



# GCSc-γ Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-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 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],

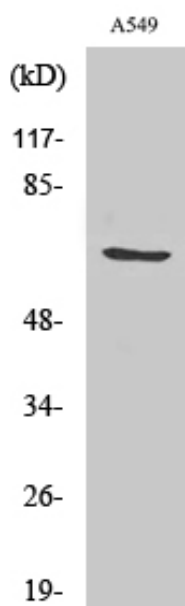
**matters needing attention**

Avoid repeated freezing and thawing!

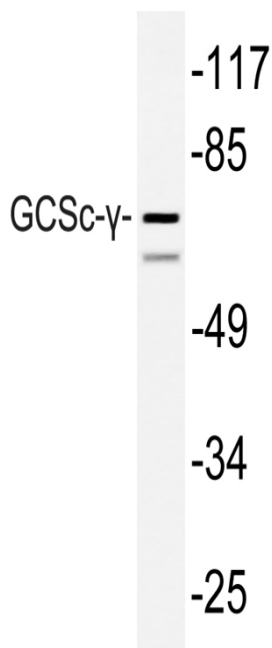
**Usage suggestions**

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-γ Polyclonal Antibody



Western blot analysis of lysate from A549 cells, using GCSc-γ antibody.