abcam

Product datasheet

Anti-Mitofusin 2 antibody ab50843

★★★★★ <u>5 Abreviews</u> <u>14 References</u> 1 Image

Overview

Product name Anti-Mitofusin 2 antibody

Description Rabbit polyclonal to Mitofusin 2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat

Predicted to work with: Cynomolgus monkey, Orangutan

Immunogen Synthetic peptide corresponding to Human Mitofusin 2 aa 557-576 conjugated to Keyhole Limpet

Haemocyanin (KLH).

Sequence:

C-LGPKNSRRALMGYNDQVQRP

Run BLAST with
 Run

General notes

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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: 0.0268% PBS

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab50843 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
WB	★★★★☆ (3)	Use a concentration of 0.5 - 1 µg/ml. Detects a band of approximately 86 kDa (predicted molecular weight: 84 kDa).

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

Phosphorylated by PINK1.

modifications

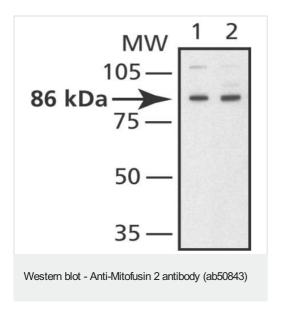
Ubiquitinated by non-degradative ubiquitin by PARK2, promoting mitochondrial fusion;

deubiquitination by USP30 inhibits mitochondrial fusion.

Cellular localization

Mitochondrion outer membrane. Colocalizes with BAX during apoptosis.

Images



All lanes: Anti-Mitofusin 2 antibody (ab50843) at 0.25 µg/ml

Lane 1 : Rat brain mitochondria

Lane 2 : Mouse brain mitochondria

Secondary

All lanes : Goat Anti-Rabbit lgG, Peroxidase conjugate and a chemiluminescent substrate.

Predicted band size: 84 kDa Observed band size: 86 kDa

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

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