

Product Name: KD-Validated GCLM Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01078**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 30.7kDa

Antigen Information

Gene Name	GCLM GCLM; Glutamate-Cysteine Ligase Modifier Subunit; GLCLR; Gamma-Glutamylcysteine Synthetase Regulatory Subunit; Glutamate--Cysteine Ligase Regulatory Subunit; Gamma-ECS Regulatory Subunit; GCS Light Chain; Glutamate-Cysteine Ligase (Gamma-Glutamylcysteine Synthetase), Regulatory (30.8kD); Glutamate-Cysteine Ligase Modifier Subunit Delta2 Alternative Splicing; Glutamate-Cysteine Ligase Regulatory Protein; Glutamate-Cysteine Ligase, Modifier Subunit; Glutamate--Cysteine Ligase Modifier Subunit; Gamma-Glutamylcysteine Synthetase; GSC Light Chain
Alternative Names	
Gene ID	2730.0
SwissProt ID	P48507
Immunogen	A synthesized peptide derived from human GCLM

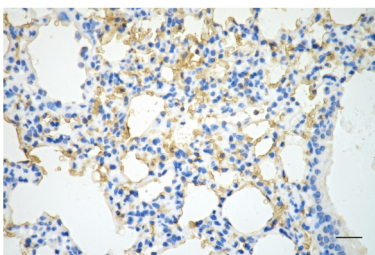
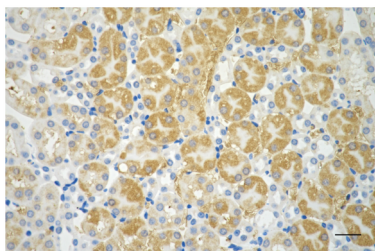
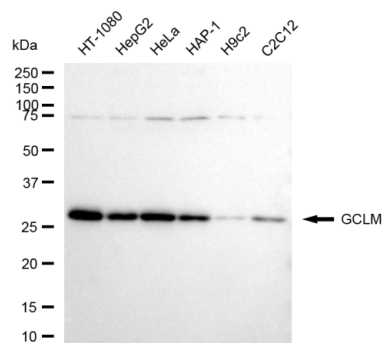
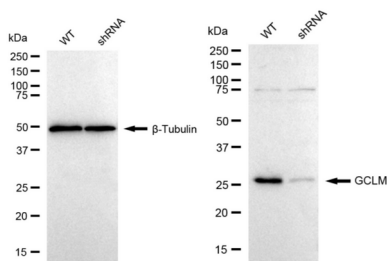
Background

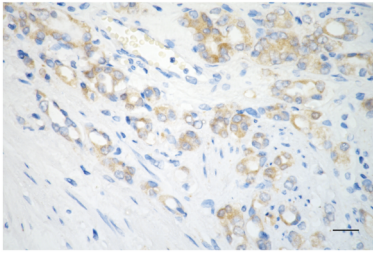
Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase, is the first rate limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]

Research Area

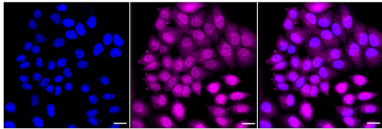
Neuroscience, Signal Transduction, Cell Biology, Metabolism

Image Data

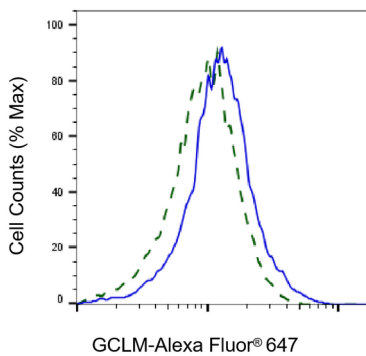




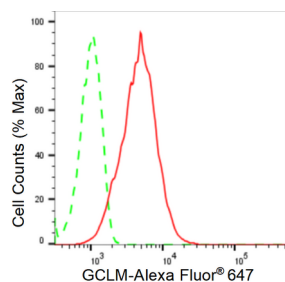
Immunohistochemistry was performed on paraffin-embedded human prostatic adenocarcinoma using GCLM antibody (KVA01078, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with GCLM antibody (KVA01078, 1:1,000). Nuclei were stained blue with DAPI; GCLM was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of GCLM knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with GCLM antibody (KVA01078, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of GCLM expression in HepG2 cells using GCLM antibody (KVA01078, 1:2,000). Green, isotype control; red, GCLM.