

For Research Use Only

# MFN2 Recombinant antibody

Catalog Number: 82673-2-RR



## Basic Information

<b>Catalog Number:</b> 82673-2-RR	<b>GenBank Accession Number:</b> BC017061	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 9927	<b>CloneNo.:</b> 2A5
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000116688	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> O95140	
<b>Immunogen Catalog Number:</b> AG2845	<b>Full Name:</b> mitofusin 2	
	<b>Calculated MW:</b> 757 aa, 86 kDa	
	<b>Observed MW:</b> 86 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, rat	<b>WB :</b> HepG2 cells, K-562 cells, NIH/3T3 cells, HSC-T6 cells
<b>Note-IHC:</b> suggested antigen retrieval with <b>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human colon cancer tissue,
	<b>IF/ICC :</b> HepG2 cells,

## Background Information

Mitofusin-2 (MFN2), a mitochondrial membrane protein, is a dynamin-like GTPase embedded in the outer mitochondrial membrane (OMM) which plays a central role in regulating mitochondrial fusion and cell metabolism (PMID: 35399520; 34026850). There are two human mitofusin isoforms MFN1 and MFN2, MFN1 and MFN2 mediate outer membrane fusion, OPA1 is involved in inner membrane fusion, and DRP1 is responsible for mitochondrial fission (PMID: 17084350; 35399520). It has been shown that MFN2 participates in multiple cellular biological processes under physical and pathological conditions. Apart from mitochondria fusion, MFN2 is also involved in mitochondrial-ER contacts (MERCs), mitophagy, cellular apoptosis, and proliferation (PMID: 34026850).

## Storage

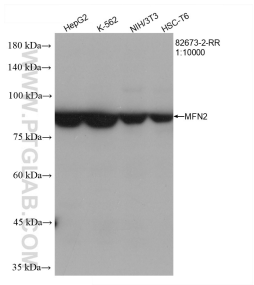
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

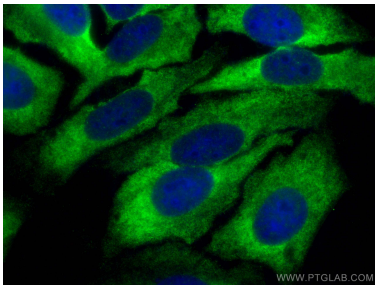
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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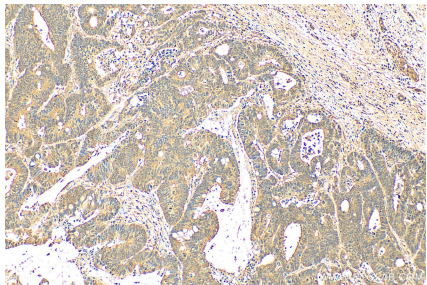
Selected Validation Data



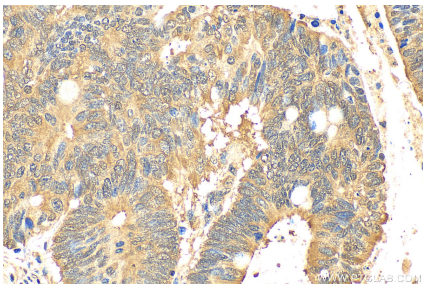
Various lysates were subjected to SDS PAGE followed by western blot with 82673-2-RR (MFN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



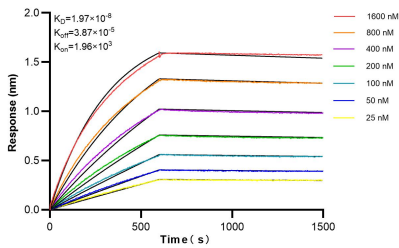
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MFN2 antibody (82673-2-RR, Clone: 2A5 ) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 82673-2-RR (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 colon cancer tissue slide using 82673-2-RR (MFN2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82673-2-RR against Human MFN2 were performed. The affinity constant is 19.7 nM.