



GCLC Rabbit mAb

Catalog No	YP-rAb-17710
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,IP,ELISA
Gene Name	GCLC
Protein Name	Glutamate--cysteine ligase catalytic subunit
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	GCLC;Glutamate--cysteine ligase catalytic subunit;GCLC ; GLCL ; GLCLC ; Glutamate--cysteine ligase catalytic subunit ; GCS heavy chain ; Gamma-ECS ; Gamma-glutamylcysteine synthetase
Observed Band	73kD
Calculated Molecular Weight	73kD
Cell Pathway	Cytoplasm
Tissue Specificity	Foreskin fibroblast,Hippocampus,Liver,Testis,Thalamus,
Function	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.,
Background	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



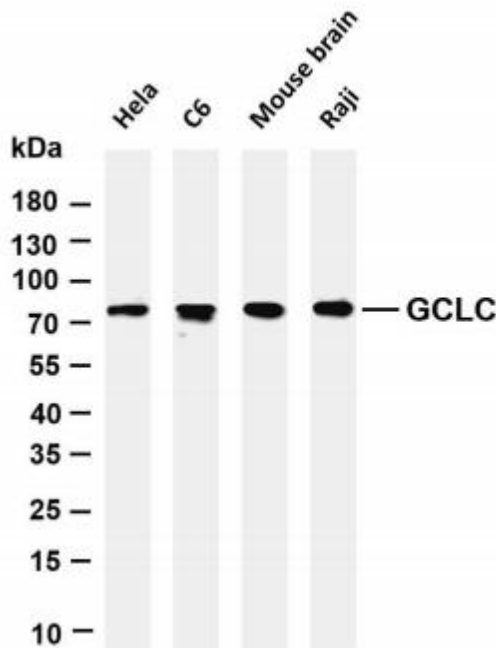
been associated with hemolytic anemia due to deficiency of gamma-glutamylcysteine synthetase and susceptibility to myocardial infarction.[provided by RefSeq, Oct 2010],

matters needing attention

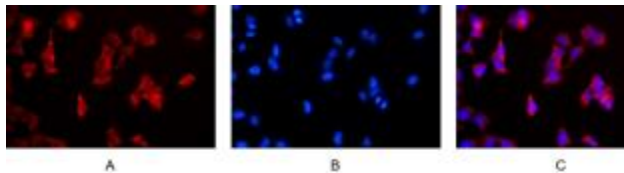
Avoid repeated freezing and thawing!

Usage suggestions

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GCLC antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: C6 Lane 3: Mouse brain Lane 4: Raji Predicted band size: 73kDa Observed band size: 73kDa



Immunofluorescence analysis of HEK293. Picture A: GCLC antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

