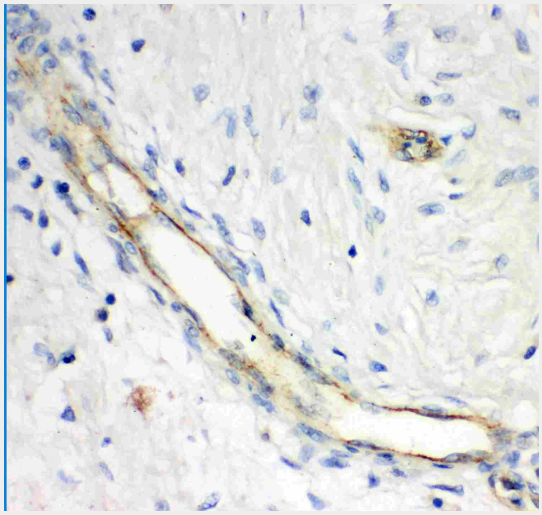
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999




Anti- GCLC antibody, ABO11892, Western blottingAll lanes: Anti GCLC (ABO11892) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: HELA Cell Lysate at 40ugLane 4: PC-12 Whole Cell Lysate at 40ugLane 5: NRK Whole Cell Lysate at 40ugLane 6: HEPA Whole Cell Lysate at 40ugLane 7: A549 Whole Cell Lysate at 40ugPredicted bind size: 72KDObserved bind size: 72KD



Anti- GCLC antibody, ABO11892, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti- GCLC antibody, ABO11892, IHC(P)IHC(P): Human Mammary Cancer Tissue

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

## Anti-GCLC Picoband Antibody - Background

GCLC, also named 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.