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MFN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16037c

Specification

MFN1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O8IWA4
Other Accession	NP_284941.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
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

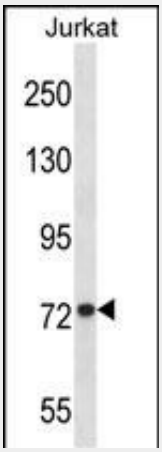
Target/Specificity
This MFN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 353-381 amino acids from the Central region of human MFN1.

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) (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) - 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 Cytomety
- Cell Culture

MFN1 Antibody (Center) - Citations

- Dynamic PGAM5 multimers dephosphorylate BCL-xL or FUNDC1 to regulate mitochondrial and cellular fate