For Research Use Only

MFN1 Monoclonal antibody

Catalog Number:66776-1-Ig 20 Publications

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Basic Information

Catalog Number:
66776-1-Ig

Size:
150ul , Concentration: 1900 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2a

Immunogen Catalog Number:
AG4890

GenBank Accession Number:
BC040557

GeneID (NCBI):
55669

UNIPROT ID:
Q8IWA4

Full Name:
mitofusin 1

Calculated MW:
741 aa, 84 kDa

Observed MW:
84 kDa

Purification Method:
Protein A purification

CloneNo.:
3F11C11

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:500-1:2000
IF/ICC 1:400-1:1600

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
Human, mouse, rat

Cited Species:
human, mouse, rat, pig

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 : HepG2 cells, PC-3 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, U-251 cells, U-87 MG cells

IHC : human prostate cancer tissue, human colon cancer tissue

IF/ICC : HepG2 cells,

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. 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
Jiling Feng	34065886	Molecules	WB
Gee Euhn Choi	33473105	Nat Commun	IF
Fan Wang	35951252	J Mol Histol	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

*** 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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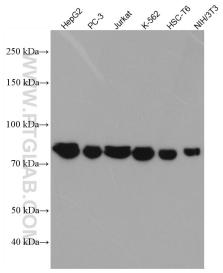
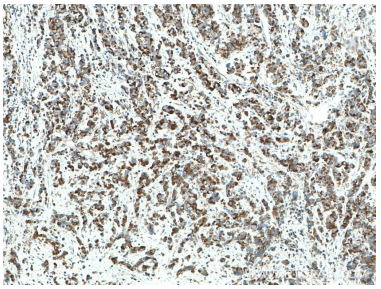
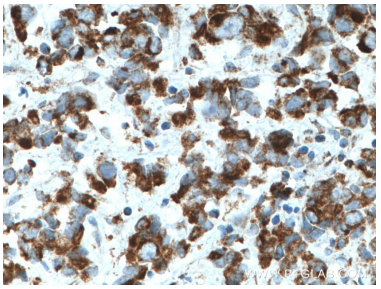
Selected Validation Data



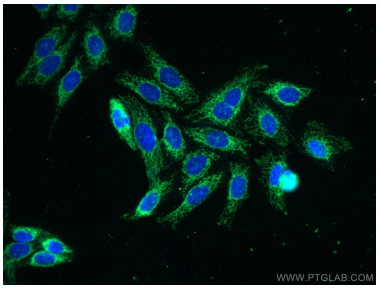
Various lysates were subjected to SDS PAGE followed by western blot with 66776-1-Ig (MFN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 66776-1-Ig (MFN1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 66776-1-Ig (MFN1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MFN1 antibody (66776-1-Ig, Clone: 3F11C11) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).