

Mitofusin 2 Antibody
Mitofusin 2 Antibody, Clone S153-5
Catalog # ASM10291

Specification

Mitofusin 2 Antibody - Product Information

Application	WB
Primary Accession	Q80U63
Other Accession	NP_573464.2
Host	Mouse
Isotype	IgG2a
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description

Mouse Anti-Human Mitofusin 2 Monoclonal IgG2a

Target/Specificity

Detects ~90kDa. No cross-reactivity against Mitofusin-1.

Other Names

CMT2A Antibody, CMT2A2 Antibody, CPRP 1 Antibody, CPRP1 Antibody, Fzo Antibody, HSG Antibody, hyperplasia suppressor gene Antibody, Hypertension related protein 1 Antibody, KIAA0214 Antibody, MARF Antibody, MFN 2 Antibody, Mfn2 Antibody, Mitochondrial assembly regulatory factor Antibody, Mitofusin-2 Antibody, Mitofusin2 Antibody, Transmembrane GTPase MFN2 Antibody

Immunogen

Fusion protein amino acids 370-600 (cytoplasmic N-terminus) of mouse Mitofusin-2. Rat: 97% identity (226/231 amino acids identical). Human: 92% identity (214/231 amino acids identical) ~55% identity with Mitofusin-1.

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature **Blue Ice or 4°C**

Certificate of Analysis

1 µg/ml of SMC-457 was sufficient for detection of Mitofusin-2 in 20 µg of mouse cardiac mitochondrial lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

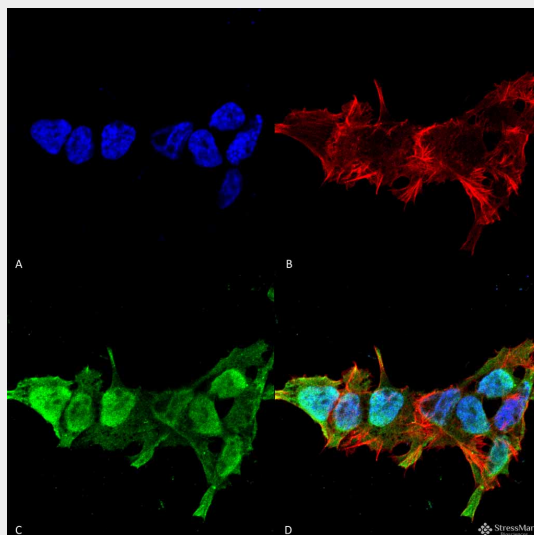
Mitochondrion | Mitochondrion Outer Membrane

Mitofusin 2 Antibody - Protocols

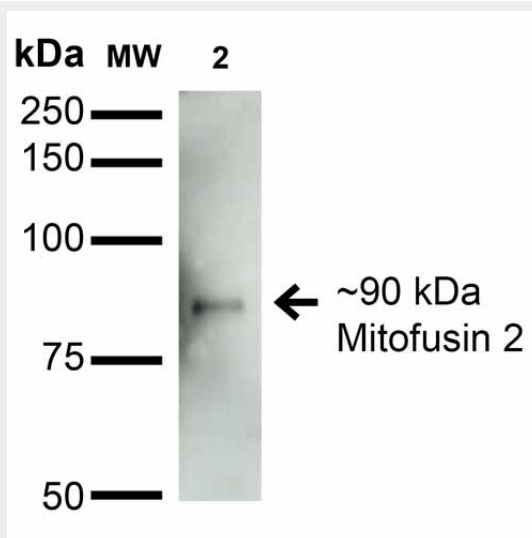
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Mitofusin 2 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Mitofusin 2 Monoclonal Antibody, Clone S153-5 (ASM10291). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Mitofusin 2 Monoclonal Antibody (ASM10291) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Mitofusin 2 Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~90 kDa Mitofusin 2 protein

using Mouse Anti-Mitofusin 2 Monoclonal Antibody, Clone S153-5 (ASM10291). Lane 1: Molecular Weight Ladder. Lane 2: Rat Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Mitofusin 2 Monoclonal Antibody (ASM10291) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~90 kDa.

Mitofusin 2 Antibody - Background

Mitofusin-2 (Mfn2) is a membrane protein of the mitochondria and is important in mitochondrial fusion in mammalian cells. Mfn2 activity has also been implicated in mitochondrial metabolism and the loss of Mfn2 may be the reason for certain metabolic modifications that are seen in individuals with obesity. Mfn2 has been associated with maintaining the membrane potential of the mitochondria. Mfn2 has been shown to hinder mitochondrial antiviral signaling by inhibiting production of type 1 interferons. Mfn2 is a p53-inducible target and involved in cell proliferation, apoptosis promotion and tumor suppression.