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Anti-Mitofusin 2 MFN2 Rabbit Monoclonal Antibody

Catalog Number: M00461

Overview

Product Name	Anti-Mitofusin 2 MFN2 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Mitofusin 2 MFN2 Rabbit Monoclonal Antibody catalog # M00461. Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.
Application	IF, IHC, ICC, WB
Clonality	Monoclonal AOCA-13
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	O95140

Technical Details

Immunogen	A synthesized peptide derived from human Mitofusin 2
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200

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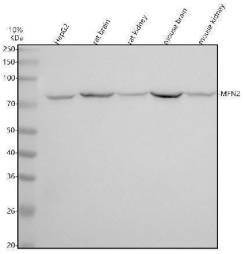
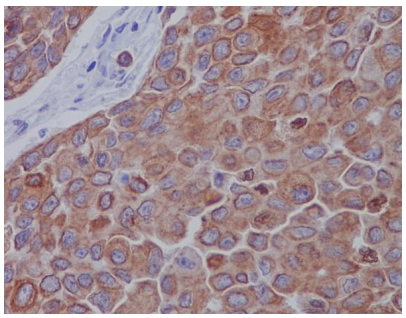
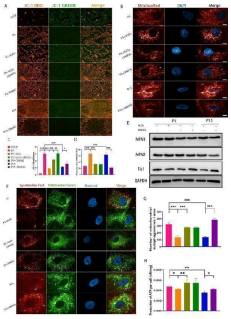
Anti-Mitofusin 2 MFN2 Rabbit Monoclonal Antibody (M00461) Images



Western blot analysis of Mitofusin 2 using anti-Mitofusin 2 antibody (M00461). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: rat kidney tissue lysates, Lane 4: rat liver tissue lysates, Lane 5: mouse brain tissue lysates, Lane 6: mouse kidney tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Mitofusin 2 antigen affinity purified monoclonal antibody (M00461) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Mitofusin 2 at approximately 86 kDa. The expected band size for Mitofusin 2 is at 86 kDa.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using Mitofusin 2 Antibody.



DMOG treatment ameliorates mitochondrial dysfunction and enhances mitophagy and ATP production in aged MSCs. (A) Representative JC-1 fluorescence images showing mitochondrial membrane potential in different groups: CCCP (positive control for mitochondrial depolarization), P5 MSCs, P5 + H_2O_2-treated MSCs, P5 + H_2O_2+DMOG-treated MSCs, P15 MSCs, and P15 + DMOG-treated MSCs. JC-1 red fluorescence indicates high mitochondrial membrane potential, whereas green fluorescence indicates depolarized mitochondria. Scale bar = 100 um. (B) Representative MitoSox Red fluorescence images showing mitochondrial ROS levels in different treatment groups. Scale bar = 10 um. (C , D) Quantitative analysis of the mitochondrial membrane potential (C) and mitochondrial ROS levels (D). (E) Western blot analysis showing the expression levels of mitophagy-related proteins (MFN1, MFN2, and Fis1) in P5 and P15 MSCs with or without H_2O_2 and DMOG treatment. GAPDH was used as a loading control. (F) Representative confocal images of co-staining with LysoTracker Red (lysosomes) and MitoTracker Green (mitochondria) in MSCs

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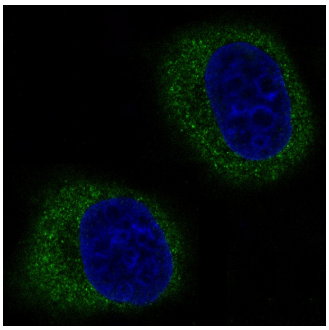
under different conditions. Scale bar = 10 um. (G) Quantitative analysis of the number of mitophagosomes per cell in the different groups. (H) Quantitative analysis of ATP production per cell in the different groups. Data are expressed as the mean ± SEM (n = 3). * p



Immunofluorescent analysis of Hela cells, using Mitofusin 2 Antibody.

1 Publications Citing This Product

1. PubMed ID: 32884840, Jiao Z,Wu Y,Qu S.Fenpropathrin induces degeneration of dopaminergic neurons via disruption of the mitochondrial quality control system.Cell Death Discov.2020 Aug 25;6:78.doi:10.1038/s41420-020-00313-y.PMID:32884840;PMCID:PMC7447795.

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Anti-Mitofusin 2 MFN2 Rabbit Monoclonal Antibody

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