

ARG57977 anti-Mitofusin 1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Mitofusin 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Mitofusin 1
Species	Human
Immunogen	Synthetic peptide around the N-terminal of Human Mitofusin 1. (DQLLEFVTEGSHFVEATYKNPELDRIA)
Conjugation	Un-conjugated
Alternate Names	EC 3.6.5.-; Fzo homolog; Mitofusin-1; hfzo1; hfzo2; Transmembrane GTPase MFN1

Application Instructions

Application table	Application	Dilution
	WB	0.5 - 1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 84 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.025% Sodium azide and 2.5% BSA.
Preservative	0.025% Sodium azide
Stabilizer	2.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Gene Symbol	MFN1
Gene Full Name	mitofusin 1
Background	The protein encoded by this gene is a mediator of mitochondrial fusion. This protein and mitofusin 2 are homologs of the Drosophila protein fuzzy onion (Fzo). They are mitochondrial membrane proteins that interact with each other to facilitate mitochondrial targeting. [provided by RefSeq, Jul 2008]
Function	Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN1 acts independently of the cytoskeleton. Overexpression induces the formation of mitochondrial networks. [UniProt]
Calculated Mw	84 kDa
PTM	Ubiquitinated by non-degradative ubiquitin by PRKN (PubMed:23933751). Deubiquitination by USP30 inhibits mitochondrial fusion (By similarity). Ubiquitinated by MARCH5 (PubMed:20103533). When mitochondria are depolarized and dysfunctional, it is ubiquitinated by a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex that contains FBXO7 and PRKN (PubMed:23933751). [UniProt]

Images

Mfn1

ARG57977 anti-Mitofusin 1 antibody WB image

Western blot: Human hippocampus stained with ARG57977 anti-Mitofusin 1 antibody.

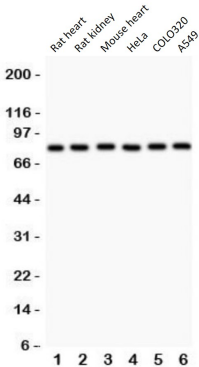
From Zhang T et al. Front Aging Neurosci. (2024), [doi: 10.3389/fnagi.2024.1390915](https://doi.org/10.3389/fnagi.2024.1390915), Fig. 6B.

Mfn1

ARG57977 anti-Mitofusin 1 antibody WB image

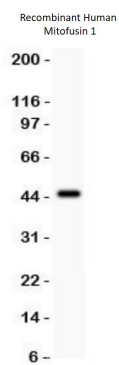
Western blot: Mouse substantia nigra stained with ARG57977 anti-Mitofusin 1 antibody.

From Ren B et al. Oxid Med Cell Longev- (2022), [doi: 10.1155/2022/3644318](https://doi.org/10.1155/2022/3644318), Fig. 7B.



ARG57977 anti-Mitofusin 1 antibody WB image

Western blot: 1) Rat heart, 2) Rat kidney, 3) Mouse heart, 4) HeLa, 5) COLO320, and 6) A549 cell lysates stained with ARG57977 anti-Mitofusin 1 antibody.



ARG57977 anti-Mitofusin 1 antibody WB image

Western blot: 0.5 ng of Recombinant Human Mitofusin 1 protein stained with ARG57977 anti-Mitofusin 1 antibody.