

**Mitofusin1 Antibody**  
Rabbit mAb  
Catalog # AP91045

**Specification**

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**Mitofusin1 Antibody - Product Information**

Application	WB, FC, IP
Primary Accession	<a href="#">Q8IWA4</a>
Clonality	Monoclonal
<b>Other Names</b>	
MFN1; Fzo homolog; Hfzo2; Mitofusin-1; Hfzo1; Mitofusin1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	84160 Da

**Mitofusin1 Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Mitofusin1
Description	Mitofusins are mitochondrial transmembrane GTPases that function to regulate mitochondrial fusion, a process that occurs in concert with mitochondrial division and is necessary for the maintenance of structural and genetic mitochondrial integrity. Two mitofusins have been described in mammals, mitofusin-1 and -2, which share 60% amino acid identity and appear to function coordinately to regulate mitochondrial fusion.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**Mitofusin1 Antibody - Protein Information**

**Name** MFN1

**Function**

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed: [12475957](http://www.uniprot.org/citations/12475957)), (PubMed: [12759376](http://www.uniprot.org/citations/12759376)), (PubMed: [27920125](http://www.uniprot.org/citations/27920125)), (PubMed: [28114303](http://www.uniprot.org/citations/28114303)).

Membrane clustering requires GTPase activity (PubMed:<a href="http://www.uniprot.org/citations/27920125" target="\_blank">27920125</a>). It may involve a major rearrangement of the coiled coil domains (PubMed:<a href="http://www.uniprot.org/citations/27920125" target="\_blank">27920125</a>, PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/12759376" target="\_blank">12759376</a>). Overexpression induces the formation of mitochondrial networks (in vitro) (PubMed:<a href="http://www.uniprot.org/citations/12759376" target="\_blank">12759376</a>). Has low GTPase activity (PubMed:<a href="http://www.uniprot.org/citations/27920125" target="\_blank">27920125</a>, PubMed:<a href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>).

#### 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).

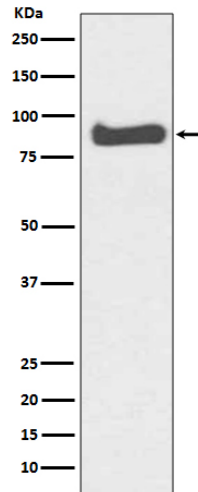
#### Mitofusin1 Antibody - Protocols

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](#)

#### Mitofusin1 Antibody - Images





Western blot analysis of Mitofusin1 expression in K562 cell lysate.