

GCLC Rabbit mAb

Catalog No: #49548

Package Size: #49548-1 50ul #49548-2 100ul

Description

Product Name	GCLC Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	JA08-03
Purification	ProA affinity purified
Applications	WB, IHC, FC
Species Reactivity	Hu, Rt
Immunogen Description	Recombinant protein
Conjugates	Unconjugated
Other Names	EC 6.3.2.2 antibody Gamma ECS antibody Gamma glutamylcysteine synthetase antibody Gamma-ECS antibod Gamma-glutamylcysteine synthetase antibody GCL antibody Gclc antibody GCS antibody GCS heavy chain antibody GLCL antibody GLCLC antibody Glutamate cysteine ligase catalytic subunit antibody Glutamate--cysteine ligase catalytic subunit antibody GSH1_HUMAN antibody
Accession No.	Swiss-Prot#:P48506
Calculated MW	73 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

WB: 1:500-1:1000IHC: 1:50-1:200 FC: 1:50-1:100

Background

The GCLC gene consists of 16 exons and encodes the 636 amino acid protein g-GCSc (g-glutamylcysteine synthetase heavy subunit), also designated g-L-glutamate-L-cysteine ligase catalytic subunit (GLCLC). g-GCSc is expressed in hemocytes, brain, liver and kidney. g-GCSc associates with a regulatory or modifier subunit, g-GCSm (g-glutamylcysteine synthetase light subunit), to form a heterodimer, g-GCS. g-GCS is the first enzyme involved and the rate determining step in glutathione biosynthesis. Oxidants, cadmium and methyl mercury upregulate the transcription of g-GCS. H₂O₂ regulation depends on the Yap1 protein and the presence of glutamate, glutamine and lysine. Cadmium regulates transcription through proteins Met-4, Met-31 and Met-32. Cbf1, a DNA binding protein, inhibits transcription of g-GCS. Chemopreventive compounds cause increased levels of g-GCSc in kidney tissues, which may protect against chemically induced carcinogenesis. A His370Leu amino acid change in g-GCSc causes deficiencies in activity which are responsible for hemolytic anemia and low red blood cell glutathione levels.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.