

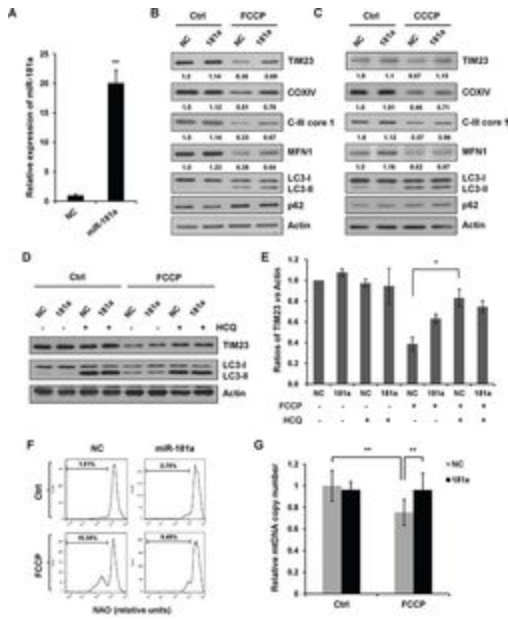
UQCRC1 Monoclonal Antibody (16D10AD9AH5)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Human, Mouse, Rat
Published Species	Rat, Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	16D10AD9AH5
Conjugate	Unconjugated
Immunogen	Bovine Complex III
Form	Liquid
Concentration	1 mg/mL
Purification	IgG fraction
Storage buffer	HEPES buffered saline
Contains	0.02% sodium azide
Storage conditions	4° C, do not freeze
RRID	AB_2532227

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5 µg/mL	33 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:50	-
Flow Cytometry (Flow)	1 µg/10 ⁶ cells	-

Product Specific Information

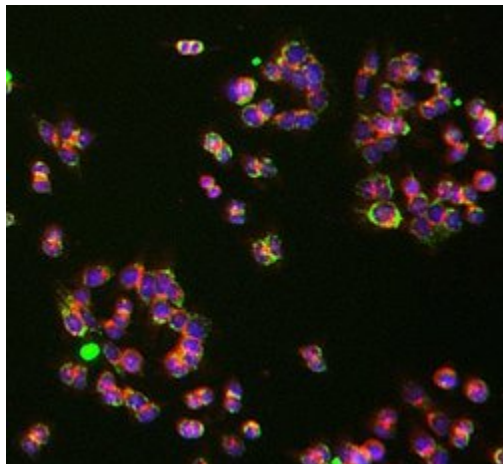
Use Human, Cow, Rat or Mouse heart mitochondrial lysate, HepG2 mitochondrial lysate. This antibody gave a positive result when used in the following methanol fixed cell lines: HCT116 for positive control.



UQCRC1 Antibody (459140)

Figure 2 miR-181a inhibits mitochondrial uncoupler-induced mitophagy A. The relative expression of miR-181a in SH-SY5Y cells transfected with miR-181a mimics or the negative control (NC). B. SH-SY5Y cells transfected with miR-181a or NC were treated with 10 μM FCCP or C. CCCP for 12 h. Samples were collected for western blot to analyze the expression of TIM23, COXIV, C-III core, MFN1, LC3, p62, and Actin. Densitometric ratios of mitochondrial marker proteins are quantified by Image J software. D. SH-SY5Y cells transfected with NC or miR-181a were exposed to FCCP (10 μM) and HCQ (20 μM) for 12 h. Western blot was performed to analyze the status of TIM23, LC3 and Actin. E. Image J densitometric analysis of the TIM23/Actin ratios from immunoblots is shown (data from three independent experiments, *p < 0.05). F. Mitochondrial content after 12 h of treatment with 10 μM FCCP was assessed by flow cytometry for NAO. G. Quantification of mitochondrial DNA copy number in NC or miR-181a transfected cells treated with FCCP (data from three independent experiments, **p < 0.01). Cell treatment validation info.

Product Images For UQCRC1 Monoclonal Antibody (16D10AD9AH5)

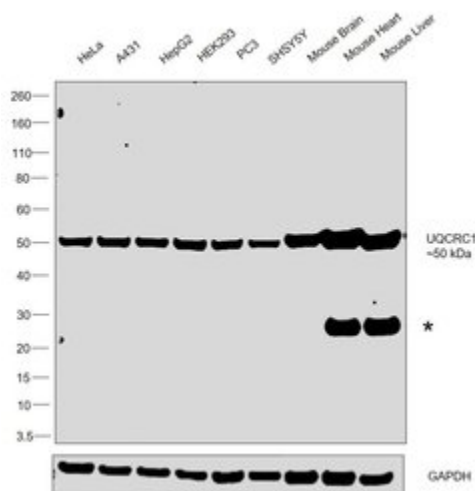


UQCRC1 Antibody (459140) in ICC/IF

Immunocytochemistry analysis of UQCRC1 was performed on HCT116 cells using a UQCRC1 Monoclonal Antibody (Product # 459140). The cells were 100% methanol fixed for 5 minutes at room temperature and then incubated in 1%BSA, 10% normal goat serum, 0.3M glycine in 0.1% PBS-Tween for 1 hour at room temperature to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the UQCRC1 Monoclonal Antibody (1:50 dilution) overnight at 4°C. The secondary antibody (pseudo-colored green) was a Goat Anti-Mouse IgG H&L used at a 1:1000 dilution for 1 hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1:200 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 µM for 1 hour at room temperature.

UQCRC1 Antibody (459140) in WB

Western blot was performed using Anti-UQCRC1 Monoclonal Antibody (16D10AD9AH5)(Product # 459140) and a 50 kDa band corresponding to UQCRC1 was observed across all cell lines and tissues tested. Whole Cell Extract-WCL (30 µg lysate) of HeLa (Lane 1), A431 (Lane 2), HepG2 (Lane 3), HEK293 (Lane 4), PC3 (Lane 5), SHSY5Y (Lane 6), Mouse Brain (Lane 7), Mouse Heart (Lane 8) and Mouse Liver (Lane 9) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:2000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



[View more figures on thermofisher.com](https://www.thermofisher.com)

Western Blot (33)

Molecular & cellular proteomics : MCP

Interspecies Differences in Proteome Turnover Kinetics Are Correlated With Life Spans and Energetic Demands.

"Published figure using UQCRC1 monoclonal antibody (Product # 459140) in Western Blot"

Authors: Swovick K, Firsanov D, Welle KA, Hryhorenko JR, Wise JP, George C, Sformo TL, Seluanov A, Gorbunova V, Ghaemmaghami S

Species
Not Applicable

Dilution
Not Cited

Year
2022

eLife

Genome-wide CRISPRi screening identifies OCIAD1 as a prohibitin client and regulatory determinant of mitochondrial Complex III assembly in human cells.

"459140 was used in Western Blotting to identify determinants of mETC function by screening a genome-wide human CRISPRi library under oxidative metabolic conditions with selective inhibition of mitochondrial Complex III and identified ovarian carcinoma immunoreactive antigen (OCIA) domain-containing protein 1 (OCIAD1) as a Complex III assembly factor."

Authors: Le Vasseur M, Friedman J, Jost M, Xu J, Yamada J, Kampmann M, Horlbeck MA, Salemi MR, Phinney BS, Weissman JS, Nunnari J

Species
Human

Dilution
1:2000

Year
2021

[View more WB references on thermofisher.com](#)

Immunohistochemistry (Paraffin) (1)

DNA repair

Mitochondrial DNA toxicity compromises mitochondrial dynamics and induces hippocampal antioxidant defenses.

"459140 was used in immunohistochemistry - paraffin section to investigate the effects of mitochondrial DNA damage on hippocampal neurons."

Authors: Lauritzen KH, Cheng C, Wiksen H, Bergersen LH, Klungland A

Species
Mouse

Dilution
1:1000

Year
2011

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.