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Mitofusin 2 Antibody

Rabbit mAb
Catalog # AP91069

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	O95140
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

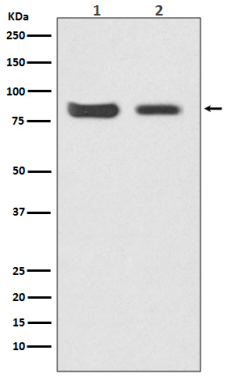
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Mitofusin 2
Description	Plays an important role in the regulation of vascular smooth muscle cell proliferation. Involved in the clearance of damaged mitochondria 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:19889647, PubMed:26214738, PubMed:28114303). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:28114303). 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:23620051). 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.