

For Research Use Only

# MFN1 Polyclonal antibody

Catalog Number: 13798-1-AP

Featured Product

224 Publications



## Basic Information

### Catalog Number:

13798-1-AP

### Size:

150ul, Concentration: 1000 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4762

### GenBank Accession Number:

BC040557

### GeneID (NCBI):

55669

### UNIPROT ID:

Q8IWA4

### Full Name:

mitofusin 1

### Calculated MW:

741 aa, 84 kDa

### Observed MW:

86 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:200-1:800

## Applications

### Tested Applications:

WB, IP, IF, IHC, ELISA

### Cited Applications:

WB, IP, IF, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, Chicken, rat, mouse, ducks, monkey, hamster, pig, duck, bovine

**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 : HSC-T6 cells, T-47D cells, mouse brain tissue, mouse kidney tissue, mouse liver tissue

IP : mouse kidney tissue,

IHC : human kidney tissue,

IF : HEK-293 cells,

## Background Information

Mitofusin-1 (MFN1) is a mediator of mitochondrial fusion. This protein and mitofusin 2 are homologs of the Drosophila protein fuzzy onion (Fzo). Mitofusins are large predicted GTPases located in outer mitochondrial membrane. They are essential for outer membrane fusion by interacting with each other to facilitate mitochondrial targeting. The mitofusins are the first known protein mediator of mitochondrial fusion, and mediate developmentally regulated post-meiotic fusion of mitochondria. Mfn1 is required on adjacent mitochondria to mediate fusion via interactions of a heptad repeat region that mediates oligomerization of the protein (PMID:16892085). Mitofusin 1 and mitofusin 2 are ubiquitinated in a PINK1/parkin-dependent manner upon induction of mitophagy (PMID: 20871098).

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenliang Zhang	34580406	Sci Rep	WB
Maria Manczak	27677309	Hum Mol Genet	IF
Jinghua Du	29158819	Theranostics	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

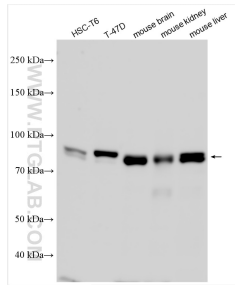
For technical support and original validation data for this product please contact:

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

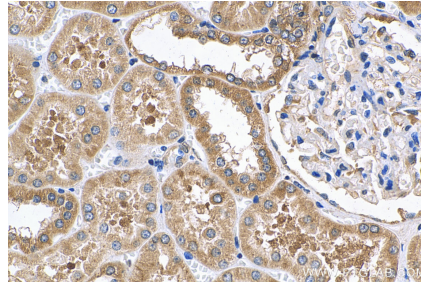
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

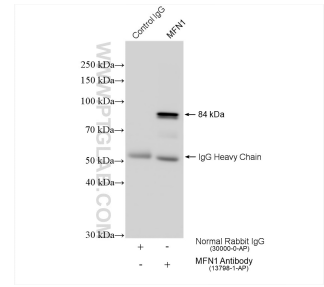
## Selected Validation Data



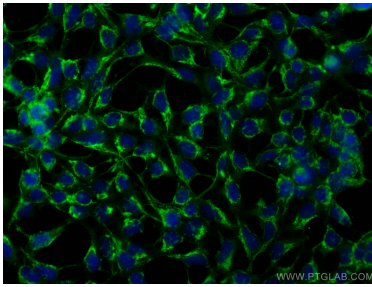
Various lysates were subjected to SDS PAGE followed by western blot with 13798-1-AP (MFN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 13798-1-AP (MFN1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-MFN1 (IP:13798-1-AP, 4ug; Detection:13798-1-AP 1:5000) with mouse kidney tissue lysate 2160 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using MFN1 antibody (13798-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).