10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

GCLM Antibody (C-term) - Product Information

Application	**IF, WB, FC, IHC-P,E**
Primary Accession	P48507
Other Accession	O09172
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
FC~~1:10~50
IHC-P~~1:25
E~~Use at an assay dependent concentration.

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

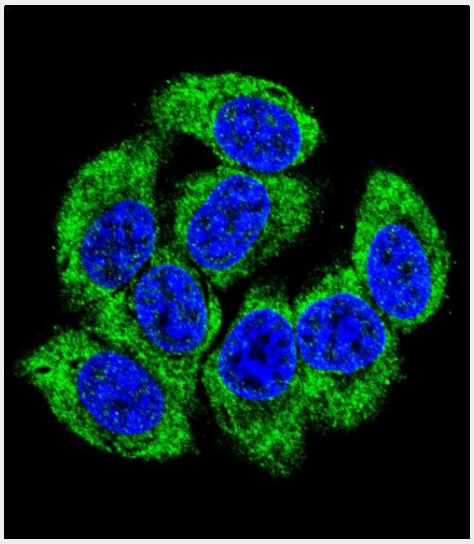
Tissue Location
In all tissues examined. Highest levels in skeletal muscle

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 Cytomety
- 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 lgG (green). DAPI was used to stain the cell nuclear (blue).

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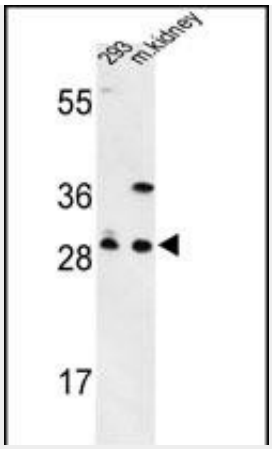
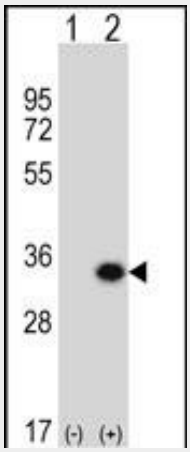
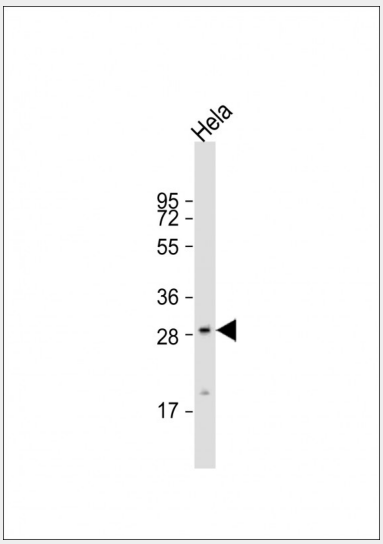


Western blot analysis of GCLM Antibody (C-term) (Cat. #AP9102b) in 293 cell line and mouse kidney tissue lysates (35ug/lane). GCLM (arrow) was detected using the purified Pab.



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.

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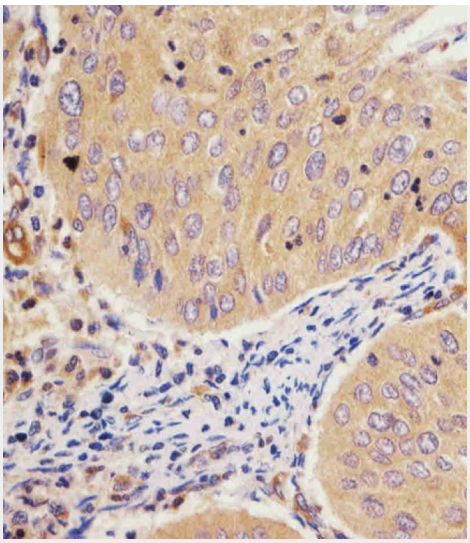
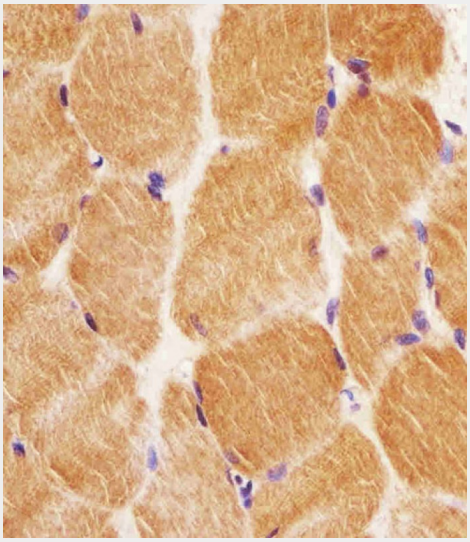


AP9102B staining GCLM in human cervical carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours 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 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

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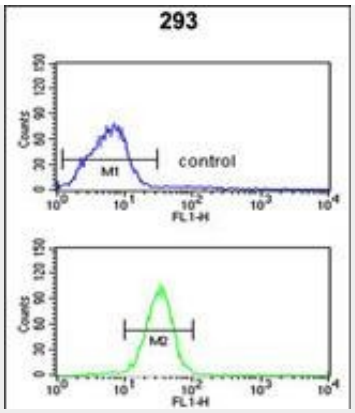

GCLM Antibody (C-term) (Cat. #AP9102b) flow cytometric analysis of 293 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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.