

For Research Use Only

# MFN2 Monoclonal antibody

Catalog Number: 67487-1-Ig

Featured Product

18 Publications



## Basic Information

Catalog Number:

67487-1-Ig

Size:

150ul, Concentration: 1500 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG29873

GenBank Accession Number:

BC017061

GeneID (NCBI):

9927

ENSEMBL Gene ID:

ENSG00000116688

UNIPROT ID:

O95140

Full Name:

mitofusin 2

Calculated MW:

757 aa, 86 kDa

Observed MW:

86 kDa

Purification Method:

Protein A purification

CloneNo.:

5F3B3

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF/ICC 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

Human, Mouse, Rat

Cited Species:

human, mouse, rat, fish

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

Positive Controls:

WB : HEK-293 cells, HeLa cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, LNCaP cells

IHC : human heart tissue,

IF/ICC : HepG2 cells,

## Background Information

MFN2, also named as CPRP1 and KIAA0214, belongs to the mitofusin family. It is an Essential transmembrane GTPase, which mediates mitochondrial fusion. MFN2 acts independently of the cytoskeleton. It therefore plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes. Overexpression of MFN2 induces the formation of mitochondrial networks. It plays an important role in the regulation of vascular smooth muscle cell proliferation. Defects in MFN2 are the cause of Charcot-Marie-Tooth disease type 2A2 (CMT2A2). Defects in MFN2 are the cause of Charcot-Marie-Tooth disease type 6 (CMT6). Ubiquitinated forms of Mfn2 (mono- and polyubiquitinated) are present during mitophagy.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yujie Zhong	36501024	Nutrients	WB,IHC
Zhanglin Chen	34749643	J Physiol Sci	WB
Jiling Feng	34065886	Molecules	WB

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

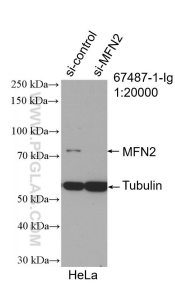
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

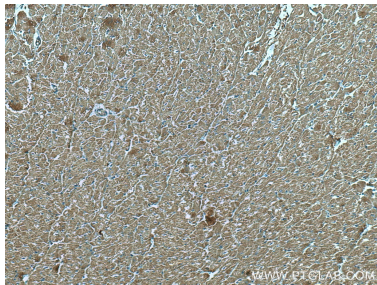
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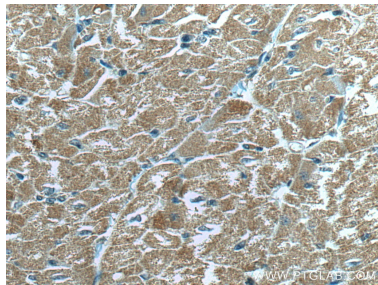
Selected Validation Data



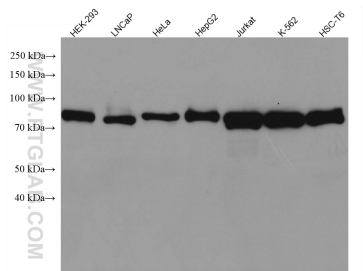
WB result of MFN2 antibody (67487-1-Ig; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MFN2 transfected HeLa cells.



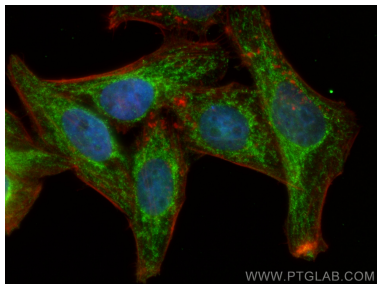
Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67487-1-Ig (MFN2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 67487-1-Ig (MFN2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 67487-1-Ig (MFN2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MFN2 antibody (67487-1-Ig, Clone: 5F3B3 ) at dilution of 1:800 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).