

# MFN2 Polyclonal antibody

Catalog Number: 28341-1-AP

## Basic Information

<b>Catalog Number:</b> 28341-1-AP	<b>GenBank Accession Number:</b> BC017061	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 9927	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000116688	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> O95140	
<b>Immunogen Catalog Number:</b> AG28128	<b>Full Name:</b> mitofusin 2	
	<b>Calculated MW:</b> 757 aa, 86 kDa	
	<b>Observed MW:</b> 86 kDa	

## Applications

### Tested Applications:

IHC, WB, ELISA

### Species Specificity:

Human, Mouse, Rat

**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, HepG2 cells, HeLa cells, mouse brain tissue, rat brain tissue

IHC : mouse heart tissue,

## 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.

## Storage

### Storage:

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

### Storage Buffer:

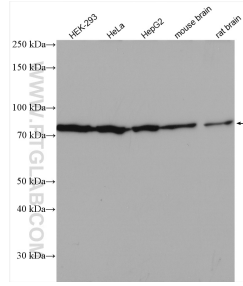
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

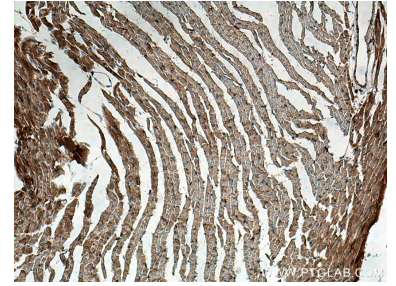
## Selected Validation Data



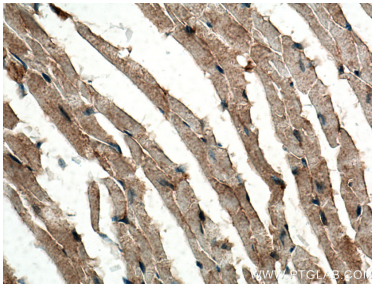
HepG2 cells were subjected to SDS PAGE followed by western blot with 28341-1-AP (MFN2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 28341-1-AP (MFN2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 28341-1-AP (MFN2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 28341-1-AP (MFN2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).