

GCLC Rabbit mAb

Catalog No: #49548

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

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	GCLC Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JA08-03
Purification	ProA affinity purified
Applications	WB, IHC, FC
Species Reactivity	Hu, Rt
Immunogen Description	Recombinant protein
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
Uniprot	P48506
GeneID	2729;
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