

Product datasheet for **TA336806**

Mitofusin 1 (MFN1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Immunohistochemistry: 1:100, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin: 1:100, Western Blot
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A genomic peptide made to an N-terminal region of human Mitofusin-1 (within residues 5-100). [Swiss-Prot Q8IWA4]
Formulation:	PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	mitofusin 1
Database Link:	NP_284941 Entrez Gene 67414 Mouse Entrez Gene 192647 Rat Entrez Gene 55669 Human Q8IWA4



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Background:

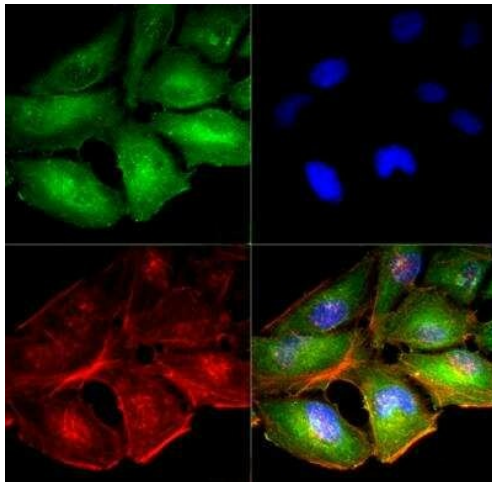
Mitochondria are dynamic organelles that continuously divide and fuse, and their dynamics/distribution is critical for their role in bioenergetics and cell survival. Mitochondrial fusion process is mediated by mitofusin 1 (MFN1) and mitofusin 2 (MFN2) proteins in the outer membrane as well as OPA1 in the inner mitochondrial membrane. MFN1 is an essential transmembrane GTPase critical to mitochondrial fusion; acts independently of the cytoskeleton, and its overexpression induces formation of mitochondrial networks. MFN1 forms homo-/heteromultimers (with MFN2), and the multimerization has been proposed to be essential for mitochondrion fusion. MFN1 interacts with VAT1 and is ubiquitinated by MARCH5. A mutation in the GTPase domain disrupts the mitochondrial fusion activity of MFN1/MFN2 and loss of MFN1/2 leads to mitochondrial dysfunction mediated embryonic lethality in mice. MFN proteins have been reported to regulate mitochondrial membrane potential, while silencing of MFN1/2 results in mitochondrial fragmentation and increased apoptotic sensitivity.

Synonyms:

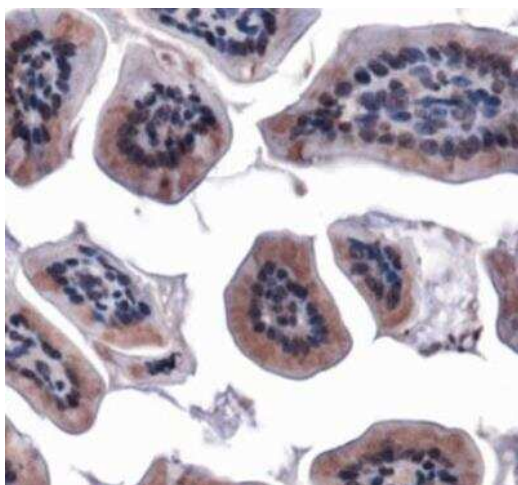
hfzo1; hfzo2

Note:

This MFN1 antibody is useful for Immunocytochemistry/Immunofluorescence, and IHC-P. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. Western Blot was reported in scientific literature.

Product images:


Immunocytochemistry/Immunofluorescence: Mitofusin 1 Antibody TA336806 - Mitofusin-1 antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).



Immunohistochemistry: Mitofusin 1 Antibody TA336806 - IHC staining of Mfn1 in mouse intestine.