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Datasheet for 600-401-CT9

# MFN2 Antibody

## Overview

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| **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

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| **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

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| **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. |

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| **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<br>• GeneID - 9927<br>• NCBI - NP_055689 |

## Application Details

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| **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

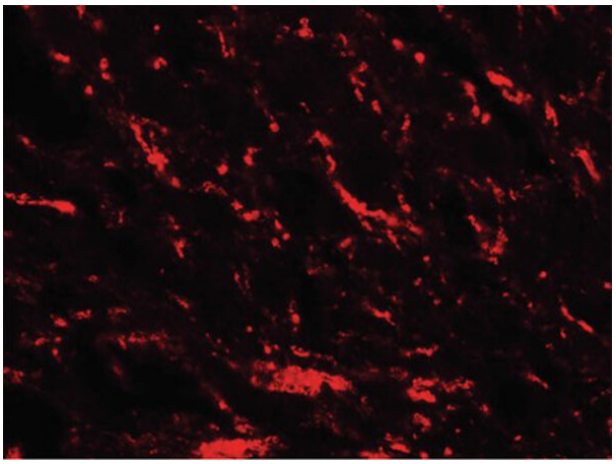
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.09% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

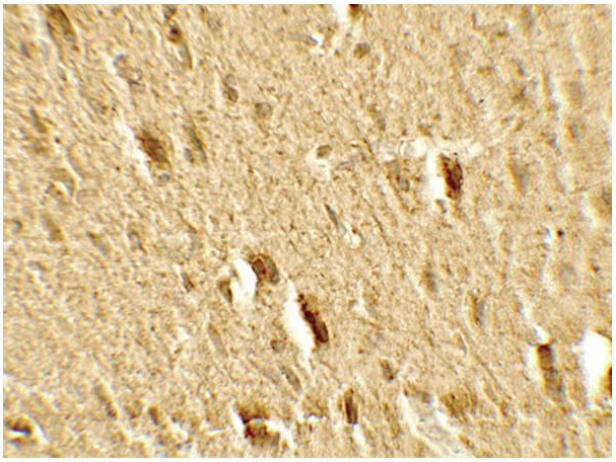
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| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely 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.

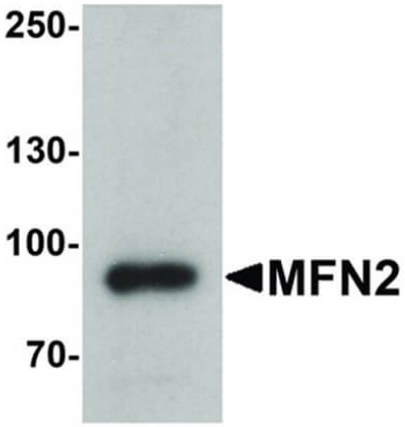
## Images



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of Rabbit anti-MFN2 antibody. Tissue: rat brain. Primary antibody: MFN2 antibody at 20 µg/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 µg/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 µg/mL overnight at 4℃. Secondary antibody: Goat anti-Rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted size: ~83 kDa, Observed size ~90 kDa for MFN2.

## Disclaimer

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