

Mitofusin 2 Antibody Rabbit mAb Catalog # AP91069

# **Specification**

# **Mitofusin 2 Antibody - Product Information**

ApplicationWB, IHC, ICCPrimary Accession095140ReactivityRatClonalityMonoclonalOther NamesCMT2A2; CMT2A; CPRP1; MFN2; Hyperplasia suppressor; MARF; Mitofusin 2; HSG; Mitofusin-2;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	86402 Da

# Mitofusin 2 Antibody - Additional Information

Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human Mitofusin 2
Description	Plays an important role in the regulation of vascular smooth muscle cell proliferation. Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy). Is required for PARK2 recruitment to dysfunctional mitochondria.
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.

# Mitofusin 2 Antibody - Protein Information

Name MFN2 {ECO:0000303|PubMed:12598526, ECO:0000312|HGNC:HGNC:16877}

### Function

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:<a href="http://www.uniprot.org/citations/11181170" target="\_blank">11181170</a>, PubMed:<a href="http://www.uniprot.org/citations/11950885" target="\_blank">11950885</a>, PubMed:<a href="http://www.uniprot.org/citations/19889647" target="\_blank">19889647</a>, PubMed:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>, PubMed:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>, PubMed:<a href="http://www.uniprot.org/citations/26214738" 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/28114303" target="\_blank">28114303</a>). Overexpression induces the formation of mitochondrial networks (PubMed:<a



href="http://www.uniprot.org/citations/28114303" target="\_blank">28114303</a>). Membrane clustering requires GTPase activity and may involve a major rearrangement of the coiled coil domains (Probable). Plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes (By similarity). Plays an important role in the regulation of vascular smooth muscle cell proliferation (By similarity). Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy) (PubMed:<a

href="http://www.uniprot.org/citations/23620051" target="\_blank">23620051</a>). Is required for PRKN recruitment to dysfunctional mitochondria (PubMed:<a

href="http://www.uniprot.org/citations/23620051" target="\_blank">23620051</a>). Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress (By similarity). Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions (By similarity).

#### **Cellular Location**

Mitochondrion outer membrane; Multi-pass membrane protein Note=Colocalizes with BAX during apoptosis

#### **Tissue Location**

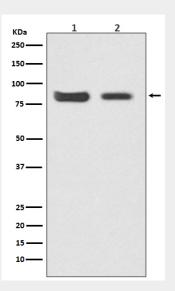
Ubiquitous; expressed at low level. Highly expressed in heart and kidney.

# Mitofusin 2 Antibody - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Mitofusin 2 Antibody - Images



Western blot analysis of Mitofusin 2 expression in (1) HeLa cell lysate; (2) Mouse kidney lysate.