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MFN1 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS16437

Specification

MFN1 Antibody (N-Terminus) - Product Information

Application	**IHC, WB, ICC**
Primary Accession	Q8IWA4
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**84kDa KDa**

MFN1 Antibody (N-Terminus) - Additional Information

Gene ID 55669

Other Names
Mitofusin-1, 3.6.5.-, Fzo homolog, Transmembrane GTPase MFN1, MFN1

Target/Specificity
MFN1 antibody is human, mouse and rat reactive. MFN1 antibody is predicted to not cross-react with MFN2.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
MFN1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

MFN1 Antibody (N-Terminus) - 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:<a

href="http://www.uniprot.org/citations/12475957" target="_blank">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

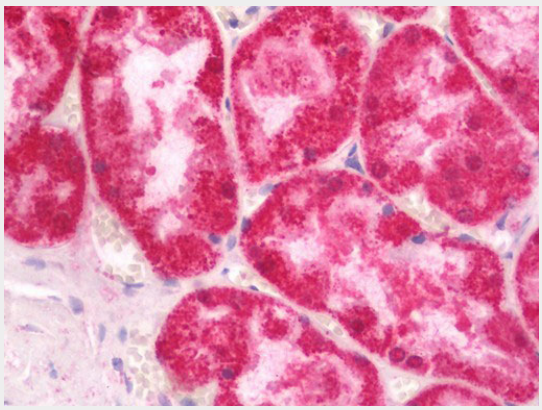
Tissue Location
Detected in kidney and heart (at protein level) (PubMed:12759376). Ubiquitous (PubMed:11950885, PubMed:12759376) Expressed at slightly higher level in kidney and heart (PubMed:12759376). Isoform 2 may be overexpressed in some tumors, such as lung cancers (PubMed:11751411).

MFN1 Antibody (N-Terminus) - 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 (N-Terminus) - Images



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

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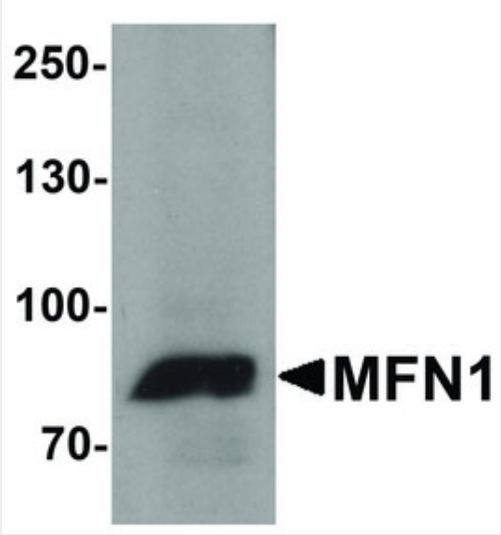

Western blot analysis of MFN1 in A431 cell lysate with MFN1 antibody at 1 ug/ml.

Immunocytochemistry of MFN1 in A431 cells with MFN1 antibody at 5 ug/mL.

MFN1 Antibody (N-Terminus) - Background

Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN1 acts independently of the cytoskeleton. Overexpression induces the formation of mitochondrial networks.

MFN1 Antibody (N-Terminus) - References

Santel A.,et al.J. Cell Sci. 114:867-874(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Muzny D.M.,et al.Nature 440:1194-1198(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Hales K.G.,et al.Cell 90:121-129(1997).