

GCLC polyclonal antibody

Catalog: BS90566

Host: Rabbit

Reactivity: Human, Rat

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.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

73 kDa

Swiss-Prot:

P48506(Human) P19468(Rat)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:500-1:1,000

IHC:1:50-1:200

FC:1:50-1:100

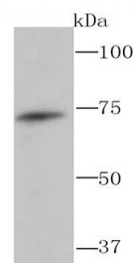
Storage&Stability:

Store at +4 °C after thawing. Aliquot store at -20 °C or -80 °C. Avoid repeated freeze / thaw cycles.

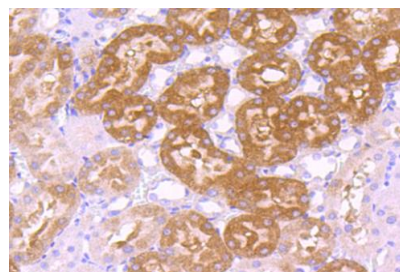
Specificity:

GCLC polyclonal antibody detects endogenous levels of GCLC protein.

DATA:



Western blot analysis of GCLC on A431 cell using anti-GCLC antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-GCLC antibody. Counter stained with hematoxylin.

Note:

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: info@bioworld.com

Tel: 6123263284

Fax: 6122933841

Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: info@biogot.com

Tel: 0086-025-68037686

Fax: 0086-025-68035151