10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Mitofilin Antibody
Catalog # AN1840

Specification

Anti-Mitofilin Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q16891
Host	**Mouse**
Clonality	**Mouse Monoclonal**
Isotype	**IgG1**
Calculated MW	**83678**

Anti-Mitofilin Antibody - Additional Information

Gene ID	**10989**

Other Names
MICOS complex subunit MIC60, Cell proliferation-inducing gene 4/52 protein, Mitochondrial inner membrane protein Mitofilin p87/89, IMMT, HMP, MIC60, MINOS2, PIG4, PIG52, MINOS

Target/Specificity
Mitofilin is an important organizer of mitochondrial architecture. The mitofilin sequence encodes a polypeptide with a central alpha-helical region with predicted coiled coil domains flanked by globular amino and carboxy termini. There are four isoforms of mitofilin, and 90/91 kDa mitofilin forms have been observed in western blots. Mitofilin is located in the inner mitochondrial membrane and interacts with several protein complexes of the outer membrane, thereby generating contact sites between the two membrane systems of mitochondria. These mitofilin-containing hetero-oligomeric protein complexes form the mitochondrial inner membrane organizing system (MINOS). MINOS integrity is required for the structural maintenance of the inner mitochondrial membrane. This mitochondrial region contains cristae membranes that form large tubular invaginations that protrude into the mitochondrial matrix. These cristae membranes contain the enzyme complexes of the oxidative phosphorylation machinery. MINOS deficiency causes loss of crista junction structures and the detachment of cristae from the inner boundary membrane.

Dilution
WB~~1:1000
IHC~~1:100~500

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Mitofilin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

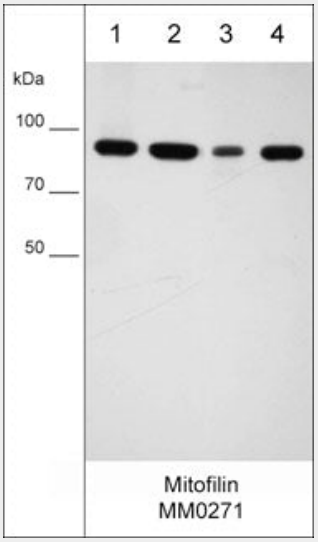
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Mitofilin Antibody - Protocols

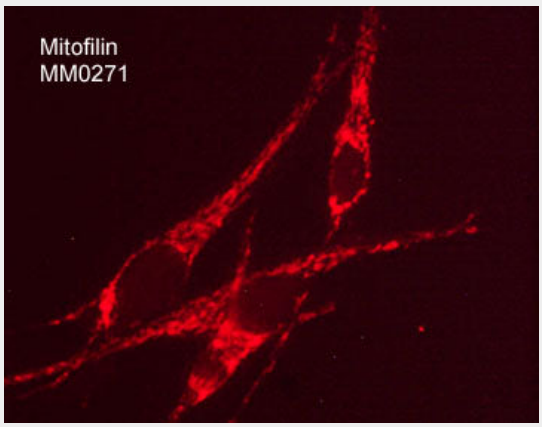
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Mitofilin Antibody - Images



Western blot analysis of human cell lysates: MeWo (lane 1), MDA-MB-231 (lane 2), PC3 (lane 3), and A549 (lane 4). The blot was probed with mouse monoclonal anti-mitofilin (MM0271) at 1:1000.



Immunocytochemical labeling of mitofilin in methanol-acetone (1:1) fixed human MeWo cells. The cells were labeled with mouse monoclonal anti-mitofilin (clone M027). The antibody was detected using goat anti-mouse DyLight® 594.

Anti-Mitofilin Antibody - Background

Mitofilin is an important organizer of mitochondrial architecture. The mitofilin sequence encodes a

polypeptide with a central alpha-helical region with predicted coiled coil domains flanked by globular amino and carboxy termini. There are four isoforms of mitofilin, and 90/91 kDa mitofilin forms have been observed in western blots. Mitofilin is located in the inner mitochondrial membrane and interacts with several protein complexes of the outer membrane, thereby generating contact sites between the two membrane systems of mitochondria. These mitofilin-containing hetero-oligomeric protein complexes form the mitochondrial inner membrane organizing system (MINOS). MINOS integrity is required for the structural maintenance of the inner mitochondrial membrane. This mitochondrial region contains cristae membranes that form large tubular invaginations that protrude into the mitochondrial matrix. These cristae membranes contain the enzyme complexes of the oxidative phosphorylation machinery. MINOS deficiency causes loss of crista junction structures and the detachment of cristae from the inner boundary membrane.