abcam

Product datasheet

Anti-UQCRFS1/RISP antibody [5A5] ab14746

★★★★★ <u>5 Abreviews</u> <u>77 References</u> 4 Images

Overview

Product name Anti-UQCRFS1/RISP antibody [5A5]

Description Mouse monoclonal [5A5] to UQCRFS1/RISP

Host species Mouse

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

Species reactivity Reacts with: Mouse, Rat, Cow, Human

Predicted to work with: Pig ...

Immunogen Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.

Positive control Human, bovine, rat and murine heart mitochondria. In Flow Cytometry, this antibody gave a

positive signal in Raji cells.

General notes

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

conjugation for your experiments, please contact 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

Product was previously marketed under the MitoSciences sub-brand.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.5

Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline

Purity Immunogen affinity purified

Purification notesNear homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using

hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

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Clonality Monoclonal

Clone number5A5IsotypeIgG2bLight chain typekappa

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab14746 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	★★★★☆ (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 25 kDa.
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170192 - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.
IHC-P	****(1)	Use a concentration of 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1

complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP

synthesis.

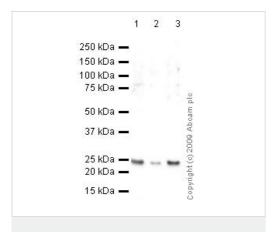
The transit peptide of the Rieske protein seems to form part of the bc1 complex and is

considered to be the subunit 11/IX of that complex.

Sequence similarities Contains 1 Rieske domain.

Cellular localization Mitochondrion inner membrane.

Images



Western blot - Anti-UQCRFS1/RISP antibody [5A5] (ab14746)

All lanes : Anti-UQCRFS1/RISP antibody [5A5] (ab14746) at $0.5 \mu g/ml$

Lane 1: Hela Whole Cell Lysate - Hydroxyurea Treated

Lane 2: Hela Whole Cell Lysate - Bleomycin Treated

Lane 3: Hela Whole Cell Lysate - Staurosporine Treated

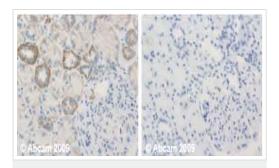
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000

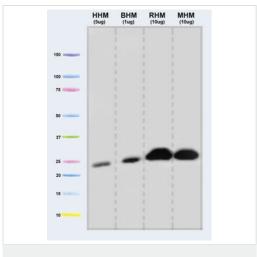
dilution

Observed band size: 25 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-UQCRFS1/RISP antibody [5A5] (ab14746)

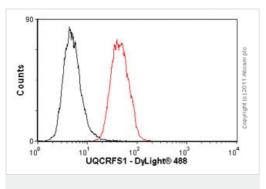
Human normal kidney (cortex). Staining is observed intracellular. Left panel: with primary antibody at 2 ug/ml. Right panel: isotype control. Sections were stained using an automated system DAKO Autostainer Plus, at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers citrate EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for mouse for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Western blot - Anti-UQCRFS1/RISP antibody [5A5] (ab14746)



Lane 1 : Isolated mitochondria from human heart at 5 μ g Lane 2 : Isolated mitochondria from bovine heart at 1 μ g Lane 3 : Isolated mitochondria from rat heart at 10 μ g Lane 4 : Isolated mitochondria from mouse heart at 10 μ g



Flow Cytometry - Anti-UQCRFS1/RISP antibody [5A5] (ab14746)

Overlay histogram showing Raji cells stained with ab14746 (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. The cells were then incubated with the antibody (ab14746, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2b [PLPV219] (ab91366, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Raji cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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

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