

MFN1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16037c

Specification

MFN1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q8IWA4
Other Accession	NP_284941.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	84160
Antigen Region	353-381

MFN1 Antibody (Center) - Additional Information

Gene ID 55669

Other Names

Mitofusin-1, 365-, Fzo homolog, Transmembrane GTPase MFN1, MFN1

Target/Specificity

This MFN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 353-381 amino acids from the Central region of human MFN1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MFN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MFN1 Antibody (Center) - Protein Information

Name MFN1

Function Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:[12475957](#), PubMed:[12759376](#), PubMed:[27920125](#), PubMed:[28114303](#)). Membrane

clustering requires GTPase activity (PubMed:[27920125](#)). It may involve a major rearrangement of the coiled coil domains (PubMed:[27920125](#), PubMed:[28114303](#)). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:[12475957](#), PubMed:[12759376](#)). Overexpression induces the formation of mitochondrial networks (in vitro) (PubMed:[12759376](#)). Has low GTPase activity (PubMed:[27920125](#), PubMed:[28114303](#)).

Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location

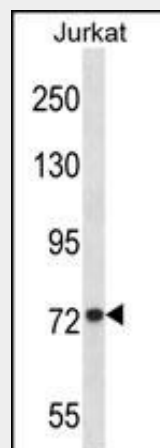
Detected in kidney and heart (at protein level) (PubMed:[12759376](#)). Ubiquitous (PubMed:[11950885](#), PubMed:[12759376](#)) Expressed at slightly higher level in kidney and heart (PubMed:[12759376](#)). Isoform 2 may be overexpressed in some tumors, such as lung cancers (PubMed:[11751411](#)).

MFN1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MFN1 Antibody (Center) - Images



MFN1 Antibody (Center) (Cat. #AP16037c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the MFN1 antibody detected the MFN1 protein (arrow).

MFN1 Antibody (Center) - Background

The protein encoded by this gene is a mediator of mitochondrial fusion. This protein and mitofusin 2 are homologs of the *Drosophila* protein fuzzy onion (Fzo). They are mitochondrial membrane proteins that interact with each other to facilitate

mitochondrial targeting.

MFN1 Antibody (Center) - References

Perumalsamy, L.R., et al. Proc. Natl. Acad. Sci. U.S.A. 107(15):6882-6887(2010)

Park, Y.Y., et al. J. Cell. Sci. 123 (PT 4), 619-626 (2010) :

Onoguchi, K., et al. PLoS Pathog. 6 (7), E1001012 (2010) :

Waxman, A.B., et al. Am. J. Respir. Cell Mol. Biol. 41(4):385-396(2009)

Wolf, C., et al. BMC Med. Genet. 10, 91 (2009) :

MFN1 Antibody (Center) - Citations

- [MCCC2 is a novel mediator between mitochondria and telomere and functions as an oncogene in colorectal cancer](#)
- [Dynamic PGAM5 multimers dephosphorylate BCL-xL or FUNDC1 to regulate mitochondrial and cellular fate](#)