

Datasheet for 600-401-CT9**MFN2 Antibody****Overview**

Description:	Anti-MFN2 (RABBIT) Antibody - 600-401-CT9
Item No.:	600-401-CT9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Mitofusin 2 (MFN2) and the related protein MFN1 are mitochondrial membrane GTPase proteins that play a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes (1,2). MFN2 is ubiquitously expressed, and found in both the ER and outer mitochondrial membrane. MFN2 has two key domains: a coiled coil region that mediates MFN2 binding and a GTPase domain that likely plays a role in fusion (3,4). Both domains are essential for embryonic development and may play a role in the pathobiology of obesity. Overexpression of MFN2 causes mitochondrial dysfunction and cell death (5).
Synonyms:	MFN2 Antibody, HSG, MARF, CMT2A, CPRP1, CMT2A2, KIAA0214, Mitofusin-2, Transmembrane GTPase MFN2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MFN2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-MFN2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid peptide near the internal region of human MFN2.

Purity/Specificity: Anti-MFN2 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. MFN2 antibody is human, mouse and rat reactive. At least three isoforms of MFN2 are known to exist. MFN2 antibody is predicted to not cross-react with MFN1.

Relevant Links:

- [UniProtKB - O95140](#)
- [GeneID - 9927](#)
- [NCBI - NP_055689](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-MFN2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 86 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000 - 1:20,000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 1-2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

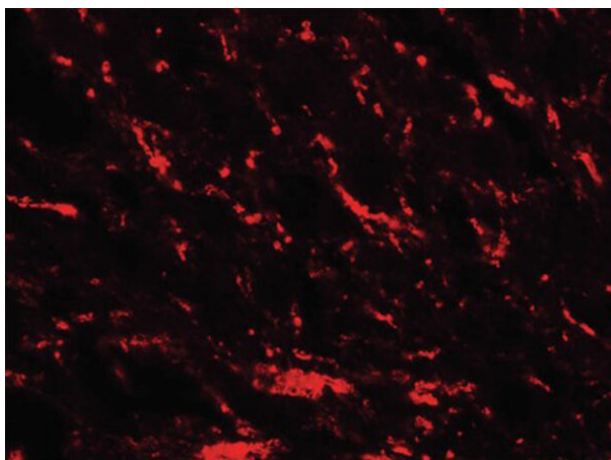
Shipping & Handling

Shipping Condition: Dry Ice

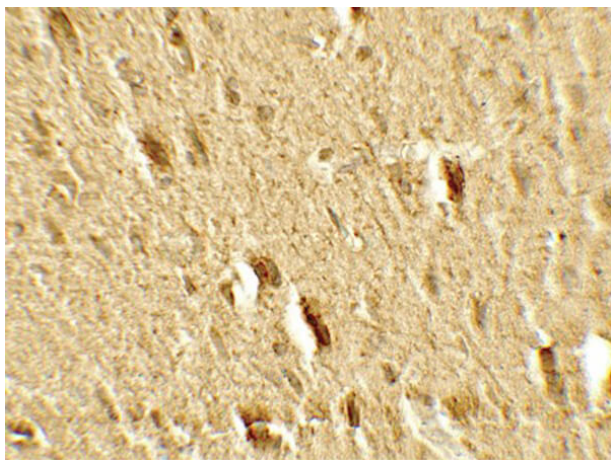
Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

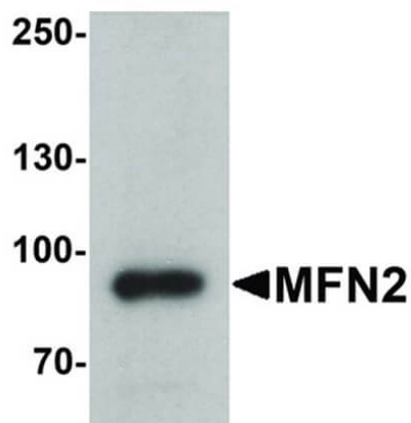
Expiration date is one (1) year from date of receipt.

Images**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of Rabbit anti-MFN2 antibody. Tissue: rat brain. Primary antibody: MFN2 antibody at 20 $\mu\text{g}/\text{mL}$. Secondary antibody: Fluorescein rabbit secondary antibody at 1:20,000. Localization: MFN2 is located on the membrane. Staining: MFN2 as red fluorescent signal.

**Immunohistochemistry**

Immunohistochemistry of Rabbit anti-MFN2 antibody. Tissue: rat brain. Primary antibody: MFN2 antibody at 5 $\mu\text{g}/\text{mL}$. Secondary antibody: Peroxidase rabbit secondary antibody at 1:5,000. Localization: MFN2 is located on the membrane. Staining: MFN2 as precipitated brown signal.

**Western Blot**

Western Blot of Rabbit anti-MFN2 antibody. Lane 1: human brain tissue lysate. Primary antibody: MFN2 antibody at 1 μ g/mL overnight at 4°C. Secondary antibody: Goat anti-Rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted size: ~83 kDa, Observed size ~90 kDa for MFN2.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.