

Anti-Mitofusin 1/MFN1 Antibody Picoband™

Catalog Number: PB9264

About MFN1

Mitofusin-1 is a protein that in humans is encoded by the MFN1 gene. It is an 8090 kDa mitochondrial member of the dynamin family of molecules. It is ubiquitously expressed, and found in the outer mitochondrial membrane. The protein encoded by this gene is a mediator of mitochondrial fusion, and thereby contribute to the dynamic balance between fusion and fission that determines mitochondria morphology. MFN1 is known to form oligomers, either with itself or MFN2, and to undergo ubiquitination by MARCH5. MFN1 has two key domains. One is a coiledcoil region that mediates MFN1: MFN1/2 binding, and a second is a GTPase domain whose cleavage of GTP is necessary for membrane fusion. Overexpression of MFN1 caused perinuclear mitochondrial clustering.

Overview

Product Name	Anti-Mitofusin 1/MFN1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Mitofusin 1/MFN1 Antibody Picoband™ catalog # PB9264. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q8IWA4

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminal of human Mitofusin 1, different from the related mouse and rat sequences by one amino acid.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p>

Anti-Mitofusin 1/MFN1 Antibody Picoband™ (PB9264) Images

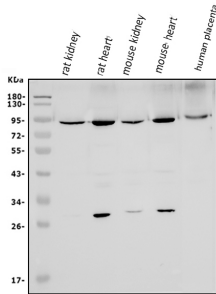


Figure 1. Western blot analysis of Mitofusin 1 using anti-Mitofusin 1 antibody (PB9264).

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 50ug of sample under reducing conditions.

Lane 1: rat kidney tissue lysates,

Lane 2: rat heart tissue lysates,

Lane 3: mouse kidney tissue lysates,

Lane 4: mouse heart tissue lysates,

Lane 5: human placenta tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 1 antigen affinity purified polyclonal antibody (Catalog # PB9264) at 0.5 ug/mL 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 1:10000 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 1 at approximately 84KD. The expected band size for Mitofusin 1 is at 84KD.

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.

Visit bosterbio.com/anti-mitofusin-1-picoband-trade-antibody-pb9264-boster.html to see all 1 publications.

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