

Mitofusin 2 Antibody

Rabbit mAb Catalog # AP91069

Product Information

Application WB, IHC, IF, ICC, IHF

Primary Accession 095140

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names CMT2A2; CMT2A; CPRP1; MFN2; Hyperplasia suppressor; MARF; Mitofusin 2;

HSG; Mitofusin-2;

Isotype Rabbit IgG Host Rabbit Calculated MW 86402

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200

Purification Affinity-chromatography

Immunogen 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.

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:11181170, PubMed:11950885,

PubMed: 1989647, PubMed: 26214738, PubMed: 28114303). Mitochondria are highly dynamic organelles, and their morphology is determined by the

equilibrium between mitochondrial fusion and fission events

(PubMed: <u>28114303</u>). Overexpression induces the formation of mitochondrial networks (PubMed: 28114303). 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: <u>23620051</u>). Is required for PRKN recruitment to dysfunctional mitochondria (PubMed: 23620051). 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).

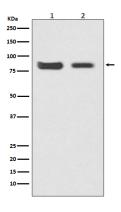
Cellular Location

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.

Images



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

Image not found: 202311/AP91069-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using Mitofusin 2 Antibody.

Image not found: 202311/AP91069-IF.jpg

Immunofluorescent analysis of Hela cells, using Mitofusin 2 Antibody.

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