

Product datasheet

Anti-GC1q R antibody [60.11] ab24733

★★★★★ 3 Abreviews 7 References 6 Images

Overview

Product name	Anti-GC1q R antibody [60.11]
Description	Mouse monoclonal [60.11] to GC1q R
Host species	Mouse
Specificity	This antibody recognizes the mature receptor at the amino terminus (aa 76-93), in the region of the receptor that binds C1q. It will block the C1q/gC1q-R interaction.
Tested applications	Suitable for: Neutralising, IHC-P, WB, IP, ELISA, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Bacterial expressed recombinant full length protein GC1q R.
Positive control	This antibody gave a positive signal in Human tonsil tissue sections. This antibody gave a positive signal in the following Methanol fixed cell lines: HeLa.
General notes	This antibody clone is manufactured by Abcam. If you require this antibody in a particular buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com or you can find further information here .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Purity	Protein G purified
Clonality	Monoclonal
Clone number	60.11
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab24733** 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
Neutralising		Use at an assay dependent concentration. PubMed: 9233640
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★	Use a concentration of 5 µg/ml. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
IP		1/5000.
ELISA		Use at an assay dependent concentration.
Flow Cyt	★★★★☆	Use 0.5µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 5 µg/ml.

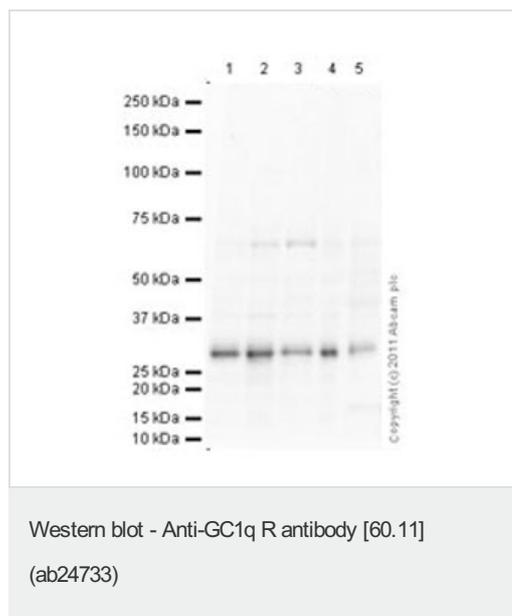
Target

Function Binds to the globular "heads" of C1q thus inhibiting C1 activation.

Sequence similarities Belongs to the MAM33 family.

Cellular localization Mitochondrion matrix. Nucleus. Might also be nuclear in some cell types.

Images



All lanes : Anti-GC1q R antibody [60.11] (ab24733) at 5 µg/ml

Lane 1 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 4 : Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate

Lane 5 : Human liver tissue lysate - total protein ([ab29889](#))

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

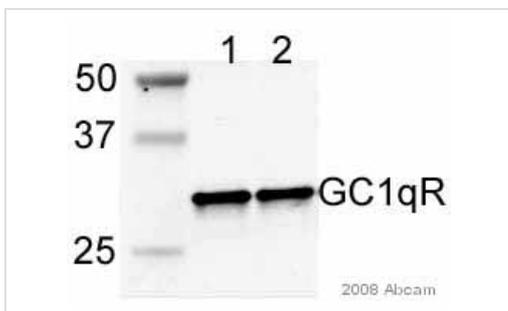
Predicted band size: 33 kDa

Observed band size: 30 kDa

[why is the actual band size different from the predicted?](#)

Additional bands at: 68 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 3 minutes



Western blot - Anti-GC1q R antibody [60.11] (ab24733)

This image is courtesy of an anonymous Abreview

Lane 1 : Mw standards

Lanes 2-3 : Anti-GC1q R antibody [60.11] (ab24733) at 1/2000 dilution

Lane 2 : 293T whole cell lysate at 20 µg

Lane 3 : Hela whole cell lysate at 20 µg

Secondary

Lanes 2-3 : Alexa Fluor® 680 conjugated goat anti-mouse

Developed using the ECL technique.

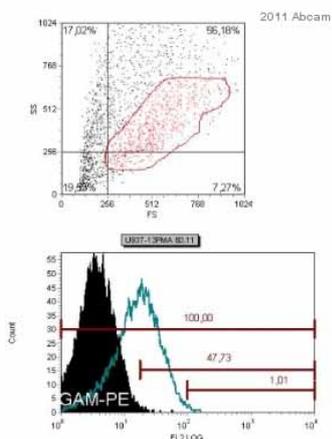
Performed under reducing conditions.

Predicted band size: 33 kDa

Observed band size: 32 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 10 seconds

The blot was blocked with 5% milk for 1 hour at 25°C prior to incubating with the primary antibody for 13 hours at 4°C.

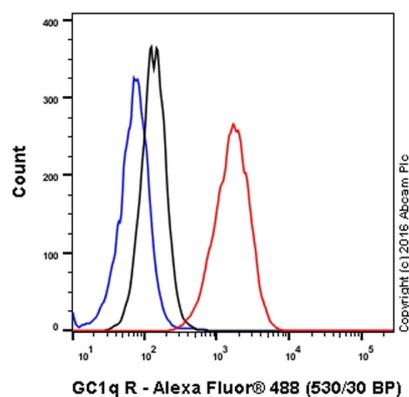


Flow Cytometry - Anti-GC1q R antibody [60.11]
(ab24733)

Image courtesy of David Sanchez Martin by Abreview.

ab24733 used in Flow Cytometry.

U937 cells were cultured in RPMI 10% FCS, treated with PMA (5nM) and, 6-12 hours later, cells were harvested, spun and resuspended to 200,000 cells in 100µl. ab24733 used at 10µg/ml for 30 minutes at 4°C. A phycoerythrin conjugated goat anti-mouse polyclonal was used as the secondary antibody at a 1/100 dilution.



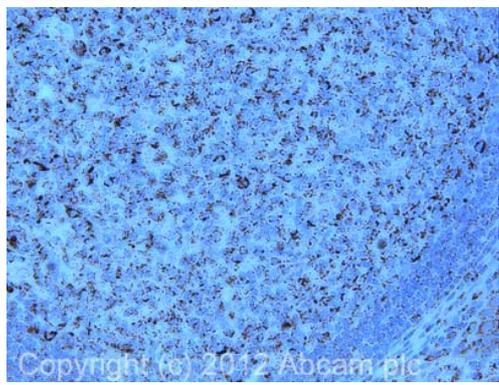
Flow Cytometry - Anti-GC1q R antibody [60.11]
(ab24733)

Overlay histogram showing HeLa cells stained with ab24733 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab24733, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150117) at 1/4000 dilution for 30 min at 22°C.

Isotype control antibody (black line) was mouse IgG1 [15-6E10A7] (ab170190, 0.5µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

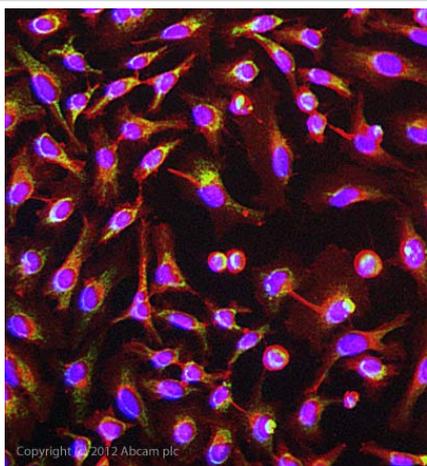
This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GC1q R antibody [60.11] (ab24733)

IHC image of ab24733 staining in human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab24733, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-GC1q R antibody [60.11] (ab24733)

ICC/IF image of ab24733 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab24733 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- mouse (ab96879) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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