For Research Use Only

MFN1 Polyclonal antibody

Catalog Number:13798-1-AP Featured Product 39 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
13798-1-AP

Size:
150UL , Concentration: 300 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4762

GenBank Accession Number:
BC040557

GeneID (NCBI):
55669

Full Name:
mitofusin 1

Calculated MW:
741 aa, 84 kDa

Observed MW:
86 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:100-1:400

Applications

Tested Applications:
IHC, WB, ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
Chicken, human, monkey, 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 : HeLa cells, rat kidney tissue, human kidney tissue, mouse kidney tissue

IHC : human lung cancer tissue,

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

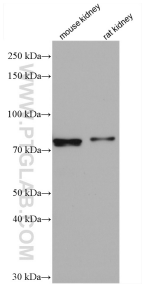
Author	Pubmed ID	Journal	Application
Maria Manczak	27677309	Hum Mol Genet	IF
Jinghua Du	29158819	Theranostics	WB
Na Jiang	32975326	Cell Prolif	WB,IHC

Storage

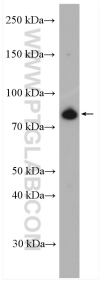
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

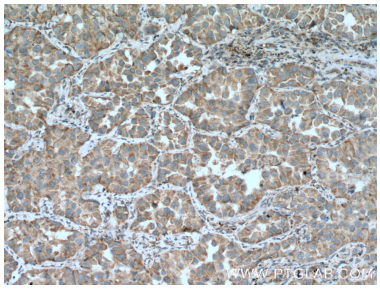
Selected Validation Data



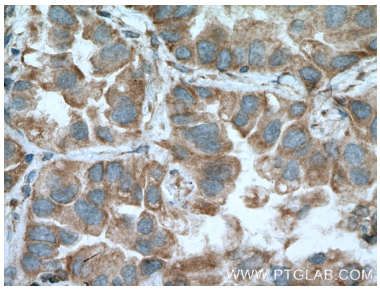
Various lysates were subjected to SDS PAGE followed by western blot with 13798-1-AP (MFN1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



HeLa cells were subjected to SDS PAGE followed by western blot with 13798-1-AP (MFN1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 13798-1-AP (MFN1 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 human lung cancer 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).