# abcam

## Product datasheet

## Anti-UQCRC2 antibody [13G12AF12BB11] ab14745

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#### Overview

Product name Anti-UQCRC2 antibody [13G12AF12BB11]

**Description** Mouse monoclonal [13G12AF12BB11] to UQCRC2

Host species Mouse

**Tested applications** Suitable for: Flow Cyt, IHC-P, WB

Species reactivity Reacts with: Human

Predicted to work with: Pig

**Immunogen** Tissue, cells or virus corresponding to Cow UQCRC2.

Positive control Human, bovine, murine and rat heart mitochondria. HepG2 cell lysate.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact  $\underline{ orders@abcam.com}.$ 

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**Storage buffer** pH: 7.4

Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline

Purity lgG fraction
Clonality Monoclonal

Clone number 13G12AF12BB11

**Isotype** IgG1

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## **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab14745 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
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IF		Use a concentration of 0.1 - 0.5 µg/ml. Requires heat-induced antigen retrieval where aldehydes are used as fixatives.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	****(9)	Use a concentration of 1 µg/ml. Detects a band of approximately 49.5 kDa.

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**Function** 

This is a component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome

b-c1 complex), which is part of the mitochondrial respiratory chain. The core protein 2 is required

for the assembly of the complex.

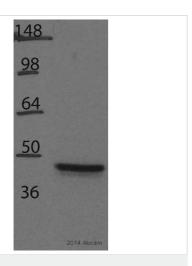
Sequence similarities

Belongs to the peptidase M16 family. UQCRC2/QCR2 subfamily.

**Cellular localization** 

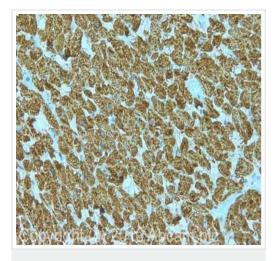
Mitochondrion inner membrane.

## **Images**

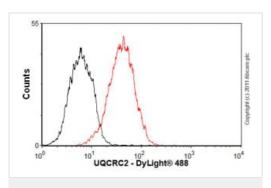


Western blot - Anti-UQCRC2 antibody [13G12AF12BB11] (ab14745)

This image is courtesy of an anonymous Abreview



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-UQCRC2 antibody
[13G12AF12BB11] (ab14745)



Flow Cytometry - Anti-UQCRC2 antibody [13G12AF12BB11] (ab14745)

Anti-UQCRC2 antibody [13G12AF12BB11] (ab14745) at 1/1000 dilution + H23 whole cell lysate at 20 µg

#### Secondary

HRP-conjugated goat anti-mouse IgG polyclonal at 1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

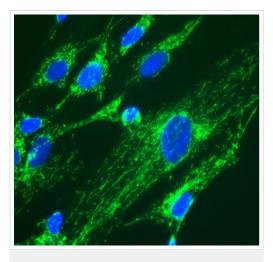
Observed band size: 48 kDa

Exposure time: 1 minute

IHC image of ab14745 staining in human heart formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM 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 ab14745, 1µg/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.

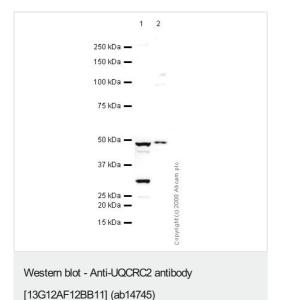
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Overlay histogram showing HepG2 cells stained with ab14745 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab14745,  $1\mu g/1x10^6$  cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1](ab91353,  $2\mu g/1x10^6$  cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunofluorescence - Anti-UQCRC2 antibody [13G12AF12BB11] (ab14745)

Mitochondrial localization of complex III visualized by immunofluorescence using anti-complex III subunit Core 2 mAb 2E3GC12FB2AE2 (ab14745). Cultured human embryonic lung-derived fibroblasts (strain MRC5) were fixed, permeabilized and then labeled with ab14745 (0.5  $\mu$ g/ml) followed by an AlexaFluor® 488-conjugated-goat-anti-mouse lgG1 isotype specific secondary antibody (2  $\mu$ g/ml).



**All lanes :** Anti-UQCRC2 antibody [13G12AF12BB11] (ab14745) at 0.5 μg/ml

Lane 1: Human skeletal muscle tissue lysate

Lane 2 : Ramos (human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to mouse  $\lg G$  - H&L - pre-adsorbed (HRP) at 1/3000 dilution

Observed band size: 48 kDa

**Additional bands at:** 30 kDa. We are unsure as to the identity of

these extra bands.

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

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