

**DATASHEET**

**MFN2 Rabbit Polyclonal Antibody**

CAT. NO. APA16139

**KEY FEATURES**

Target	MFN2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

**BACKGROUND**

Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion . Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events . Overexpression induces the formation of mitochondrial networks . 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 . 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 PRKN recruitment to dysfunctional mitochondria .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to MFN2
Specificity	Recognizes endogenous levels of MFN2 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human MFN2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 50; Observed: 86 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	CPRP1; KIAA0214; Mitofusin-2; Transmembrane GTPase MFN2
Gene Symbol	MFN2
Entrez Gene	9927(Human); 170731(Mouse)
SwissProt	O95140(Human); Q80U63(Mouse); Q8R500(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

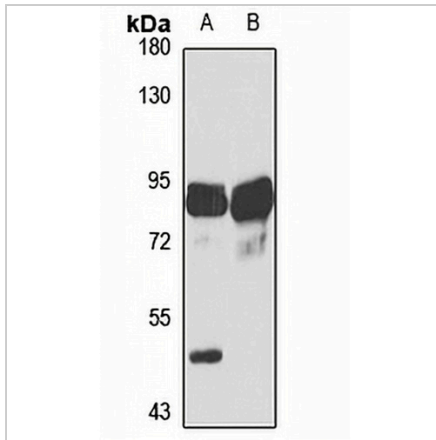
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

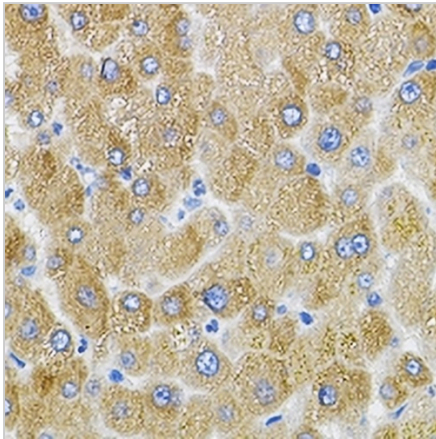
**MFN2 Rabbit Polyclonal Antibody**

CAT. NO. APA16139

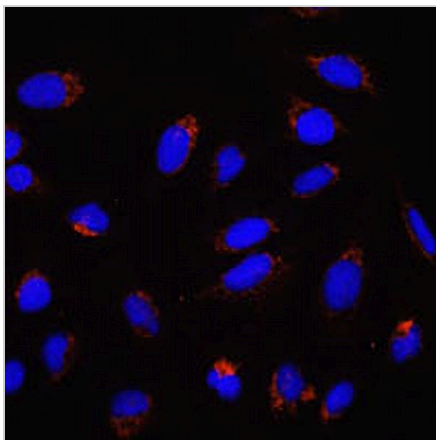
**DATA**



Western blot analysis of MFN2 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 50; 86 kD; Observed band size: 86 kD)



Immunohistochemical analysis of MFN2 staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MFN2 staining in U2OS cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.