


FITC Anti-Mitofusin 2 antibody [N153/5] ab186319

Overview

Product name	FITC Anti-Mitofusin 2 antibody [N153/5]
Description	FITC Mouse monoclonal [N153/5] to Mitofusin 2
Host species	Mouse
Conjugation	FITC. Ex: 493nm, Em: 528nm
Specificity	ab186319 does not cross react with Mitofusin 1.
Tested applications	Suitable for: IHC-Fr, IHC-P, ICC/IF, WB
Species reactivity	Reacts with: Mouse Predicted to work with: Rat, Human 
Immunogen	Recombinant fragment corresponding to Mouse Mitofusin 2 aa 370-600. Database link: Q80U63
Positive control	Mouse cardiac mitochondrial lysate.
General notes	<p>The clone number has been updated from S153-5 to N153/5, both clone numbers name the same antibody clone.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Store In the Dark.
Storage buffer	Preservative: 0.1% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 49% PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	N153/5

Isotype

IgG2a

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab186319 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

Target

Function

Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN2 acts independently of the cytoskeleton. It therefore plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes. Overexpression induces the formation of mitochondrial networks. 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 PARK2 recruitment to dysfunctional mitochondria. Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress. Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions.

Tissue specificity

Ubiquitous; expressed at low level. Highly expressed in heart and kidney.

Involvement in disease

Charcot-Marie-Tooth disease 2A2
Neuropathy, hereditary motor and sensory, 6A

Sequence similarities

Belongs to the TRAFAC class dynamin-like GTPase superfamily. Dynamin/Fzo/YdjA family. Mitofusin subfamily.
Contains 1 dynamin-type G (guanine nucleotide-binding) domain.

Post-translational modifications

Phosphorylated by PINK1.
Ubiquitinated by non-degradative ubiquitin by PARK2, promoting mitochondrial fusion; deubiquitination by USP30 inhibits mitochondrial fusion.

Cellular localization

Mitochondrion outer membrane. Colocalizes with BAX during apoptosis.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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