



# GCSc-γ Polyclonal Antibody

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>         | BYab-03895                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reactivity</b>         | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>       | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Name</b>          | GCLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Name</b>       | Glutamate--cysteine ligase catalytic subunit                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human GCSc-gamma. AA range:266-315                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>        | GCSc-γ Polyclonal Antibody detects endogenous levels of GCSc-γ protein.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>           | GCLC; GLCL; GLCLC; Glutamate--cysteine ligase catalytic subunit; GCS heavy chain; Gamma-ECS; Gamma-glutamylcysteine synthetase                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Observed Band</b>      | 73kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cell Pathway</b>       | cytosol,integral component of membrane,glutamate-cysteine ligase complex,                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Tissue Specificity</b> | Foreskin fibroblast,Hippocampus,Liver,Testis,Thalamus,                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>           | catalytic activity:ATP + L-glutamate + L-cysteine = ADP + phosphate + gamma-L-glutamyl-L-cysteine.,disease:Defects in GCLC are the cause of hemolytic anemia [MIM:230450].,enzyme regulation:Feedback inhibition by glutathione.,pathway:Sulfur metabolism; glutathione biosynthesis; glutathione from L-cysteine and L-glutamate: step 1/2.,similarity:Belongs to the glutamate--cysteine ligase type 3 family.,subunit:Heterodimer of a catalytic heavy chain and a regulatory light chain., |
| <b>Background</b>         | Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase is the first rate-limiting enzyme of glutathione synthesis. The enzyme consists of                                                                                                                                                                                                                                                                                                                                  |

**Nanjing BYabscience technology Co.,Ltd**



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 2010],

**matters needing attention**

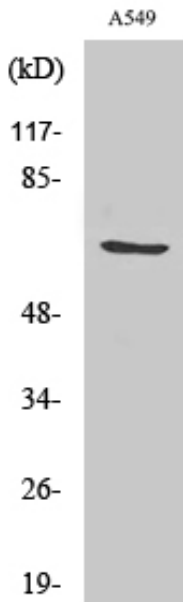
Avoid repeated freezing and thawing!

**Usage suggestions**

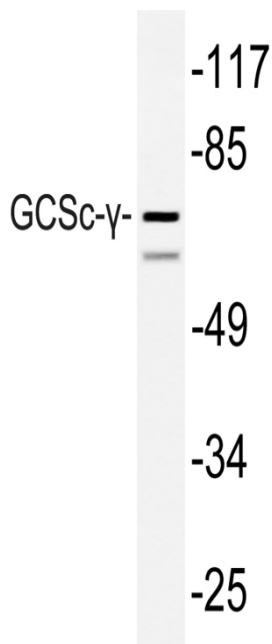
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western Blot analysis of various cells using GCSc- $\gamma$  Polyclonal Antibody



Western blot analysis of lysate from A549 cells, using GCSc- $\gamma$  antibody.