abcam

ab207777

Anti-GCLC antibody [EPR20078]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR20078
Purification technique	Affinity purification Protein A
Concentration	0.59 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/40
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Rat
Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.

Notes	-

Flow Cyt (Intra)

Tested

Species	Rat
Dilution info	1/60
Notes	-

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information GCLC

Function	Catalyzes the ATP-dependent ligation of L-glutamate and L-cysteine and participates in the first and rate-limiting step in glutathione biosynthesis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

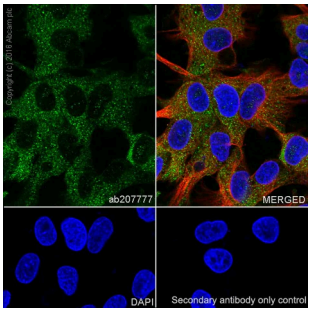
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images

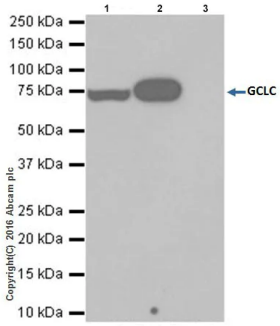


Immunocytochemistry/ Immunofluorescence - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GCLC antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling GCLC with ab207777 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and weak nuclear staining on HepG2 cell line. The nuclear counterstain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Immunoprecipitation - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC was immunoprecipitated from 0.35 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab207777 at 1/40 dilution.
Western blot was performed from the immunoprecipitate using ab207777 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Lane 1: HepG2 whole cell lysate 10µg (Input).

Lane 2: ab207777 IP in HepG2 whole cell lysate.

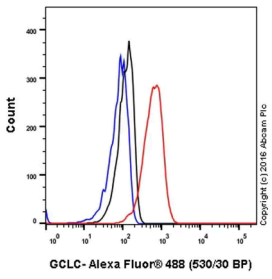
Lane 3: Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab207777 in HepG2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

All lanes:
Immunoprecipitation - Anti-GCLC antibody [EPR20078] (ab207777)

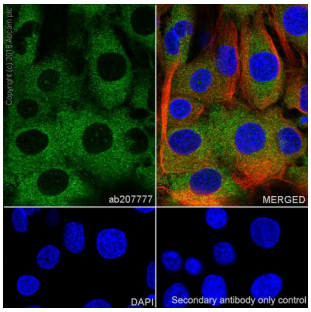
Predicted band size: 73 kDa



Flow Cytometry (Intracellular) - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC Flow Cytometry (Intracellular) staining using rabbit Anti-GCLC antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed PC-12 (Rat adrenal gland pheochromocytoma cell line) cells labeling GCLCwith ab207777 at 1/60 dilution (red) compared with aRabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

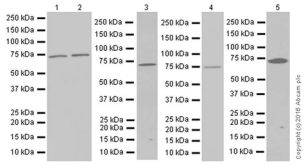


Immunocytochemistry/ Immunofluorescence - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GCLC antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-12 (Rat adrenal gland pheochromocytoma cell line) cells labeling GCLC with ab207777 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and weak nuclear staining on PC-12 cell line. The nuclear counterstain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Western blot - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC Western blot staining using rabbit Anti-GCLC antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Lanes 1 - 2:
Western blot - Anti-GCLC antibody [EPR20078] (ab207777) at 1/2000 dilution

Lanes 3 - 5:
Western blot - Anti-GCLC antibody [EPR20078] (ab207777) at 1/1000 dilution

Lane 1:
HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate at 10 µg

Lane 2:
MCF7 (Human breast adenocarcinoma cell line) whole cell lysate at 10 µg

Lane 3:
A549 (Human lung carcinoma cell line) whole cell lysate at 10 µg

Lane 4:
Human lung lysate at 10 µg

Lane 5:
Human fetal liver lysate at 10 µg

Secondary

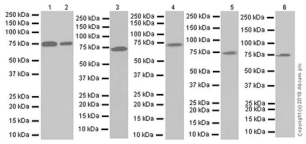
Lanes 1 - 3:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lanes 4 - 5:
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 73 kDa

Observed band size: 73 kDa

Exposure time: 3min



Western blot - Anti-GCLC antibody [EPR20078] (ab207777)

GCLC Western blot staining using rabbit Anti-GCLC antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1-3: 3 minutes; Lane 4: 15 seconds; Lane 5: 3 seconds; Lane 6: 5 seconds.

Lanes 1 - 2:
Western blot - Anti-GCLC antibody [EPR20078] (ab207777) at 1/2000 dilution

Lanes 3 - 6:
Western blot - Anti-GCLC antibody [EPR20078] (ab207777) at 1/1000 dilution

Lane 1:
C6 (Rat glial tumor cell line) whole cell lysate at 10 µg

Lane 2:
PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate at 10 µg

Lane 3:
RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

Lane 4:
Rat liver lysate at 10 µg

Lane 5:
Mouse liver lysate at 10 µg

Lane 6:
Mouse spleen lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 73 kDa

Observed band size: 73 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.