abcam

Product datasheet

Anti-Mitofusin 1 antibody ab57602

★★★★★ 10 Abreviews　37 References　画像数 6

製品の概要

製品名	Anti-Mitofusin 1 antibody
製品の詳細	Mouse monoclonal to Mitofusin 1
アプリケーション	**適用あり:** WB, IHC-P, ICC/IF, Flow Cyt, IP
種交差性	**交差種:** Mouse, Rat, Human, Cynomolgus monkey
免疫原	Recombinant full length protein, corresponding to amino acids 1-742 of Human Mitofusin 1

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	Preservative: None PBS, pH 7.2
精製度	Protein G purified
ポリ/モノ	モノクローナル
アイソタイプ	IgG2a
軽鎖の種類	kappa

アプリケーション

Our Abpromise guarantee covers the use of **ab57602** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

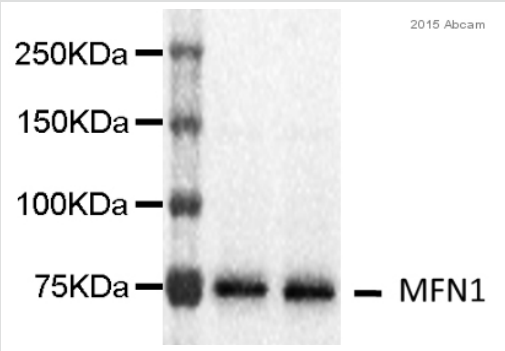
アプリケーション	Abreviews	特記事項
WB	★★★★☆	Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 84 kDa.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★	Use a concentration of 5 µg/ml.

アプリケーション	Abreviews	特記事項
Flow Cyt		Use 1µg for 10^6 cells. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

ターゲット情報

機能	Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN1 acts independently of the cytoskeleton. Overexpression induces the formation of mitochondrial networks.
組織特異性	Ubiquitous. Expressed at slightly higher level in kidney and heart. Isoform 2 may be overexpressed in some tumors, such as lung cancers.
配列類似性	Belongs to the mitofusin family.
翻訳後修飾	Ubiquitinated by MARCH5.
細胞内局在	Cytoplasm and Mitochondrion outer membrane.

画像



Western blot - Anti-Mitofusin 1 antibody (ab57602)
This image is courtesy of an anonymous Abreview

All lanes : Anti-Mitofusin 1 antibody (ab57602) at 1/1000 dilution

Lane 1 : Mouse cardiomyocytes whole cell lysate
Lane 2 : Mouse cardiomyocytes whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary
HRP-conjugated goat anti-mouse IgG at 1/5000 dilution

Performed under reducing conditions.

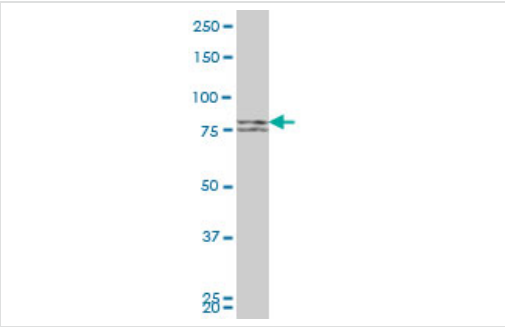
Predicted band size : 84 kDa
Observed band size : 75 kDa

Exposure time : 30 seconds

This image is courtesy of an anonymous Abreview

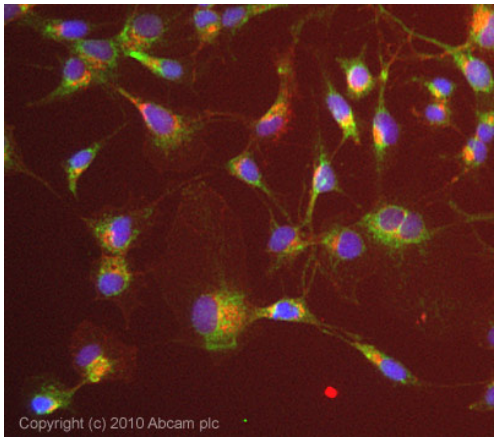
Blocked with 5% milk for 1 hour at 25°C.

Incubated with the primary antibody at 4°C for 13 hours in 1X TBS.



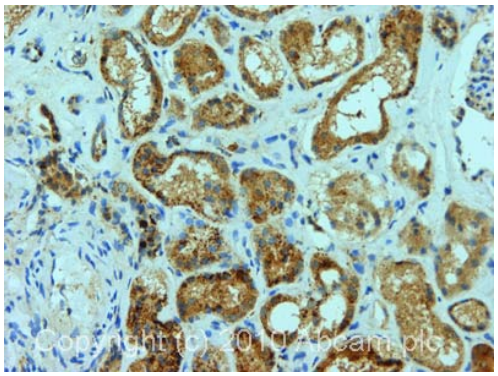
Western blot - Anti-Mitofusin 1 antibody (ab57602)

Predicted band size : 84 kDa
Mitofusin 1 antibody (ab57602) at 1ug/lane + HeLa cell lysate at 25ug/lane.



Immunocytochemistry/ Immunofluorescence - Anti-Mitofusin 1 antibody (ab57602)

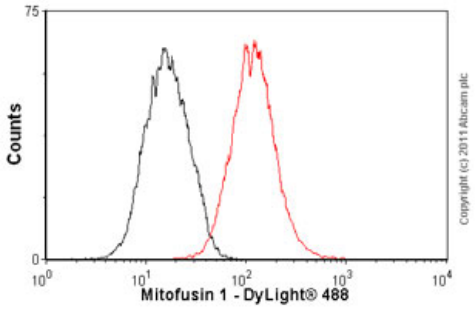
ICC/IF image of ab57602 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab57602, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofusin 1 antibody (ab57602)

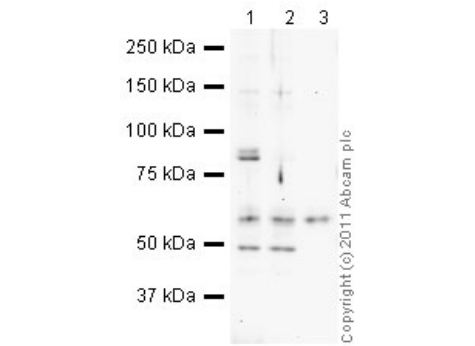
IHC image of ab57602 staining in human normal kidney formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab57602, 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.



Flow Cytometry - Anti-Mitofusin 1 antibody (ab57602)

Overlay histogram showing HEK293 cells stained with ab57602 (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 (ab57602, 1µg/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 IgG2a [ICIGG2A] (ab91361, 1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunoprecipitation - Anti-Mitofusin 1 antibody (ab57602)

Mitofusin 1 was immunoprecipitated using 0.5mg Hela whole cell extract, 10ug of Mouse monoclonal to Mitofusin 1 and 50µl of protein G magnetic beads (lane 1). The antibody was incubated with the Protein G beads for 10 min under agitation. No antibody was added to the control lane 2 and no extract or antibody was added to contol lane 3. Hela whole cell extract diluted in RIPA buffer was added to each sample and incubated for 10min under agitation. Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab57602.
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.
Bands: 84kDa:Mitofusin 1; 60kDa bead background: non specific - 48kDa: We are unsure as to the identity of this extra band.

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