

## Product datasheet

### Anti-Mitofilin antibody [EPR8749] ab137057

KO VALIDATED

Recombinant

RabMAb

[9 References](#) [11 Images](#)

#### Overview

<b>Product name</b>	Anti-Mitofilin antibody [EPR8749]
<b>Description</b>	Rabbit monoclonal [EPR8749] to Mitofilin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HAP1, HepG2, HeLA whole cel lysates; human heart, fetal heart and skeletal muscle tissuesIHC-P: Human thyroid cancer, hepatocellular cancer, colon and testis Tissue ICC/IF: HeLa cells Flow Cyt (intra): HeLa cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR8749
<b>Isotype</b>	IgG

## Applications

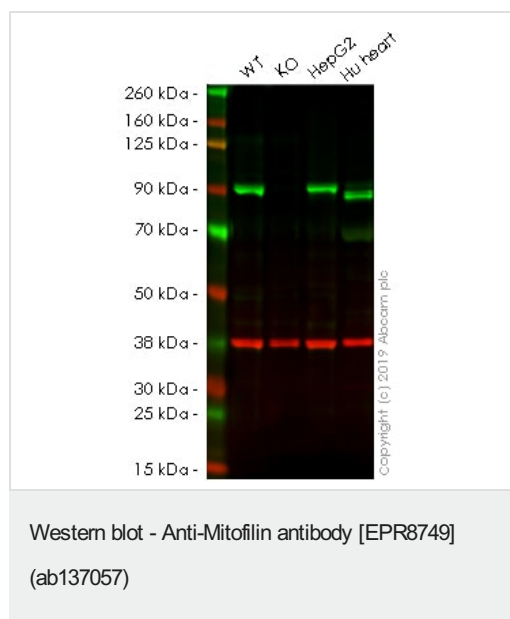
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab137057 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>Flow Cyt (Intra)</b>		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>WB</b>		1/1000 - 1/10000. Detects a band of approximately 80-84 kDa (predicted molecular weight: 84 kDa).
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
<b>ICC/IF</b>		1/100 - 1/500.

## Target

**Cellular localization** Mitochondrion inner membrane.

## Images



**All lanes** : Anti-Mitofilin antibody [EPR8749] (ab137057) at 1/1000 dilution

**Lane 1** : Wild-type HAP1 whole cell lysate

**Lane 2** : IMMT knockout HAP1 whole cell lysate

**Lane 3** : HepG2 whole cell lysate

**Lane 4** : Human Heart whole cell lysate

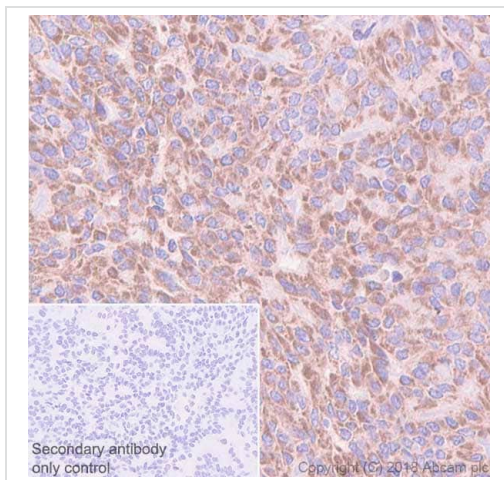
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 84 kDa

**Observed band size:** 84 kDa

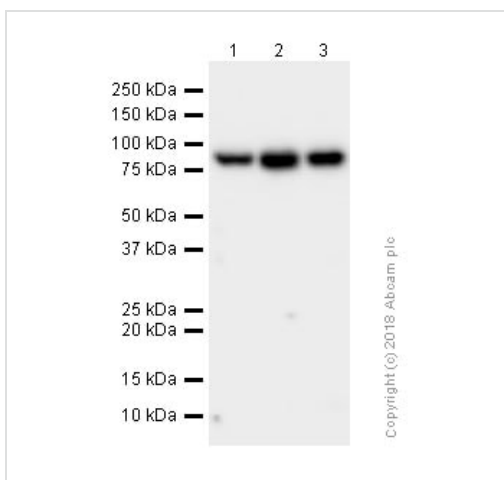
**Lanes 1 - 4:** Merged signal (red and green). Green - ab137057 observed at 84 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab137057 was shown to specifically react with IMMT in wild-type HAP1 cells as signal was lost in IMMT knockout cells. Wild-type and IMMT knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab137057 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofilin antibody [EPR8749] (ab137057)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid cancer tissue sections labeling Mitofilin with purified ab137057 at 1/250 dilution (0.508 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Mitofilin antibody [EPR8749] (ab137057)

**All lanes :** Anti-Mitofilin antibody [EPR8749] (ab137057) at 1/10000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 2 :** Human fetal heart lysates

**Lane 3 :** Human skeletal muscle lysates

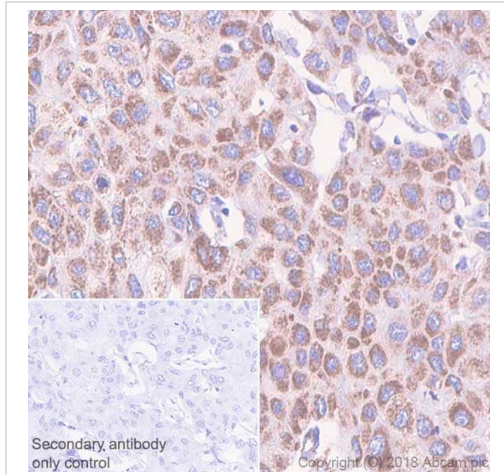
Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

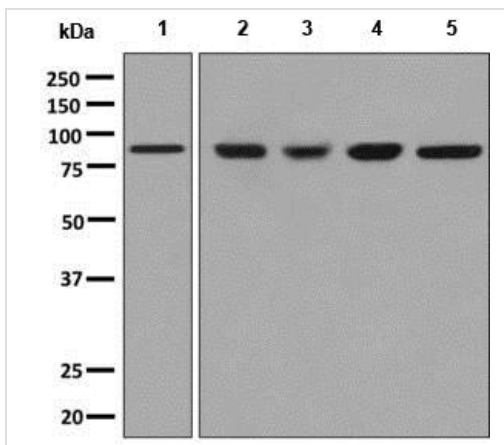
**Predicted band size:** 84 kDa

**Observed band size:** 84 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofilin antibody [EPR8749] (ab137057)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human hepatocellular cancer tissue sections labeling Mitofilin with purified ab137057 at 1/250 dilution (0.508 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Mitofilin antibody [EPR8749] (ab137057)

**All lanes :** Anti-Mitofilin antibody [EPR8749] (ab137057) at 1/1000 dilution (unpurified)

**Lane 1 :** HeLa cell lysate

**Lane 2 :** Human fetal heart tissue lysate

**Lane 3 :** Human fetal muscle tissue lysate

**Lane 4 :** A673 cell lysate

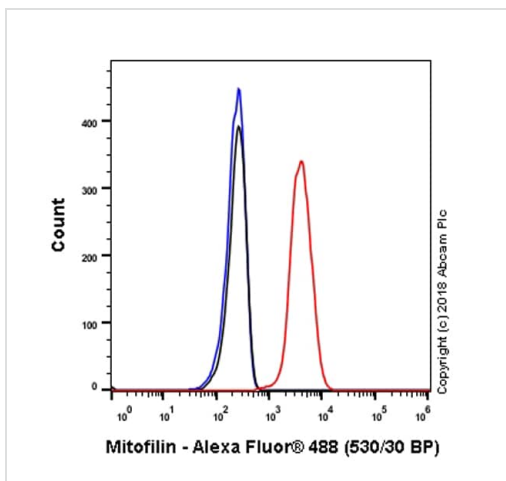
**Lane 5 :** Saos 2 cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

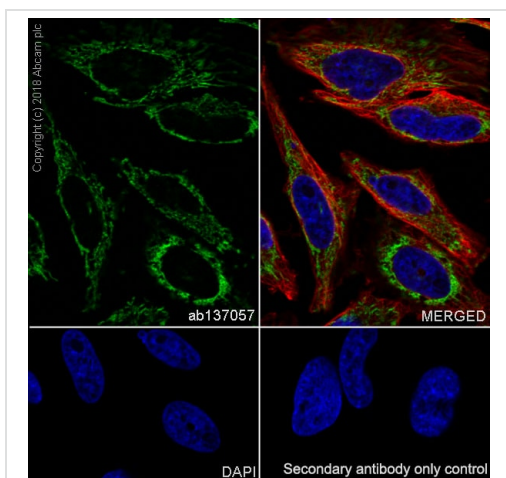
**All lanes :** HRP labelled Goat anti-Rabbit IgG at 1/2000 dilution

**Predicted band size:** 84 kDa



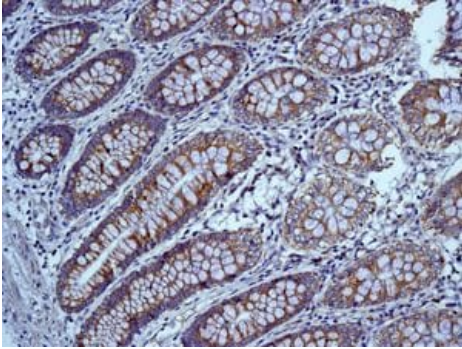
Flow Cytometry (Intracellular) - Anti-Mitofilin antibody [EPR8749] (ab137057)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Mitofilin with purified ab137057 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-Mitofilin antibody [EPR8749] (ab137057)

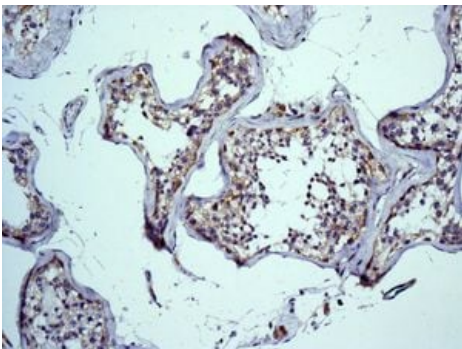
Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Mitofilin with purified ab137057 at 1/100 dilution (1.3 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofilin antibody [EPR8749] (ab137057)

Immunohistochemical analysis of paraffin embedded Human colon tissue labelling Mitofilin with ab137057 (unpurified) at 1/100 dilution.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

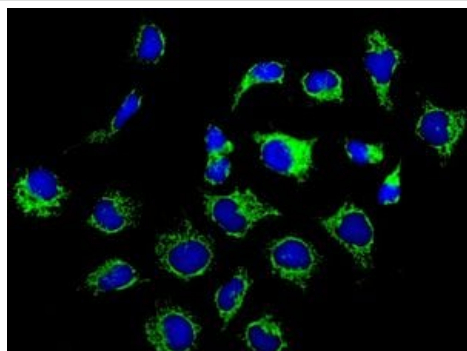


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofilin antibody [EPR8749] (ab137057)

Immunohistochemical analysis of paraffin embedded Human testis tissue labelling Mitofilin with ab137057 (unpurified) at 1/100 dilution.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.





Immunofluorescent staining of HeLa cells labelling Mitofilin with ab137057 (unpurified) at 1/250 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-Mitofilin antibody [EPR8749] (ab137057)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Mitofilin antibody [EPR8749] (ab137057)

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

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