

Product datasheet

Anti-GCLM antibody [EPR6667] ab126704

KO VALIDATED Recombinant RabMAB

★★★★★ 2 Abreviews 13 References 7 Images

Overview

Product name	Anti-GCLM antibody [EPR6667]
Description	Rabbit monoclonal [EPR6667] to GCLM
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human GCLM aa 50-150. The exact sequence is proprietary.
Positive control	IHC: Rat liver tissue; Mouse cardiac muscle tissue; Human bladder cancer tissue WB: HeLa, NIH/3T3, PC-12; Wild-type HAP1 whole cell lysate, HeLa cell lysate IP: HeLa cells
General notes	

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAB[®] patents](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20

Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified
Clonality Monoclonal
Clone number EPR6667
Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab126704 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

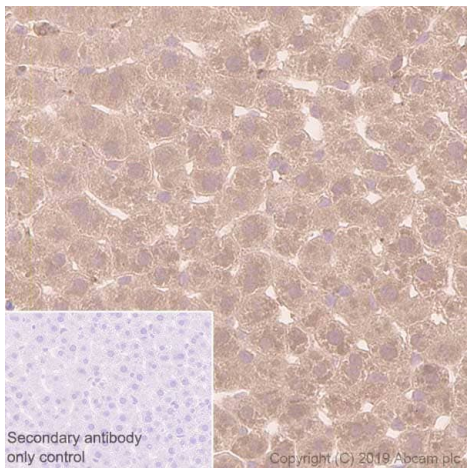
Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 31 kDa.
IP		1/10 - 1/100.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt.

Target

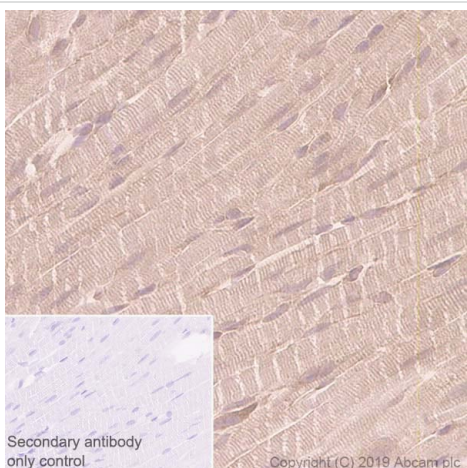
Tissue specificity In all tissues examined. Highest levels in skeletal muscle.
Pathway Sulfur metabolism; glutathione biosynthesis; glutathione from L-cysteine and L-glutamate: step 1/2.
Sequence similarities Belongs to the aldo/keto reductase family. Glutamate--cysteine ligase light chain subfamily.

Images



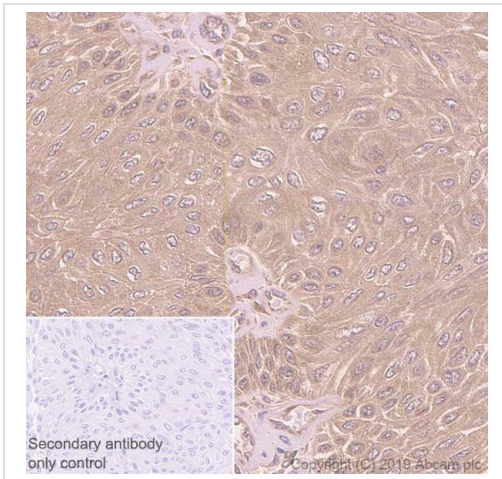
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat liver tissue sections labeling GCLM with purified ab126704 at 1/50 dilution (2.4 µg/mL). Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GCLM antibody
[EPR6667] (ab126704)

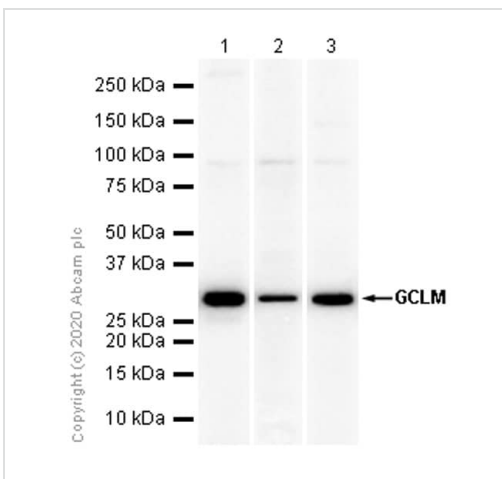


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse cardiac muscle tissue sections labeling GCLM with purified ab126704 at 1/50 dilution (2.4 µg/mL). Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GCLM antibody
[EPR6667] (ab126704)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GCLM antibody [EPR6667] (ab126704)



Western blot - Anti-GCLM antibody [EPR6667] (ab126704)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human bladder cancer tissue sections labeling GCLM with purified ab126704 at 1/50 dilution (2.4 µg/mL). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Lanes 1 & 3 : Anti-GCLM antibody [EPR6667] (ab126704) at 1/10000 dilution (Purified)

Lane 2 : Anti-GCLM antibody [EPR6667] (ab126704) at 1/10000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

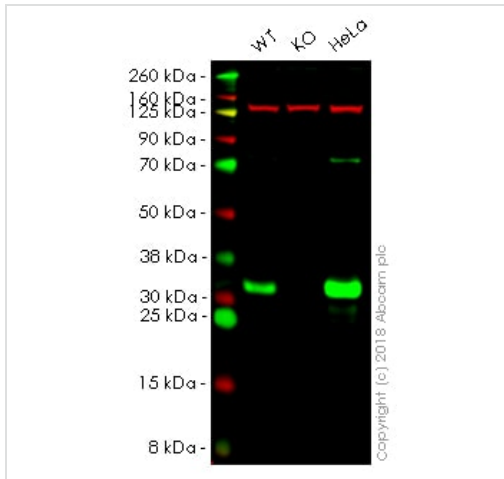
Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Secondary

Lanes 1 & 3 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Lane 2 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 31 kDa



Western blot - Anti-GCLM antibody [EPR6667] (ab126704)

All lanes : Anti-GCLM antibody [EPR6667] (ab126704) at 1 µg/ml

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : GCLM knockout HAP1 whole cell lysate

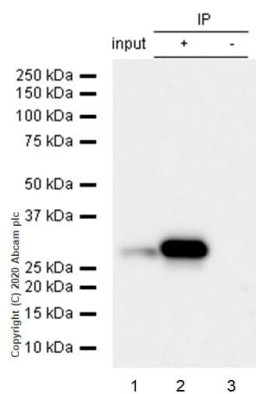
Lane 3 : HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 31 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab126704 observed at 31 kDa. Red - loading control, [ab130007](#), observed at 130 kDa.

ab126704 was shown to recognize GCLM in wild-type HAP1 cells as signal was lost at the expected MW in GCLM knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and GCLM knockout samples were subjected to SDS-PAGE. Ab126704 and [ab130007](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-GCLM antibody
[EPR6667] (ab126704)

Purified ab126704 at 1/20 dilution (0.6µg) immunoprecipitating GCLM in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab126704 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab126704 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/5000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 31 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-GCLM antibody [EPR6667] (ab126704)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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