### For Research Use Only

# GCLM Polyclonal antibody

Catalog Number: 14241-1-AP

Featured Product

**151 Publications** 



**Basic Information** 

Catalog Number: GenBank Accession Number: 14241-1-AP BC041809

Concentration: GeneID (NCBI): 550 ug/ml 2730

Source: UNIPROT ID: P48507

Isotype: Full Name:
IgG glutamate-cysteine ligase, modifier

Immunogen Catalog Number: subunit

5497 Calculated MW: 31 kDa

Observed MW: 31 kDa Purification Method:

Antigen affinity purification Recommended Dilutions:

WB: 1:2000-1:10000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:400-1:1600 IF/ICC: 1:50-1:500

FC (Intra): 0.25 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications: WB, IHC, IF Species Specificity: human, mouse, rat

**Cited Species:** 

human, mouse, rat, goat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A431 cells, HeLa cells, LO2 cells, mouse liver

tissue, rat liver tissue, HepG2 cells

IP: A431 cells,

IHC: human liver cancer tissue, human skeletal muscle tissue, mouse skeletal muscle tissue

IF/ICC : HepG2 cells,
FC (Intra) : HepG2 cells,

# Background Information

GCLM(Glutamate--cysteine ligase regulatory subunit) is also named as GLCLR and belongs to the aldo/keto reductase family. It catalyzes the first step of GSH synthesis and is involved in gamma-glutamyl cycle. GCLM is implicated in some forms of hemolytic anemia.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Lin-Tao Xu	34601084	J Ethnopharmacol	WB
Jiawen Zheng	31569771	Mar Drugs	WB
Jie Deng	34565300	Bioengineered	WB

Storage

Storage:

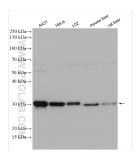
Store at -20°C. Stable for one year after shipment.

Storage Buffer

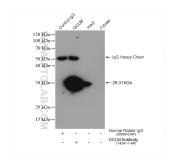
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

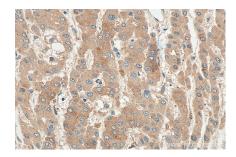
## **Selected Validation Data**



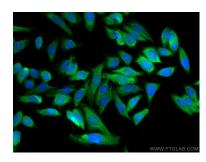
Various lysates were subjected to SDS PAGE followed by western blot with 14241-1-AP (GCLM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



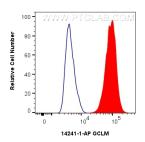
IP result of anti-GCLM (IP:14241-1-AP, 4ug; Detection:14241-1-AP 1:2000) with A431 cells lysate 1000 ug.



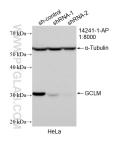
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 14241-1-AP (GCLM antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using GCLM antibody (14241-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug GCLM Polyclonal antibody (14241-1-AP) and CoraLite® 488-Conjugated Goat Anti-Rabbit I gG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of GCLM antibody (14241-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GCLM transfected HeLa cells.