

## Basic Information

<b>Product Name</b>	Anti-MFN1 Antibody (Clone#3H3)		
<b>Gene Name</b>	MFN1		
<b>Source</b>	Mouse		
<b>Clonality</b>	Monoclonal		
<b>Isotype</b>	IgG2b		
<b>Species Reactivity</b>	human		
<b>Tested Application</b>	WB, ICC/IF		
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.		
<b>Immunogen</b>	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.		
<b>Concentration</b>	500 ug/ml		
<b>Purification</b>	protein G purified.		
<b>Observed MW</b>	84 kDa		
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunocytochemistry in fixed cells:1:50-400		

## Storage

12 months from date of receipt, -20°C as supplied.

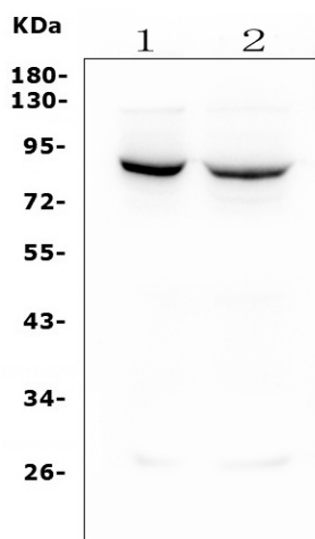
## Background Information

Mitofusin-1 is a protein that in humans is encoded by the MFN1 gene. It is an 80 90 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 MFN 2, and to undergo ubiquitination by MARCH5. MFN 1 has two key domains. One is a coiled-coil region that mediates MFN 1: MFN 1/2 binding, and a second is a GTPase domain whose cleavage of GTP is necessary for membrane fusion. Overexpression of MFN1 caused perinuclear mitochondrial clustering.

## Reference

Anti-MFN1 Antibody (Clone#3H3)被引用在1文献中。

## Selected Validation Data



Western blot analysis of MFN1 using anti-MFN1 antibody (M02172-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela tissue lysates,

Lane 2: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-MFN1 antigen

affinity purified monoclonal antibody (M02172-1) at a dilution of

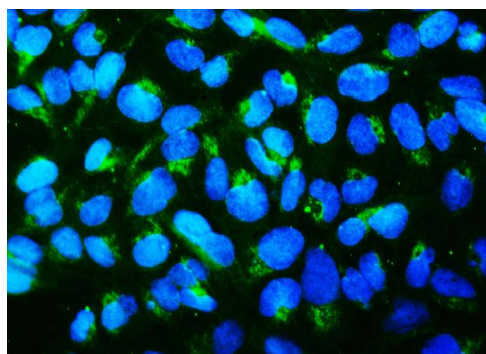
1:1000 and probed with a goat anti-mouse IgG-HRP secondary

antibody (Catalog # BA1050). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for MFN1 at approximately 84 kDa. The expected band size

for MFN1 is at 84 kDa.



ICC/IF analysis of MFN1 using anti-MFN1 antibody (M02172-1).

MFN1 was detected in an immunocytochemical section of U2OS cells.

The section was incubated with mouse anti-MFN1 Antibody

(M02172-1) at a dilution of 1:100. Cy3-conjugated Anti-mouse IgG

Secondary Antibody (red)(Catalog#BA1031) was used as secondary

antibody. The section was counterstained with DAPI (Catalog #

AR1176) (Blue).