For Research Use Only

MFN2 Polyclonal antibody

Catalog Number:12186-1-AP Featured Product 407 Publications

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Basic Information

Catalog Number:
12186-1-AP

Size:
150ul , Concentration: 500 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG2845

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:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, monkey, chicken, zebrafish, bovine, goat, duck

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 : mouse brain tissue, HeLa cells, mouse kidney tissue, rat brain tissue, rat heart tissue, mouse liver tissue, rat kidney tissue, rat liver tissue

IP : mouse kidney tissue,

IHC : human colon cancer 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Maria Manczak	27677309	Hum Mol Genet	IF
Na Jiang	32975326	Cell Prolif	IHC
Siwen Li	28957766	Chemosphere	

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
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
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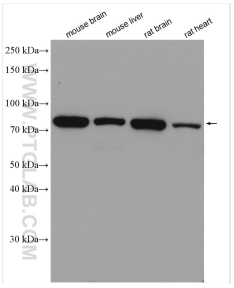
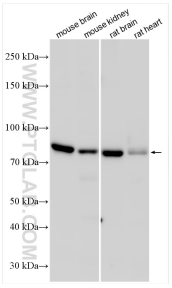
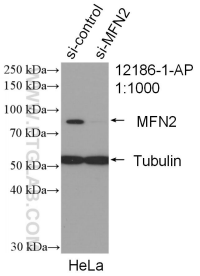
Selected Validation Data



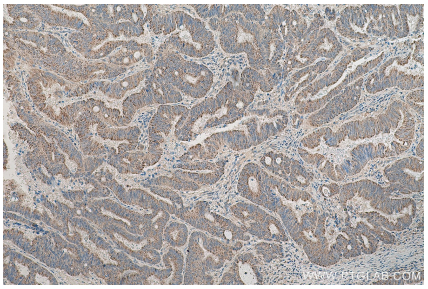
Various lysates were subjected to SDS PAGE followed by western blot with 12186-1-AP (MFN2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



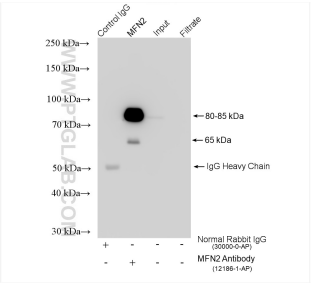
Various lysates were subjected to SDS PAGE followed by western blot with 12186-1-AP (MFN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



WB result of MFN2 antibody (12186-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MFN2 transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12186-1-AP (MFN2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-MFN2 (IP:12186-1-AP, 4ug; Detection:12186-1-AP 1:10000) with mouse kidney tissue lysate 2160 ug.