

**GCLM Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9102B**

**Specification**

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**GCLM Antibody (C-term) - Product Information**

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">P48507</a>
Other Accession	<a href="#">O09172</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	30727
Antigen Region	246-274

**GCLM Antibody (C-term) - Additional Information**

**Gene ID** 2730

**Other Names**

Glutamate--cysteine ligase regulatory subunit, GCS light chain, Gamma-ECS regulatory subunit, Gamma-glutamylcysteine synthetase regulatory subunit, Glutamate--cysteine ligase modifier subunit, GCLM, GLCLR

**Target/Specificity**

This GCLM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 246-274 amino acids from the C-terminal region of human GCLM.

**Dilution**

IF~~1:10~50  
WB~~1:8000  
IHC-P~~1:25  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GCLM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GCLM Antibody (C-term) - Protein Information**

**Name** GCLM

**Synonyms** GLCLR

**Tissue Location**

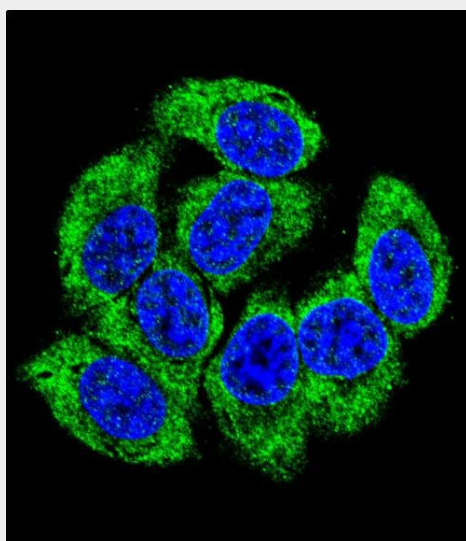
In all tissues examined. Highest levels in skeletal muscle

**GCLM Antibody (C-term) - Protocols**

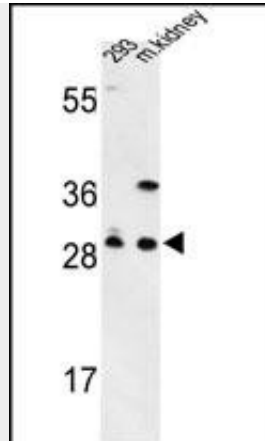
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

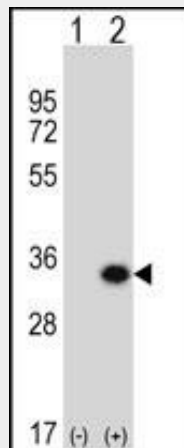
**GCLM Antibody (C-term) - Images**



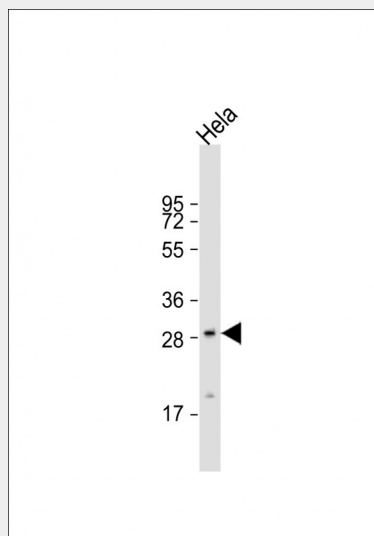
Confocal immunofluorescent analysis of GCLM Antibody (C-term)(Cat#AP9102b) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



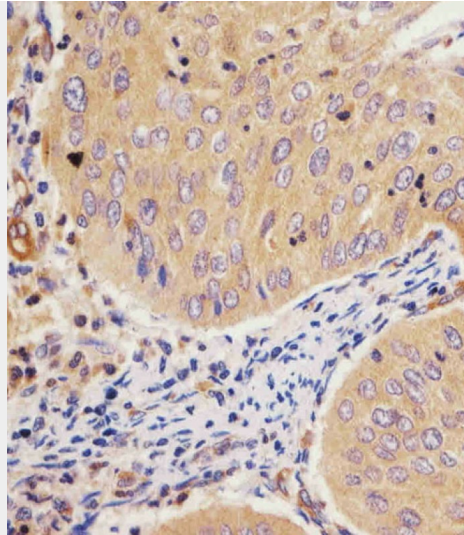
Western blot analysis of GCLM Antibody (C-term) (Cat. #AP9102b) in 293 cell line and mouse kidney tissue lysates (35ug/lane). GCLM (arrow) was detected using the purified Pab.



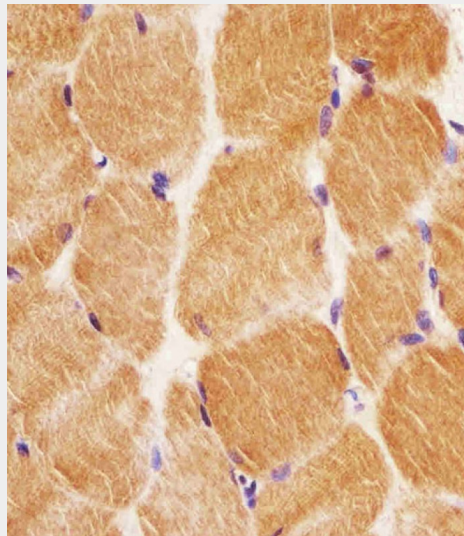
Western blot analysis of GCLM (arrow) using rabbit polyclonal GCLM Antibody (C-term) (Cat. #AP9102b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GCLM gene.



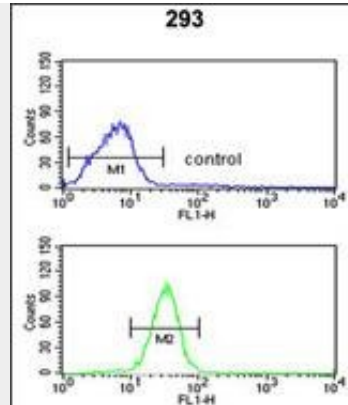
Anti-GCLM Antibody (C-term) at 1:8000 dilution + HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



AP9102B staining GCLM in human cervical carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP9102B staining GCLM in human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



GCLM Antibody (C-term) (Cat. #AP9102b) flow cytometric analysis of 293 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **GCLM Antibody (C-term) - Background**

GCLM 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. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.

### **GCLM Antibody (C-term) - References**

Moyer, A.M., et.al., Cancer Epidemiol. Biomarkers Prev. 19 (3), 811-821 (2010)  
 Engstrom, K.S., et.al., Mutat. Res. 683 (1-2), 98-105 (2010)

### **GCLM Antibody (C-term) - Citations**

- [The protective role of resveratrol in the sodium arsenite-induced oxidative damage via modulation of intracellular GSH homeostasis.](#)