Datasheet for ABIN5013951

anti-MFN1 antibody (AA 1-234)

1 Validation

4 Images

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Overview

Quantity:	100 µL
Target:	MFN1
Binding Specificity:	AA 1-234
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MFN1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Purpose:	Polyclonal Antibody to Mitofusin 1 (MFN1)
Immunogen:	Recombinant Mitofusin 1 (MFN1) corresdonding to Met1~Ile234
Isotype:	IgG
Specificity:	The antibody is a rabbit polyclonal antibody raised against MFN1. It has been selected for its ability to recognize MFN1 in immunohistochemical staining and western blotting.
Cross-Reactivity:	Human, Rat
Purification:	Antigen-specific affinity chromatography followed by Protein A affinity chromatography

Target Details

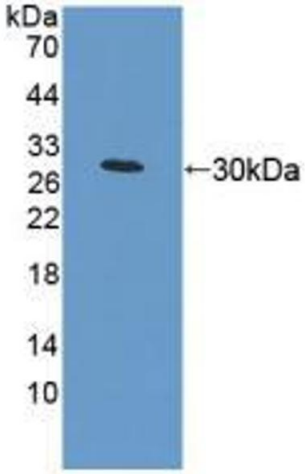
Target:	MFN1
Alternative Name:	Mitofusin 1 (MFN1 Products)
Background:	Hfzo1, Hfzo2, Transmembrane GTPase MFN1, Fzo homolog

Application Details

Application Notes:	Western blotting: 0.5-2 µg/mL 1:500-2000 Immunohistochemistry: 5-20 µg/mL 1:50-200 Immunocytochemistry: 5-20 µg/mL 1:50-200 Optimal working dilutions must be determined by end user.
Comment:	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Restrictions:	For Research Use only

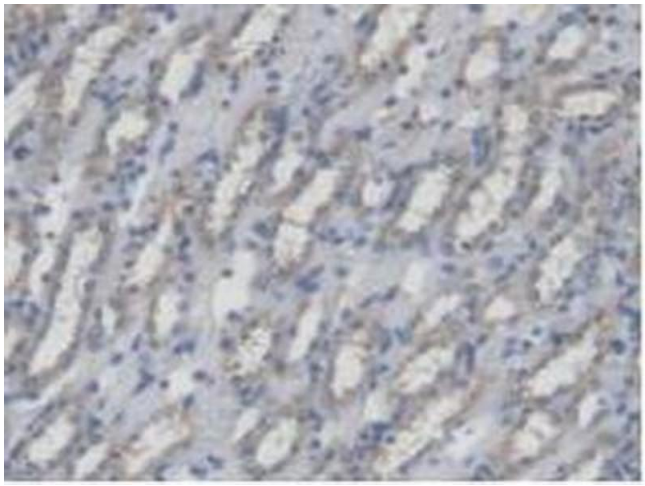
Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	0.01M PBS, pH 7.4, containing 0.05 % Proclin-300, 50 % glycerol.
Preservative:	ProClin
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for frequent use. Stored at -20°C in a manual defrost freezer for two year without detectable loss of activity. Avoid repeated freeze-thaw cycles.
Expiry Date:	24 months



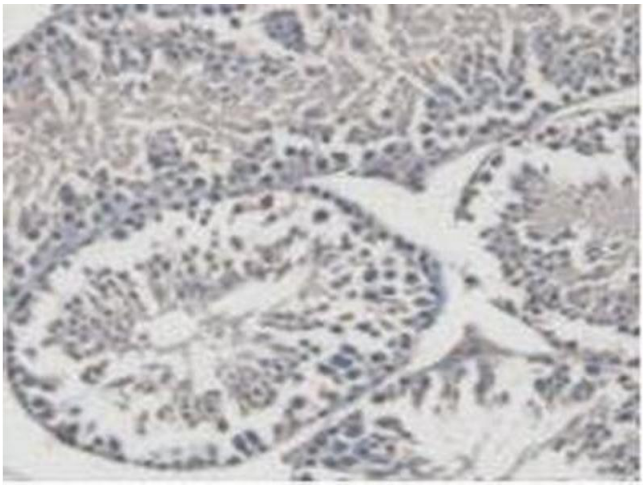
Western Blotting

Image 1. Figure. Western Blot; Sample: Recombinant MFN1, Mouse.



Immunohistochemistry

Image 2. Figure. DAB staining on IHC-P; Samples: Mouse Kidney Tissue.



Immunohistochemistry

Image 3. Figure. DAB staining on IHC-P; Samples: Mouse Testis Tissue.

Please check the product details page for more images. Overall 4 images are available for ABIN5013951.

Validation report #103013 for Western Blotting (WB)

Successfully validated (Western Blotting (WB))

by Wang Lab, Department of Animal Science, College of Agriculture & Natural Resources

Report Number: 103013

Date: May 30 2018

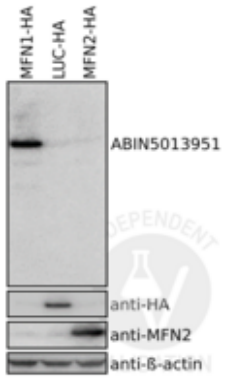
Target:	MFN1
Lot Number:	A20180411903
Method validated:	Western Blotting (WB)
Positive Control:	293T cells transfected with MFN1-HA expression vector; the full length MFN1 CDS has been inserted upstream of an HA-tag in plasmid pcDNA3.1.
Negative Control:	293T cells transfected with an LUC-HA expression vector, and the full length LUC CDS has been inserted upstream of an HA-tag in plasmid pcDNA3.1. 293T cells transfected with MFN2-HA expression vector; the full length MFN2 CDS has been inserted upstream of an FLAG-tag in plasmid pcDNA3.1.
Notes:	Passed. ABIN5013951 specifically recognizes antigen in sample.
Primary Antibody:	ABIN5013951
Secondary Antibody:	goat anti-rabbit IgG (H+L) antibody HRP conjugate (Bio-Rad, 170-6515)
Protocol:	• Grow 293T cells in DMEM medium (Gibco, lot 1897400) supplemented with 10% fetal bovine serum (Gibco, lot 1913756) and 1% Penicillin-Streptomycin (thermo, 10378016), at 37°C and 7% CO_2 in 6-well plates to 60-70% confluency. • Transfect cells with plasmids expressing either MFN1-HA, MFN2-HA or LUC-HA with max 2µg of plasmid using PEI transfection reagent (Poly-Science, 24765-1) following the manufacturer´s instructions. • Lyse cells in 100µl RIPA buffer containing protease inhibitors (Sigma-Aldrich, P8340). • Determine total protein content of the lysates using a Bradford protein assay (Protein Assay Dye Reagent Concentrate, Bio-Rad, 5000006). • Denature 100µg total protein for 10min at 95°C in 1x SDS loading buffer and subsequently separate them on a freshly cast 10% denaturing polyacrylamide gel. • Transfer proteins onto Immun-Blot Low Fluorescence PVDF Membrane (0.45µm) at 1.0A and up to 25V for 30min via Trans-Blot Turbo Transfer System. • Block the membrane with Bio-rad Blotting-Grade Blocker (5% non-fat milk in PBS). • Incubation with primary ○ rabbit anti-MFN1 antibody (antibodies-online, ABIN5013951, lot A20180411903) diluted 1:200 in Blocking Buffer (5% non-fat milk) ON at 4°C.

- mouse anti-HA-tag antibody (Santa Cruz, sc-7392) diluted 1:2000 in Blocking Buffer (5% non-fat milk) ON at 4°C (only LUC-HA expressing cells).
- mouse anti-MFN2-tag antibody (Santa Cruz, sc-100560) diluted 1:2000 in Blocking Buffer (5% non-fat milk) ON at 4°C.
- mouse anti-beta-actin antibody (Sigma-Aldrich, A1978) diluted 1:10000 in Blocking Buffer(5% non-fat milk) ON at 4°C.

- Wash membrane 3x for 10min with PBS supplemented with 0.1% Tween 20.
- Incubation with secondary goat anti-rabbit IgG (H+L) antibody HRP conjugate (Bio-Rad, 170-6515) or goat anti-mouse IgG (H+L) antibody HRP conjugate (Bio-Rad, 170-6516) diluted 1:10000 in Odyssey Blocking Buffer for 1h at RT.
- Wash membrane 3x for 10min with PBS supplemented with 0.1% Tween 20.
- Add Clarity and Clarity Max Western ECL Blotting Substrates and scan the membrane on a Bio-Rad ChemiDoc XRS+System.

Experimental Notes: The antigen antibody ABIN5013951 reveals a protein of the expected molecular weight of antigen in lysates of cells. The protein bands is only visible in the positive but not the negative controls.

Image for Validation report #103013



Validation image no. 1 for anti-Mitofusin 1 (MFN1) (AA 1-234) antibody (ABIN5013951)

Western blot analysis of lysates from 293T cells ectopically expressing HA-tag labeled human MFN1 (MFN1-HA), luciferase (LUC-HA), and human MFN2 (MFN2-HA). Protein bands were revealed using ABIN5013951, an HA-tag antibody, an MFN2 antibody, and a beta-actin loading control.